

INN^oTOOL

LOOK FORWARD



>>>2015

INNOTOOL

INNOTOOL, which stands for „Innovative Tooling“, is a market leader in indexable milling products.

The high shear geometry design of cutter body and inserts ensures that Innoutil performs very well on low powered machines and often the cutting data can be increased considerably due to the soft cutting action.

The range of standard tooling has increased to now also contain a full range of tools for die & mould machining, as well as a range of indexable insert short hole drills.

In addition to the complete range of standard end mills, square shoulder mills, helical end mills, side and face mills and die and mould tooling, INNOTOOL can offer an excellent and fast service for special solutions.

We look forward to being of service.





STANDARD PLUS

Innotool's standard program comprises a broad and worldwide established range of cutting tools, suitable for the most various applications.

This range of cutting tools is constantly expanded: End mills, shell end mills, shoulder-type milling cutters, face mills, slotting cutters, form milling cutters, drills, solid carbide, adaptations, set-up equipment and indexable inserts.

The development and production of special-purpose tools according to customer-specific requirements is another important factor for Innotool.

Our know-how and great potential of experience, combined with our own demand for quality, functionality and innovation, guarantees our customers the optimum cutting tool solution – for individual machining tasks, for all industries.





LOOK FORWARD



8-13 General Technical Information

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GENERAL TECHNICAL INFORMATION

O

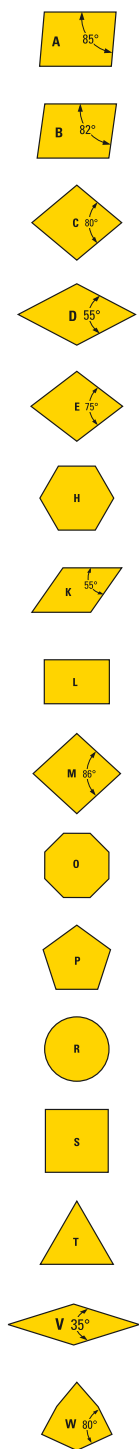
N

C

U

05

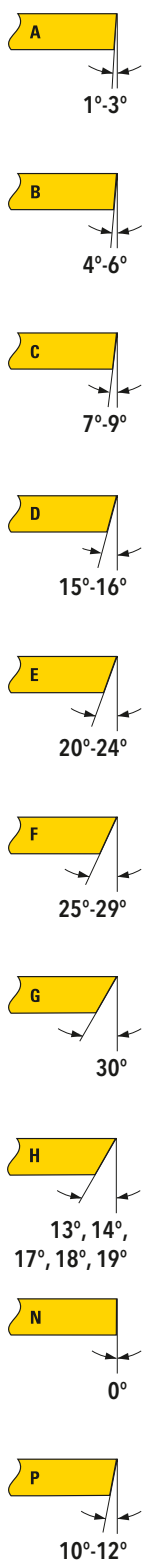
INSERT SHAPE



U = High feed geometry

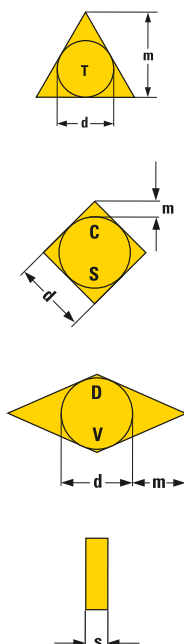
Z = Chip breaker geometry

CLEARANCE ANGLE



0 = others
autres

TOLERANCES

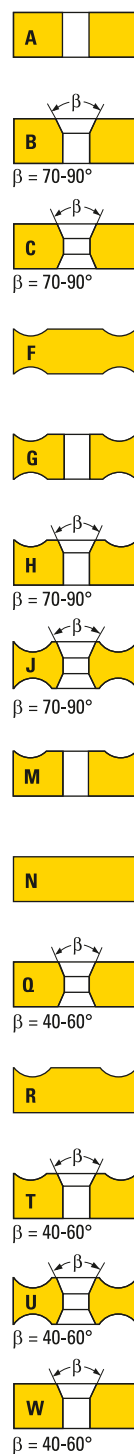


	d	m	s
A	±0,025	±0,005	±0,025
C	±0,025	±0,013	±0,025
E	±0,025	±0,025	±0,025
F	±0,013	±0,005	±0,025
G	±0,025	±0,025	±0,05-0,13
H	±0,013	±0,013	±0,025
J ¹	±0,05-0,15 ²	±0,005	±0,025
K ¹	±0,05-0,15 ²	±0,013	±0,025
L ¹	±0,05-0,15 ²	±0,013	±0,025
M	±0,05-0,15 ²	±0,08-0,20 ²	±0,013
N	±0,05-0,15 ²	±0,08-0,20 ²	±0,025
U	±0,05-0,25 ²	±0,13-0,38 ²	±0,05-0,13

¹Inserts with ground wiper

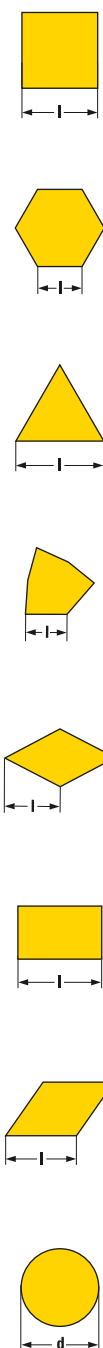
²Depending on insert size
(see ISO standard 1832)

INSERT TYPE



X = Special design
(description required)

CUTTING EDGE LENGTH



GENERAL TECHNICAL INFORMATION

05

AN

T

N

HR

INSERT THICKNESS



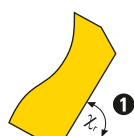
CORNER RADIUS



02	r = 0,2
04	r = 0,4
08	r = 0,8
12	r = 1,2
16	v 1,6
24	r = 2,4



00 dia. in inch measures
converted to mm
M0 dia. in metric measures



1 Lead angle χ_r

A = 45°

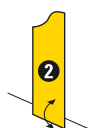
D = 60°

E = 75°

F = 85°

P = 90°

Z = others / autres



2 Clearance angle on wiper

A = 3°

B = 5°

C = 7°

D = 15°

E = 20°

F = 25°

G = 30°

N = 0°

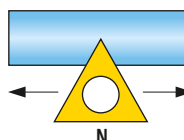
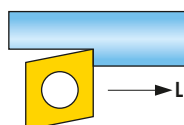
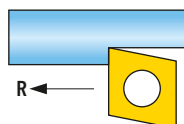
P = 11°

Z = other

CUTTING EDGE



CUTTING DIRECTION



For example:

P = Polished

W = With wiper
finishing edge /
facette

HR = Heat grooves

GENERAL TECHNICAL INFORMATION

X	X	A	XXX
TOOLTYPE	DENSITY	STYLE	TOOL DIAMETER
1 End or shell-type mill with straight flute 2 Stepped end mills 4 Solid carbide end mills & screw-type mills, helical flute	5 Solid carbide, 1 & 2 no. of flutes, large spacing 6 Solid carbide, 3 no. of flutes, normal spacing 7 Solid carbide, 4 & 5 no. of flutes, narrow spacing 8 Solid carbide, 6-9 no. of flutes, extra narrow spacing 9 Solid carbide, 10 or more flutes, extra narrow spacing R Blank	A High speed cutter B Ball nose cutter - cylindrical C 90° cutting angle with chamfer on cutting edge D 90° cutting angle with radius on cutting edge J 90° cutting angle with sharp cutting edge M 60° - 74° cutting angle N 45° - 59° cutting angle P 1° - 44° cutting angle R Outside radius chamfer mill T T-slot mill U Torus form mill X Ball nose mill - spherical Y Thread mill Z Centering mil	3-digit number e.g. diameter 12.0mm = 120

GENERAL TECHNICAL INFORMATION

XX	EE	H	00
CUTTING LENGTH OR TOOL HEIGHT	ADAPTION CODE	ROTATING DIRECTION	STANDARD OR SPECIAL TOOL
2-digit number e.g. cutting edge 7.0mm = 70	T0 8 mm cyl. shank T1 10 mm cyl. shank T2 12 mm cyl. shank T3 16 mm cyl. shank T4 20 mm cyl. shank T5 25 mm cyl. shank T6 ChipSurfer thread T7 6 mm cyl. shank T8 ChipSurfer thread T9 3 mm cyl. shank TQ ChipSurfer thread TR ChipSurfer thread TS ChipSurfer thread TU ChipSurfer thread UA 7 mm cyl. shank UD 2 mm cyl. shank UE 2,5 mm cyl. shank UF 3,5 mm cyl. shank UG 4,5 mm cyl. shank UH 5,5 mm cyl. shank U0 4 mm cyl. shank U1 5 mm cyl. shank U2 18 mm cyl. shank U8 14 mm cyl. shank U9 9 mm cyl. shank WE 6 mm Weldon DIN 6535 HB WF 14 mm Weldon DIN 6535 HB WG 18 mm Weldon DIN 6535 HB W0 8 mm Weldon DIN 6535 HB W1 10 mm Weldon DIN 6535 HB W2 12 mm Weldon DIN 6535 HB W3 16 mm Weldon DIN 6535 HB W4 20 mm Weldon DIN 6535 HB W5 25 mm Weldon DIN 6535 HB WR 5 mm Weldon DIN 6535 HB	R R. H. mills L L. H. mills - neutral (R. H. / L. H.)	A 0°-25° pos. helical angle B 26°-34° pos. helical angle C 35°-44° pos. helical angle D pos. helical angle > 45° F 0°-25° neg. helical angle G 26°-34° neg. helical angle H 35°-44° neg. helical angle J neg. helical angle > 45° K neg. chamfer L 0°-30° pos. helical angle with chipbreaker M 31°-44° pos. helical angle with chipbreaker N > 45° pos. helical angle with chip breaker resp. neutral slot mill P positive slot mill Q HPC divers spacing T HPC divers spacing and divers helical angle U 45° roughing and finishing W High precision cutter

GENERAL TECHNICAL INFORMATION

	Grade	Coating	ISO-group	milling	drilling	solid carbide	Application and Material
Carbide	IN05S	-	N10-N25	•	•	•	for machining of AL-alloys and non-ferrous materials
	IN10K	-	K10-K25	•	•	•	for finish machining of cast iron
			N10-N25	•	•	•	for finish machining of AL-alloys and non-ferrous materials
	IN15K	-	N15-N30	•	•	•	for machining of AL-alloys and non-ferrous materials
PVD coated	IN2004	TiAlN	P10-P20	•	•	•	for milling of alloyed steel
			K10-K25	•	•	•	for medium machining of gray cast iron - especially CGI
			H05-H15	•	•	•	for medium machining of hardened steel at medium up to high cutting speed
	IN2005	TiAlN	P15-P30	•	•	•	for general machining of steel at high cutting speed
			M15-M35	•	•	•	for general machining of stainless steel
			K20-K40	•	•	•	for general machining of cast iron
			S05-S20	•	•	•	for general milling of heat resistant alloys and titanium also for wet machining
	IN2006	TiAlN	P05-P20	•	•	•	for finish machining at high cutting speed and low cutting depth
			H05-H20	•	•	•	for finish machining of hardened steel up to 63 HRC
	IN2010	TiAlN	K10-K30	•	•	•	for finish machining and drilling of cast iron material
	IN2035	TiAlN	P25-P50	•	•	•	for high feed machining of steel
			M20-M40	•	•	•	for machining of stainless and austenitic steel and heat resistant alloys
			S20-S30	•	•	•	mainly for milling of materials of machining group ,S'
	IN2040	TiAlN	P15-P35	•	•	•	for finish machining of unalloyed steel and tempered steel
	IN2504	TiAlN / TiN	P05-P25	•	•	•	for milling of steel at medium up to high cutting speed
			H05-H25	•	•	•	for milling of hardened steel at medium up to high cutting speed
	IN2505	TiAlN / TiN	P15-P30	•	•	•	for semi-finish and rough machining of steel with high strength
			M15-M35	•	•	•	for general machining of stainless steel
			S05-S20	•	•	•	for general machining of heat resistant alloys
	IN2510	TiAlN / TiN	K10-K30	•	•	•	for general machining of gray cast and non-ferrous metal
	IN2515	TiAlN / TiN	P20-P35	•	•	•	for milling of steel with high strength at medium cutting speed
			K30-K50	•	•	•	for general machining of gray cast and nodular cast iron
	IN2530	TiAlN / TiN	P20-P40	•	•	•	tough grade for general machining of steel
			M15-M30	•	•	•	for general machining of stainless steel
			K20-K40	•	•	•	for general machining of cast iron
			S15-S30	•	•	•	for general machining of heat resistant alloys
	IN2540	TiAlN / TiN	P15-P35	•	•	•	for semi-finish and rough machining of unalloyed steel and tempered steel
	IN4005	TiAlN / Al ₂ O ₃	P15-P30	•	•	•	for general machining of steel
			M15-M35	•	•	•	for general machining of stainless steel
			K20-K40	•	•	•	for general machining of cast iron
			S05-S20	•	•	•	for general machining of heat resistant alloys and titanium
	IN4010	TiAlN / Al ₂ O ₃	K10-K30	•	•	•	for general machining of cast iron
	IN4015	TiAlN / Al ₂ O ₃	P20-P35	•	•	•	for milling of steel with high strength at medium cutting speed
			K30-K50	•	•	•	for general milling of gray cast and nodular cast iron
	IN4030	TiAlN / Al ₂ O ₃	P20-P40	•	•	•	tough grade for general machining of steel
			M15-M30	•	•	•	for general machining of stainless and austenitic steel
			S15-S25	•	•	•	for general machining of heat resistant alloys
	IN4035	TiAlN / Al ₂ O ₃	P25-P50	•	•	•	for high feed machining of steel
			M20-M40	•	•	•	for machining of stainless steel, austenitic steel and heat resistant alloys
			S20-S30	•	•	•	mainly for milling of materials of machining group ,S'
	IN4040	TiAlN / Al ₂ O ₃	P15-P30	•	•	•	for medium machining of unalloyed and tempered steel
CVD coated	IN6505	TiCN / Al ₂ O ₃ / TiN	P10-P25	•	•	•	for drilling of steel, used only at peripheral insert
	IN6520	TiCN / Al ₂ O ₃ / TiN	P10-P40	•	•	•	for drilling of steel, used only at peripheral insert
	IN6535	TiCN / Al ₂ O ₃ / TiN	M20-M35	•	•	•	for dry machining of stainless steel and heat resistant alloys at high cutting speed
			S15-S30	•	•	•	mainly for milling of materials of machining group ,S'
	IN7035	TiCN / Al ₂ O ₃ / TiCN	P20-P40	•	•	•	for high feed machining of steel
			M20-M35	•	•	•	for machining of stainless and austenitic steel and heat resistant alloys
			S15-S30	•	•	•	mainly for milling of materials of machining group ,S'
Cermet	IN0560	TiN	P05-P15	•	•	•	for finish machining of steel at medium up to high cutting speed
			M05-M15	•	•	•	for finish machining of stainless steel at medium up to high cutting speed
SiN	IN70N	-	K10-K20	•	•	•	for machining of gray cast at extremely high cutting speed
CBN	IN80B	-	K05-K15	•	•	•	for machining of surface hardened cast materials and chill cast
			H05-H15	•	•	•	for machining of hardened steel
PKD	IN90D	-	N01-N10	•	•	•	for machining of aluminum, non-ferrous materials and graphite

GENERAL TECHNICAL INFORMATION

Application	Grade	ISO-group						
milling	IN2006	P05-P20					H05-H20	Hardness ↑ ↓ Toughness
	IN2004	P10-P20		K10-K20			H05-H15	
	IN4010			K10-K30				
	IN2510			K10-K30				
	IN2005	P15-P30	M15-M35	K20-K40		S05-S20		
	IN2505	P15-P30	M15-M35			S05-S20		
	IN4040	P15-P30						
	IN2540	P15-P35						
	IN4015	P20-P30		K30-K50				
	IN2515	P20-P30		K30-K50				
	IN4030	P20-P40	M15-M30			S15-S25		
	IN2530	P20-P40	M15-M30	K20-K40		S15-S25		
	IN6535		M20-M35			S15-S30		
	IN7035	P20-P40	M20-M35			S15-S30		
	IN4035	P25-P50	M20-M40			S20-S30		
	IN2035	P25-P50	M20-M40			S20-S30		
drilling	IN2010			K10-K30				Hardness ↑ ↓ Toughness
	IN6505	P10-P25						
	IN6520	P10-P40						
	IN2505	P20-P40	M20-M40			S05-S20		
	IN2005	P15-P30	M15-M35	K20-K40		S05-S20		
solid carbide	IN2504	P05-P25					H05-H25	Hardness ↑ ↓ Toughness
	IN2006	P05-P20					H05-H20	
	IN2005	P15-P30	M15-M35	K20-K40		S05-S20		

END MILLS

	D	a	Description	Code	Page
	10 - 25	5,7	HIPOS MICRO SA06D02	SA06D02	16
	9,5 - 25	5,7	HIPOS MICRO SA06D03	SA06D03	17
	10 - 25	5,7	HIPOS MICRO SA06M01	SA06M01	18
	10 - 35	5,7	HIPOS MICRO SA06E01	SA06E01	19
	12 - 25	9	HIPOS PLUS SB09D03	SB09D03	20
	16 - 32	9	HIPOS PLUS SB09M01	SB09M01	22
	12 - 32	9	HIPOS PLUS SB09E01	SB09E01	24
	20 - 32	12	HIPOS PLUS SB13D03B	SB13D03B	26
	20 - 32	12	HIPOS PLUS SB13M01B	SB13M01B	28
	20 - 40	12	HIPOS PLUS SB13E01B	SB13E01B	30
	25 - 40	8,4	ALUMINATOR SS11E01	SS11E01	32
	25 - 40	5,8	ECO 6 SW06D03	SW06D03	33
	25 - 40	5,8	ECO 6 SW06E01	SW06E01	34
	20 - 42	15,5	ALUMINATOR EX14E01	EX14E01	35

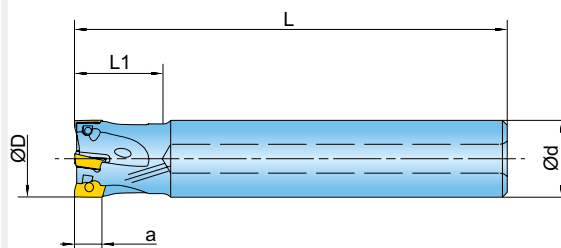
Subject to printing error or technical changes.

END MILLS

Subject to printing error or technical changes.

END MILLS

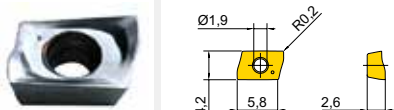
ADAPTION ACC. TO DIN 1835 A



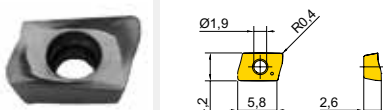
Designation	D	d	L	L1	a	Z	Icon	IK	kg
SA.010.006	10	10	55	16	5,7	2	10,0°	✓	0,03
SA.012.007	12	12	60	17	5,7	3	6,5°	✓	0,04
SA.016.009	16	16	90	19	5,7	4	4,0°	✓	0,11
SA.020.015	20	20	105	19	5,7	5	2,5°	✓	0,21
SA.025.015	25	20	115	65	5,7	7	2,0°	✓	0,24

Programming radius 1mm

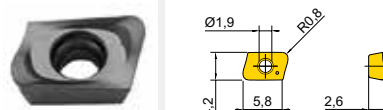
AOMT060202R



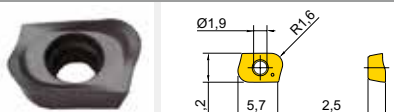
AOMT060204R



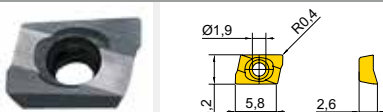
AOMT060208R



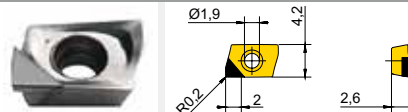
AOMT060216R



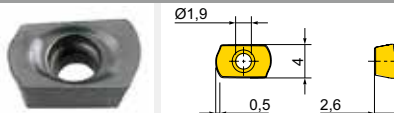
AOCT060204FR-P



AOMT060202R-DT1



UOMT0602TR



Designation	fz(min/max)	Design	Grade	IN05S	IN203S	IN250S	IN2530	IN653S	IN90D	
AOMT060202R	0,06/0,12	positive geometry R0,2								
AOMT060204R	0,06/0,12	positive geometry R0,4								
AOMT060208R	0,06/0,12	positive geometry R0,8								
AOMT060216R ¹⁾	0,06/0,12	positive geometry R1,6								
AOCT060204FR-P	0,05/0,12	non-ferrous geometry, polished R0,4								
AOMT060202R-DT1	0,05/0,12	with short PCD-tip R0,2								
UOMT0602TR	0,30/0,80	high feed geometry								

¹⁾ Cutter body has to be modified

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



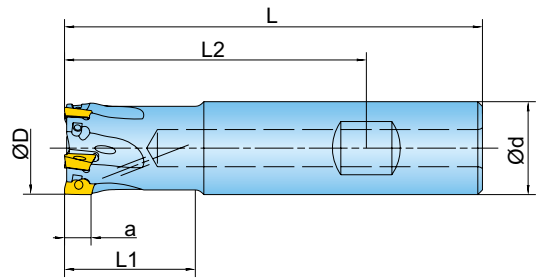
SM18-041-00 (0,5Nm) DS-TP06S (TX-Plus)

① = Insert screw ② = Screw driver

HIPOS MICRO SA06D02

END MILLS

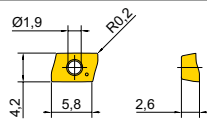
ADAPTION ACC. TO DIN 1835 B (WELDON)



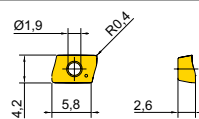
Designation	D	d	L	L1	L2	a	Z	Icon	IK	kg
SA.010.004	9,5	16	80	18	56	5,7	2	10,5°	✓	0,09
SA.010.005	10	16	80	18	56	5,7	2	10,0°	✓	0,09
SA.012.005	11,5	16	80	20	56	5,7	3	7,0°	✓	0,09
SA.012.006	12	16	80	20	56	5,7	3	6,5°	✓	0,09
SA.014.004	13,5	16	80	22	56	5,7	3	5,5°	✓	0,09
SA.014.005	14	16	80	22	56	5,7	3	5,2°	✓	0,09
SA.016.008	16	16	85	26	61	5,7	4	4,0°	✓	0,10
SA.020.014	20	20	90	30	65	5,7	5	2,5°	✓	0,17
SA.025.014	25	25	100	40	68	5,7	7	2,0°	✓	0,31

Programming radius 1mm

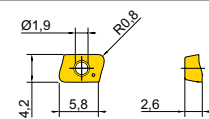
AOMT060202R



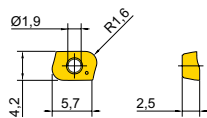
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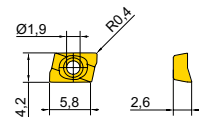
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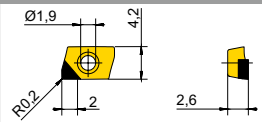
AOMT060216R



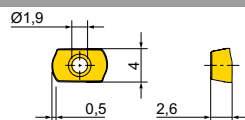
AOCT060204FR-P



AOMT060202R-DT1



UOMT0602TR



Designation	fz(min/max)	Design	Grade	IN05S	IN2035	IN2505	IN2530	IN6535	IN90D	
AOMT060202R	0,06/0,12	positive geometry R0,2								
AOMT060204R	0,06/0,12	positive geometry R0,4								
AOMT060208R	0,06/0,12	positive geometry R0,8								
AOMT060216R ¹⁾	0,06/0,12	positive geometry R1,6								
AOCT060204FR-P	0,05/0,12	non-ferrous geometry, polished R0,4								
AOMT060202R-DT1	0,05/0,12	with short PCD-tip R0,2								
UOMT0602TR	0,30/0,80	high feed geometry								

¹⁾ Cutter body has to be modified

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

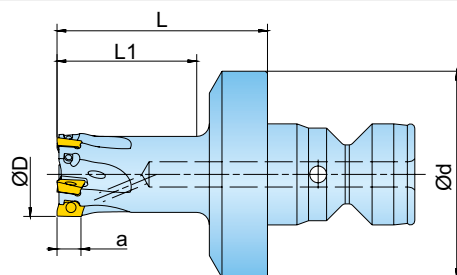


SM18-041-00 (0,5Nm) DS-TP06S (TX-Plus)

① = Insert screw ② = Screw driver

END MILLS

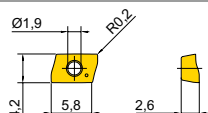
MODULAR MILLING ADAPTOR INNOFIT



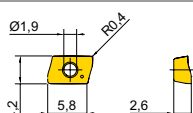
Designation	D	d	L	L1	a	MOD	Z		IK	kg
SA.010.007	10	49	40	22	5,7	40	2	10,0°	✓	0,25
SA.012.009	12	49	40	22	5,7	40	3	6,5°	✓	0,25
SA.016.011	16	49	45	28	5,7	40	4	4,0°	✓	0,27
SA.020.017	20	49	50	36	5,7	40	5	2,5°	✓	0,30
SA.025.017	25	49	55	41	5,7	40	7	2,0°	✓	0,36

Programming radius 1mm

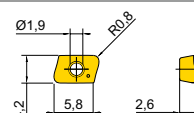
AOMT060202R



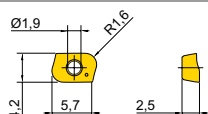
AOMT060204R



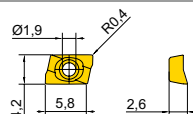
AOMT060208R



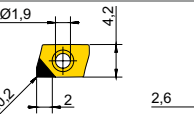
AOMT060216R



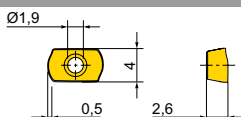
AOCT060204FR-P



AOMT060202R-DT1



UOMT0602TR



Designation	fz(min/max)	Design	Grade	IN05S	IN2035	IN2505	IN2530	IN6535	IN90D	
AOMT060202R	0,06/0,12	positive geometry R0,2								
AOMT060204R	0,06/0,12	positive geometry R0,4								
AOMT060208R	0,06/0,12	positive geometry R0,8								
AOMT060216R ¹⁾	0,06/0,12	positive geometry R1,6								
AOCT060204FR-P	0,05/0,12	non-ferrous geometry, polished R0,4								
AOMT060202R-DT1	0,05/0,12	with short PCD-tip R0,2								
UOMT0602TR	0,30/0,80	high feed geometry								

¹⁾ Cutter body has to be modified

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

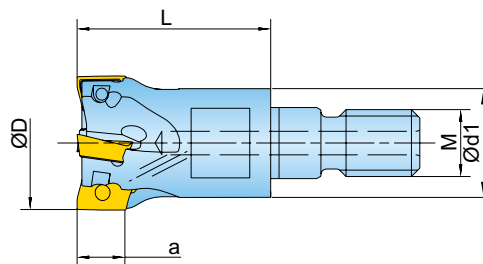


SM18-041-00 (0,5Nm) DS-TP06S (TX-Plus)

① = Insert screw ② = Screw driver

END MILLS

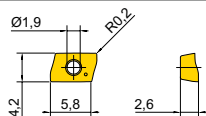
SCREW-IN TYPE ADAPTION



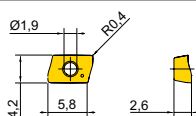
Designation	D	d1	L	a	M	Z			
SA.010.009	10	9,8	17	5,7	6	2	10°	✓	0,01
SA.012.008	12	11,8	23	5,7	6	3	6,5°	✓	0,02
SA.015.002	15	13	23	5,7	8	4	4,4°	✓	0,02
SA.016.010	16	13	23	5,7	8	4	4,0°	✓	0,03
SA.020.016	20	18	30	5,7	10	5	2,5°	✓	0,06
SA.025.016	25	21	35	5,7	12	7	2,0°	✓	0,10
SA.030.001	30	29	43	5,7	16	8	1,7°	✓	0,21
SA.032.018	32	29	43	5,7	16	8	1,6°	✓	0,22
SA.035.002	35	29	43	5,7	16	9	1,4°	✓	0,24

Programming radius 1mm

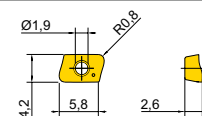
AOMT060202R



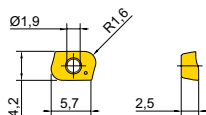
AOMT060204R



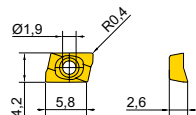
AOMT060208R



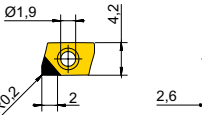
AOMT060216R



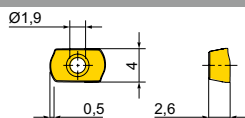
AOCT060204FR-P



AOMT060202R-DT1



UOMT0602TR



Designation	fz(min/max)	Design	Grade	IN05S	IN203S	IN250S	IN2530	IN653S	IN90D	
AOMT060202R	0,06/0,12	positive geometry R0,2								
AOMT060204R	0,06/0,12	positive geometry R0,4								
AOMT060208R	0,06/0,12	positive geometry R0,8								
AOMT060216R ¹⁾	0,06/0,12	positive geometry R1,6								
AOCT060204FR-P	0,05/0,12	non-ferrous geometry, polished R0,4								
AOMT060202R-DT1	0,05/0,12	with short PCD-tip R0,2								
UOMT0602TR	0,30/0,80	high feed geometry								

¹⁾ Cutter body has to be modified

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

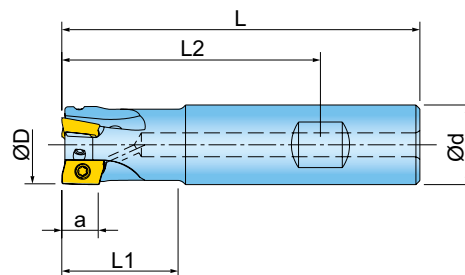


SM18-041-00 (0,5Nm) DS-TP06S (TX-Plus)

① = Insert screw ② = Screw driver

END MILLS

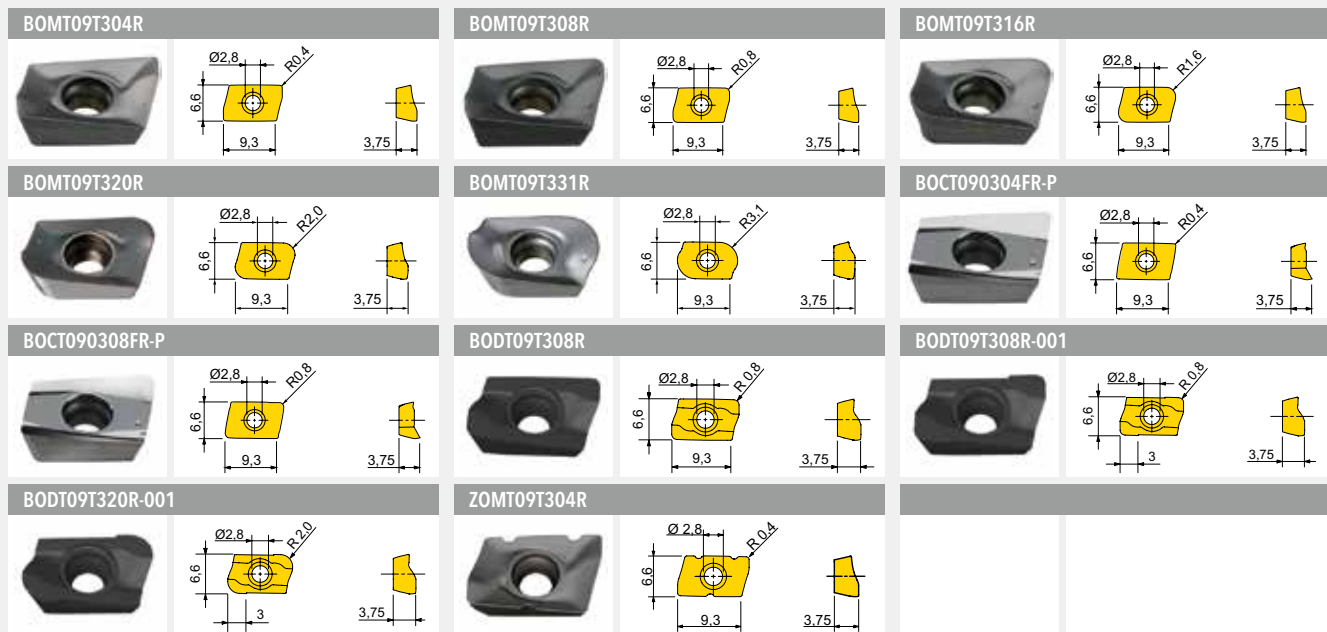
ADAPTION ACC. TO DIN 1835 B (WELDON)



Designation	D	d	L	L1	L2	a	Z			
SB.012.001	12	16	80	20	56	9	1	1,5°	✓	0,09
SB.016.001	16	16	85	26	61	9	2	10,0°	✓	0,10
SB.020.010	20	20	90	30	65	9	2	7,0°	✓	0,18
SB.020.005	20	20	90	30	65	9	3	7,0°	✓	0,17
SB.020.006	20	20	125	75	100	9	2	7,0°	✓	0,23
SB.025.009	25	25	100	40	68	9	4	4,4°	✓	0,31
SB.025.010	25	25	145	85	113	9	3	4,4°	✓	0,45
SB.025.014	25	25	145	85	113	9	4	4,4°	✓	0,45

HIPOS PLUS SB09D03

END MILLS



Designation	fz(min/max)	Design	Grade	IN10K	IN2035	IN2504	IN2505	IN2530	IN4030	IN6535
BOMT09T304R	0,10/0,15	positive geometry R0,4								
BOMT09T308R	0,10/0,15	positive geometry R0,8								
BOMT09T316R ¹⁾	0,10/0,15	positive geometry R1,6								
BOMT09T320R ¹⁾	0,10/0,15	positive geometry R2,0								
BOMT09T331R ¹⁾	0,10/0,15	positive geometry R3,1								
BOCT090304FR-P	0,05/0,20	non-ferrous geometry, polished R0,4								
BOCT090308FR-P	0,05/0,20	non-ferrous geometry, polished R0,8								
BODT09T308R	0,05/0,15	ground finishing geometry R0,8								
BODT09T308R-001	0,05/0,15	finishing geometry, short R0,8								
BODT09T320R-001	0,05/0,15	finishing geometry, short R2,0								
ZOMT09T304R ²⁾	0,10/0,15	chip splitter geometry R0,4								

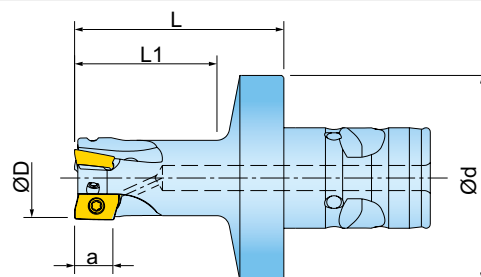
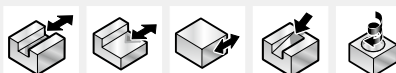
¹⁾ Cutter body has to be modified; ²⁾ Best results are achieved on tools with an even number of teeth. Please mount inserts alternating. ● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS	
①	②
Diameter Range	
12 - 16	SM25-054-00 (1,1Nm) DS-T08S
20 - 25	SM25-064-00 (1,1Nm) DS-T08S

① = Insert screw ② = Screw driver

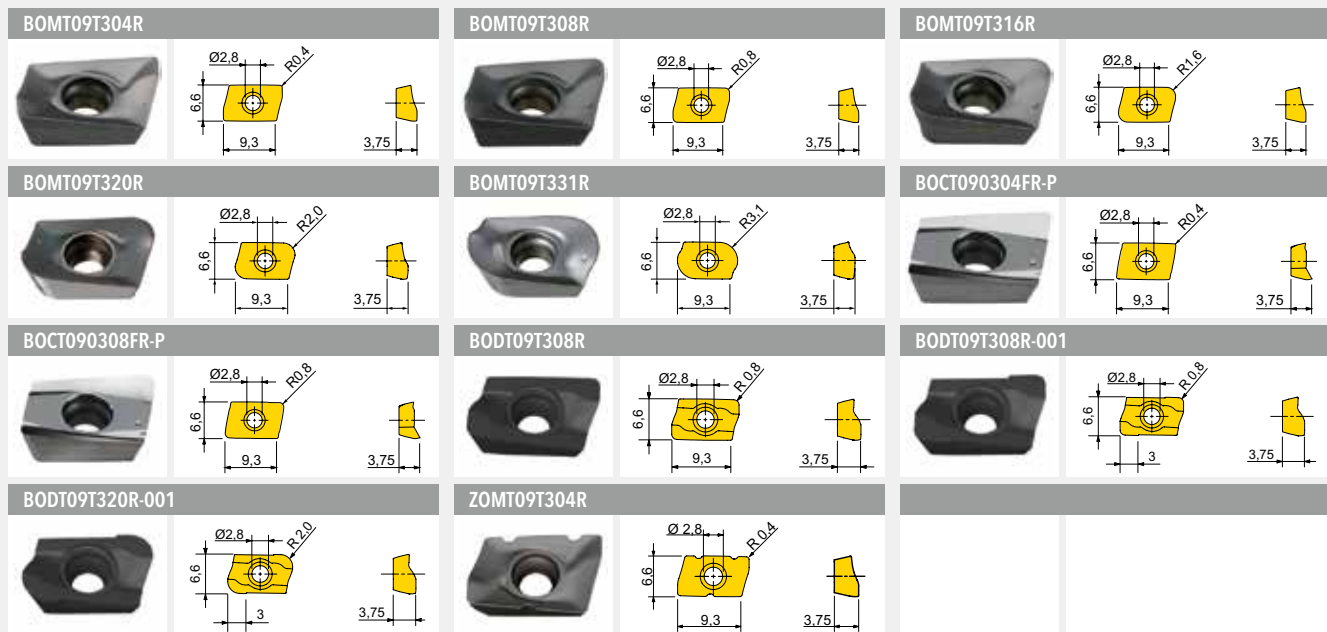
END MILLS

MODULAR MILLING ADAPTOR INNOFIT



Designation	D	d	L	L1	a	MOD	Z			
SB.016.002	16	49	45	28	9	40	2	10,0°	✓	0,29
SB.020.007	20	49	50	36	9	40	3	7,0°	✓	0,32
SB.020.008	20	49	70	56	9	40	2	7,0°	✓	0,36
SB.025.011	25	49	55	41	9	40	4	4,4°	✓	0,37
SB.025.012	25	49	100	86	9	40	3	4,4°	✓	0,51
SB.032.010	32	49	55	41	9	40	5	2,8°	✓	0,45

END MILLS



Designation	fz(min/max)	Design	Grade	IN10K	IN2035	IN2504	IN2505	IN2530	IN4030	IN6535
BOMT09T304R	0,10/0,15	positive geometry R0,4								
BOMT09T308R	0,10/0,15	positive geometry R0,8								
BOMT09T316R ¹⁾	0,10/0,15	positive geometry R1,6								
BOMT09T320R ¹⁾	0,10/0,15	positive geometry R2,0								
BOMT09T331R ¹⁾	0,10/0,15	positive geometry R3,1								
BOCT090304FR-P	0,05/0,20	non-ferrous geometry, polished R0,4								
BOCT090308FR-P	0,05/0,20	non-ferrous geometry, polished R0,8								
BODT09T308R	0,05/0,15	ground finishing geometry R0,8								
BODT09T308R-001	0,05/0,15	finishing geometry, short R0,8								
BODT09T320R-001	0,05/0,15	finishing geometry, short R2,0								
ZOMT09T304R ²⁾	0,10/0,15	chip splitter geometry R0,4								

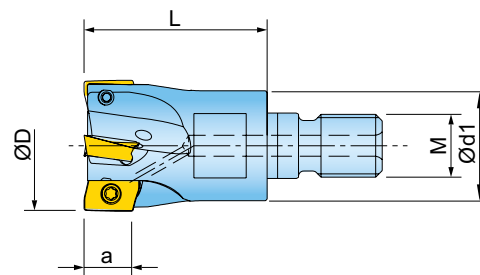
¹⁾ Cutter body has to be modified; ²⁾ Best results are achieved on tools with an even number of teeth. Please mount inserts alternating. ● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS		①	②
Diameter Range			
16	SM25-054-00 (1,1Nm) DS-T08S		
20 - 32	SM25-064-00 (1,1Nm) DS-T08S		

① = Insert screw ② = Screw driver

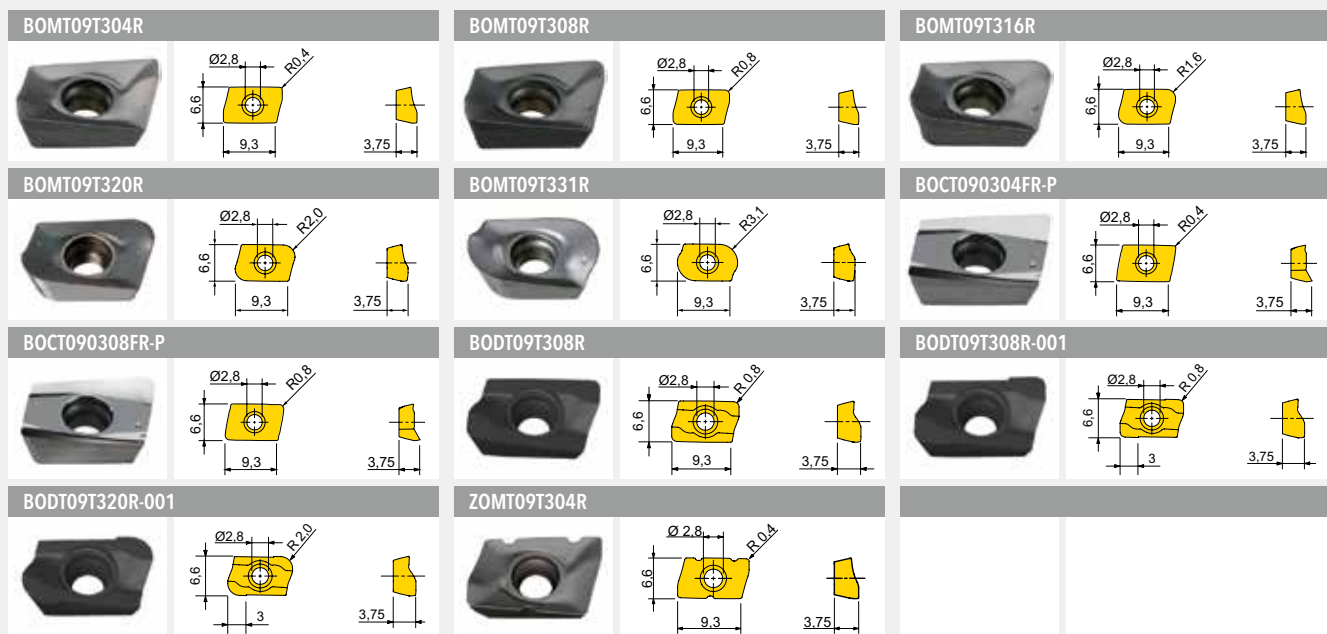
END MILLS

SCREW-IN TYPE ADAPTION



Designation	D	d1	L	a	M	Z			
SB.012.002	12	11,8	30	9	6	1	1,5°	✓	0,02
SB.015.001	15	13	30	9	8	2	12,0°	✓	0,03
SB.016.003	16	13	35	9	8	2	10,0°	✓	0,03
SB.020.011	20	18	35	9	10	2	7,0°	✓	0,07
SB.020.009	20	18	35	9	10	3	7,0°	✓	0,06
SB.025.013	25	21	35	9	12	4	4,4°	✓	0,09
SB.032.012	32	29	43	9	16	4	2,8°	✓	0,20
SB.032.011	32	29	43	9	16	5	2,8°	✓	0,20

END MILLS



Designation	fz(min/max)	Design	Grade	IN10K	IN2035	IN2504	IN2505	IN2530	IN4030	IN6535
BOMT09T304R	0,10/0,15	positive geometry R0,4								
BOMT09T308R	0,10/0,15	positive geometry R0,8								
BOMT09T316R ¹⁾	0,10/0,15	positive geometry R1,6								
BOMT09T320R ¹⁾	0,10/0,15	positive geometry R2,0								
BOMT09T331R ¹⁾	0,10/0,15	positive geometry R3,1								
BOCT090304FR-P	0,05/0,20	non-ferrous geometry, polished R0,4								
BOCT090308FR-P	0,05/0,20	non-ferrous geometry, polished R0,8								
BODT09T308R	0,05/0,15	ground finishing geometry R0,8								
BODT09T308R-001	0,05/0,15	finishing geometry, short R0,8								
BODT09T320R-001	0,05/0,15	finishing geometry, short R2,0								
ZOMT09T304R ²⁾	0,10/0,15	chip splitter geometry R0,4								

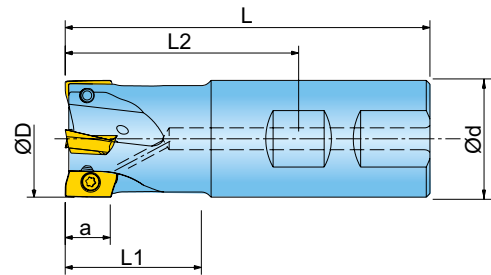
¹⁾ Cutter body has to be modified; ²⁾ Best results are achieved on tools with an even number of teeth. Please mount inserts alternating. ● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS	①	②
Diameter Range		
12 - 16	SM25-054-00 (1,1Nm) DS-T08S	
20 - 32	SM25-064-00 (1,1Nm) DS-T08S	

① = Insert screw ② = Screw driver

END MILLS

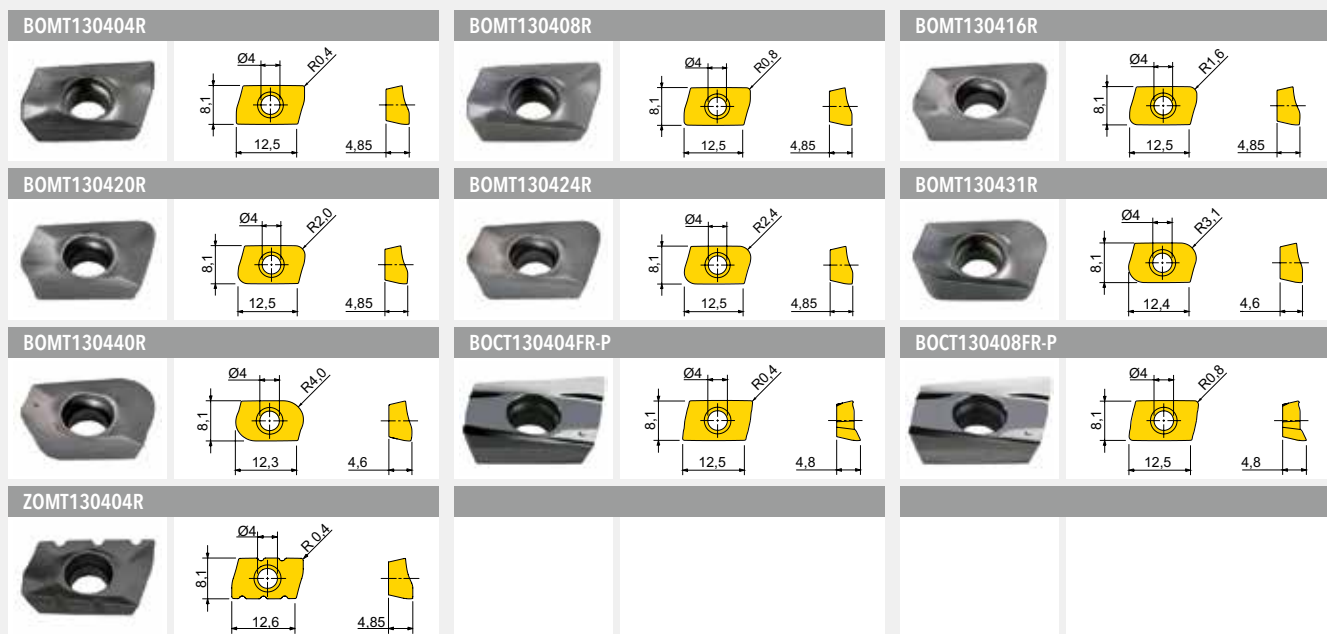
ADAPTION ACC. TO DIN 1835 B (WELDON)



Designation	D	d	L	L1	L2	a	Z			
SB.020.001	20	20	90	30	65	12	2	7,0°	✓	0,17
SB.025.015	25	25	100	40	68	12	2	7,9°	✓	0,32
SB.025.005	25	25	100	40	68	12	3	7,9°	✓	0,30
SB.032.007	32	25	100	40	68	12	4	5,0°	✓	0,33
SB.032.005	32	32	100	38	64	12	4	5,0°	✓	0,51

HIPOS PLUS SB13D03B

END MILLS



Designation	fz(min/max)	Design	Grade	IN10K	IN2035	IN2505	IN2530	IN4030	IN6535		
BOMT130404R	0,12/0,20	positive geometry R0,4									
BOMT130408R	0,12/0,20	positive geometry R0,8									
BOMT130416R	0,12/0,20	positive geometry R1,6									
BOMT130420R	0,12/0,20	positive geometry R2,0									
BOMT130424R ¹⁾	0,12/0,20	positive geometry R2,4									
BOMT130431R ¹⁾	0,12/0,20	positive geometry R3,1									
BOMT130440R ¹⁾	0,12/0,20	positive geometry R4,0									
BOCT130404FR-P	0,05/0,25	non-ferrous geometry, polished R0,4									
BOCT130408FR-P	0,05/0,25	non-ferrous geometry, polished R0,8									
ZOMT130404R ²⁾	0,12/0,20	chip splitter geometry R0,4									

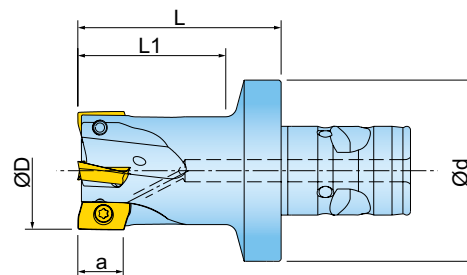
¹⁾ Cutter body has to be modified; ²⁾ Best results are achieved on tools with an even number of teeth. Please mount inserts alternating. ● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS	① 	② 
SM35-088-10 (3,0Nm) DS-T10S		

① = Insert screw ② = Screw driver

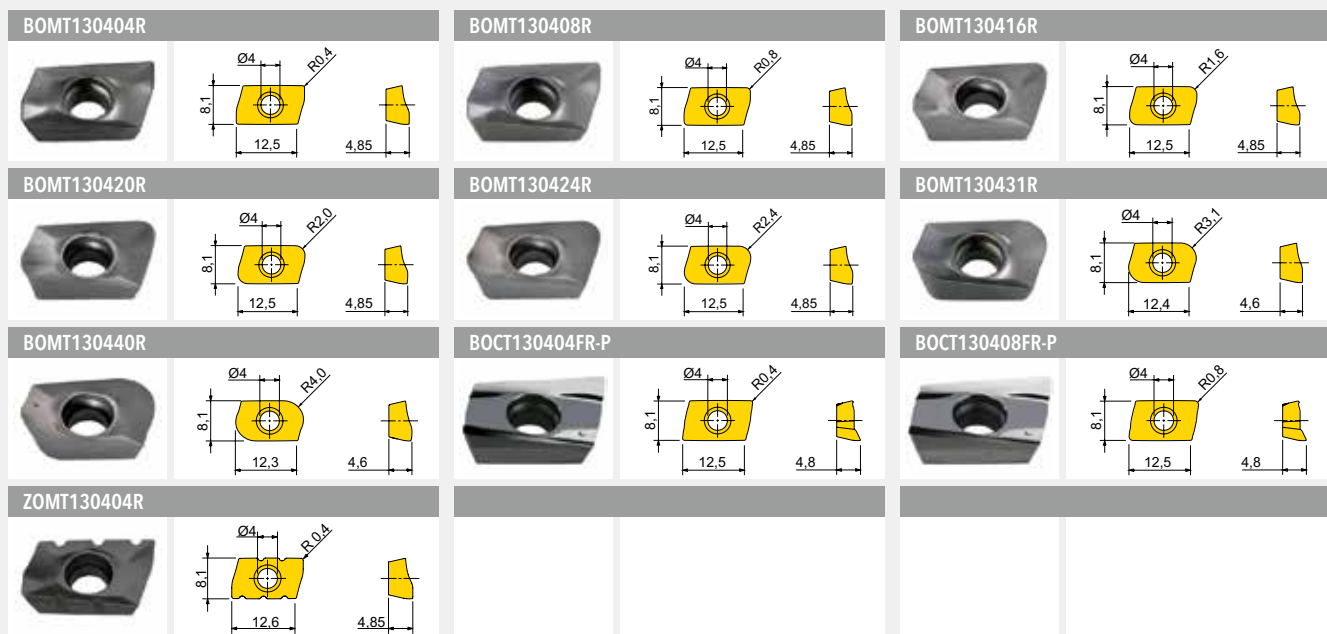
END MILLS

MODULAR MILLING ADAPTOR INNOFIT



Designation	D	d	L	L1	a	MOD	Z			
SB.020.003	20	49	50	36	12	40	2	7,0°	✓	0,31
SB.020.004	20	49	70	56	12	40	2	7,0°	✓	0,35
SB.025.007	25	49	55	42	12	40	3	7,9°	✓	0,36
SB.025.008	25	49	100	87	12	40	2	7,9°	✓	0,51
SB.032.008	32	49	55	42	12	40	4	5,0°	✓	0,43
SB.032.009	32	49	135	122	12	40	3	5,0°	✓	0,84

END MILLS



Designation	fz(min/max)	Design	Grade	IN10K	IN2035	IN2505	IN2530	IN4030	IN6535		
BOMT130404R	0,12/0,20	positive geometry R0,4									
BOMT130408R	0,12/0,20	positive geometry R0,8									
BOMT130416R	0,12/0,20	positive geometry R1,6									
BOMT130420R	0,12/0,20	positive geometry R2,0									
BOMT130424R ¹⁾	0,12/0,20	positive geometry R2,4									
BOMT130431R ¹⁾	0,12/0,20	positive geometry R3,1									
BOMT130440R ¹⁾	0,12/0,20	positive geometry R4,0									
BOCT130404FR-P	0,05/0,25	non-ferrous geometry, polished R0,4									
BOCT130408FR-P	0,05/0,25	non-ferrous geometry, polished R0,8									
ZOMT130404R ²⁾	0,12/0,20	chip splitter geometry R0,4									

¹⁾ Cutter body has to be modified; ²⁾ Best results are achieved on tools with an even number of teeth. Please mount inserts alternating. ● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

① 

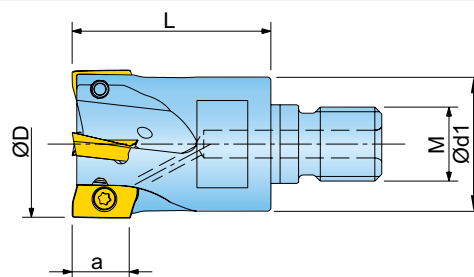
② 

SM35-088-10 (3,0Nm) DS-T10S

① = Insert screw ② = Screw driver

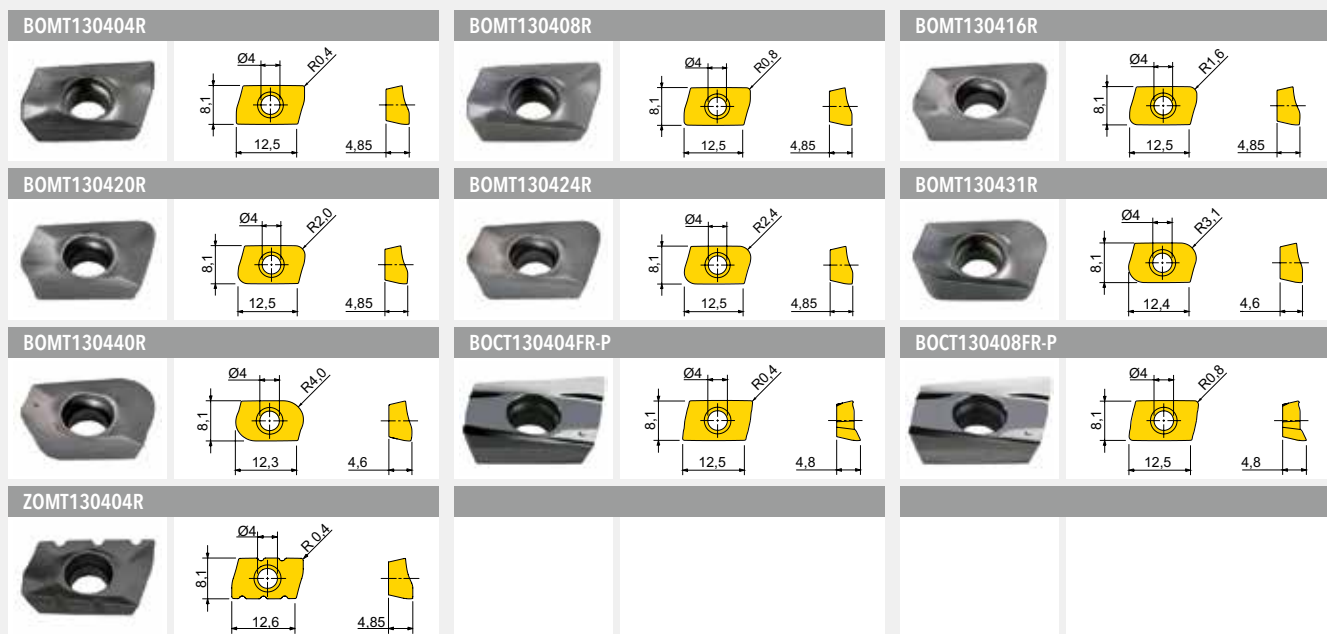
END MILLS

SCREW-IN TYPE ADAPTION



Designation	D	d1	L	a	M	Z			
SB.020.002	20	18	35	12	10	2	7,0°	✓	0,06
SB.025.016	25	21	35	12	12	2	7,9°	✓	0,09
SB.025.006	25	21	35	12	12	3	7,9°	✓	0,08
SB.032.006	32	29	43	12	16	4	5,0°	✓	0,19
SB.035.001	35	29	43	12	16	4	4,2°	✓	0,20
SB.040.002	40	29	43	12	16	4	3,2°	✓	0,25
SB.040.001	40	29	43	12	16	5	3,2°	✓	0,23

END MILLS



Designation	fz(min/max)	Design	Grade	IN10K	IN2035	IN2505	IN2530	IN4030	IN6535		
BOMT130404R	0,12/0,20	positive geometry R0,4									
BOMT130408R	0,12/0,20	positive geometry R0,8									
BOMT130416R	0,12/0,20	positive geometry R1,6									
BOMT130420R	0,12/0,20	positive geometry R2,0									
BOMT130424R ¹⁾	0,12/0,20	positive geometry R2,4									
BOMT130431R ¹⁾	0,12/0,20	positive geometry R3,1									
BOMT130440R ¹⁾	0,12/0,20	positive geometry R4,0									
BOCT130404FR-P	0,05/0,25	non-ferrous geometry, polished R0,4									
BOCT130408FR-P	0,05/0,25	non-ferrous geometry, polished R0,8									
ZOMT130404R ²⁾	0,12/0,20	chip splitter geometry R0,4									

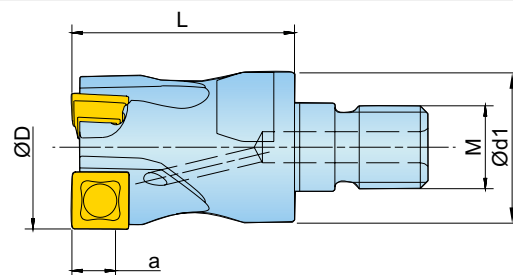
¹⁾ Cutter body has to be modified; ²⁾ Best results are achieved on tools with an even number of teeth. Please mount inserts alternating. ● = P ● = M ● = K ● = N ● = S ○ = H



① = Insert screw ② = Screw driver

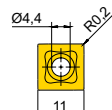
END MILLS

SCREW-IN TYPE ADAPTION

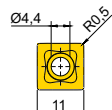


Designation	D	d1	L	a	M	Z			
SS.025.006	25	21	35	8,4	12	2	7,0°	✓	0,08
SS.032.006	32	29	43	8,4	16	3	6,0°	✓	0,18
SS.040.002	40	29	43	8,4	16	3	4,0°	✓	0,22

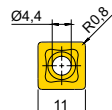
SHET110502FR-P



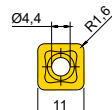
SHET110505FR-P



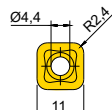
SHET110508FR-P



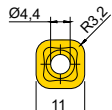
SHET110516FR-P



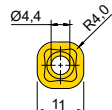
SHET110524FN-P



SHET110532FN-P



SHET110540FN-P



Designation	fz(min/max)	Design	Grade	IN15K									
SHET110502FR-P	0,05/0,30	non-ferrous geometry, polished R0,2		●									
SHET110505FR-P	0,05/0,30	non-ferrous geometry, polished R0,5		●									
SHET110508FR-P	0,05/0,30	non-ferrous geometry, polished R0,8		●									
SHET110516FR-P	0,05/0,30	non-ferrous geometry, polished R1,6		●									
SHET110524FN-P	0,05/0,30	non-ferrous geometry, polished R2,4		●									
SHET110532FN-P	0,05/0,30	non-ferrous geometry, polished R3,2		●									
SHET110540FN-P	0,05/0,30	non-ferrous geometry, polished R4,0		●									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



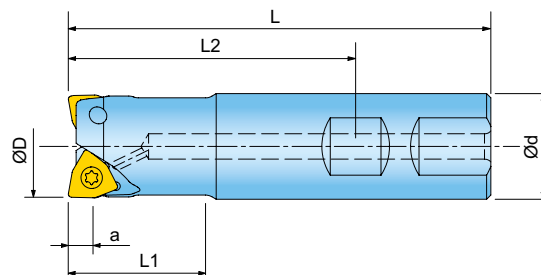
SM40-093-20 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

ALUMINATOR SS11E01

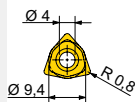
END MILLS

ADAPTION ACC. TO DIN 1835 B (WELDON)



Designation	D	d	L	L1	L2	a	Z		IK	kg
SW.025.001	25	25	100	30	68	5,8	2	2,9°	✓	0,32
SW.032.001	32	32	110	40	74	5,8	3	2,2°	✓	0,58
SW.040.001	40	32	115	40	79	5,8	4	1,8°	✓	0,66

WNMU060608N



Designation	fz(min/max)	Design	Grade	IN2505	IN2530						
WNMU060608N	0,13/0,35	positive geometry R0,8									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

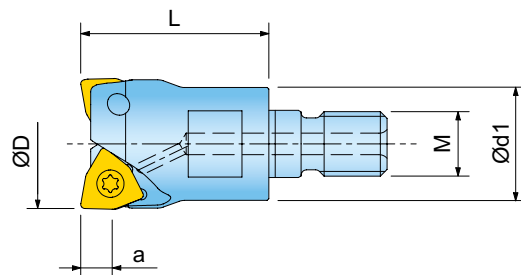


SM35-088-60 (3,0Nm) DS-T10S

① = Insert screw ② = Screw driver

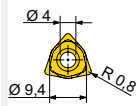
END MILLS

SCREW-IN TYPE ADAPTION



Designation	D	d	L	a	M	Z			
SW.025.002	25	21	35	5,8	12	2	2,9°	✓	0,10
SW.032.002	32	29	43	5,8	16	3	2,2°	✓	0,21
SW.040.002	40	29	43	5,8	16	4	1,8°	✓	0,25

WNMU060608N



Designation	fz(min/max)	Design	Grade	IN2505	IN2530						
WNMU060608N	0,13/0,35	positive geometry R0,8									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



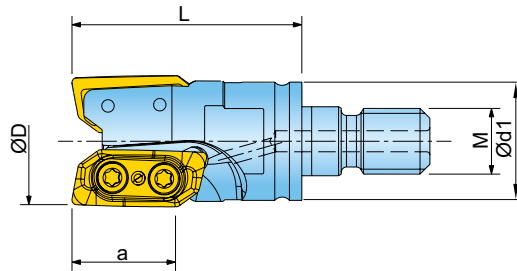
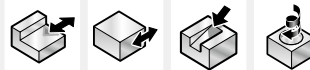
SM35-088-60 (3,0Nm) DS-T10S

① = Insert screw ② = Screw driver

ECO 6 SW06E01

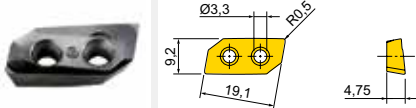
END MILLS

SCREW-IN TYPE ADAPTION

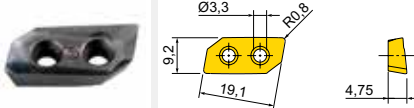


Designation	D	d1	L	a	M	Z			
EX.020.001	20	18	35	15,5	10	2	4,6°	✓	0,06
EX.025.002	25	21	43	15,5	12	2	9,6°	✓	0,12
EX.032.002	32	29	43	15,5	16	3	12,2°	✓	0,21
EX.040.001	40	29	53	15,5	16	3	8,6°	✓	0,32
EX.042.002	42	29	53	15,5	16	3	8,1°	✓	0,34

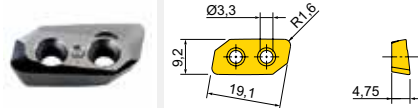
XPET140405FR-P



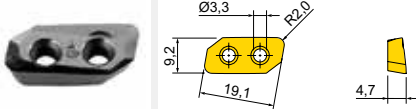
XPET140408FR-P



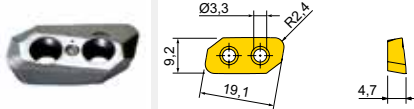
XPET140416FR-P



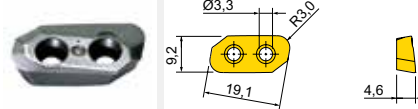
XPET140420FR-P



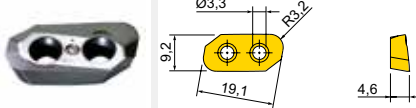
XPET140424FR-P



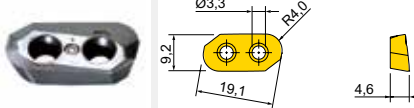
XPET140430FR-P



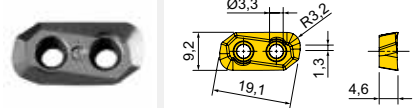
XPET140432FR-P



XPET140440FR-P



XPET140432FR-PW



Designation	fz(min/max)	Design	Grade	IN15K									
XPET140405FR-P	0,05/0,30	non-ferrous geometry, polished R0,5		●									
XPET140408FR-P	0,05/0,30	non-ferrous geometry, polished R0,8		●									
XPET140416FR-P	0,05/0,30	non-ferrous geometry, polished R1,6		●									
XPET140420FR-P	0,05/0,30	non-ferrous geometry, polished R2,0		●									
XPET140424FR-P	0,05/0,30	non-ferrous geometry, polished R2,4		●									
XPET140430FR-P ¹⁾	0,05/0,30	non-ferrous geometry, polished R3,0		●									
XPET140432FR-P ¹⁾	0,05/0,30	non-ferrous geometry, polished R3,2		●									
XPET140440FR-P ¹⁾	0,05/0,30	non-ferrous geometry, polished R4,0		●									
XPET140432FR-PW ¹⁾	0,05/0,30	Wiper non-ferrous geometry, polished R3,2		●									

¹⁾ Cutter body has to be modified

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



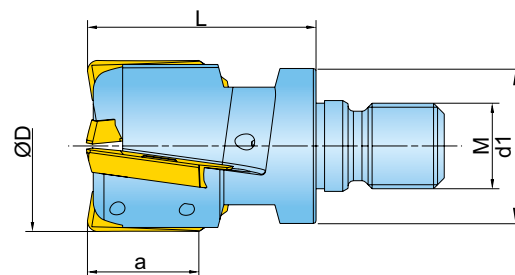
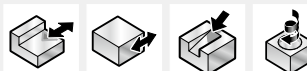
Diameter Range

20 - 25	SM30-065-00 (2,0Nm) DS-T09S
32 - 42	SM30-082-00 (2,0Nm) DS-T09S

① = Insert screw ② = Screw driver

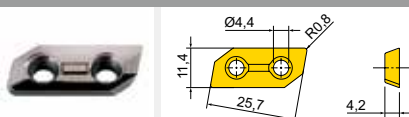
END MILLS

SCREW-IN TYPE ADAPTION

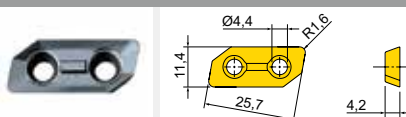


Designation	D	d1	L	a	M	Z			
EX.025.001	25	21	43	21	12	1	20,0°	✓	0,12
EX.032.001	32	29	43	21	16	2	15,0°	✓	0,15
EX.042.001	42	29	53	21	16	3	10,0°	✓	0,20

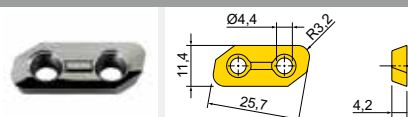
XEET250408R-P



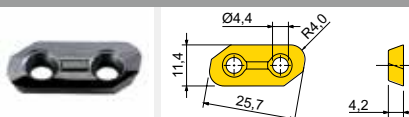
XEET250416R-P



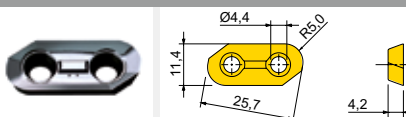
XEET250432R-P



XEET250440R-P



XEET250450R-P



Designation	fz(min/max)	Design	Grade	IN15K								
XEET250408R-P	0,05/0,35	non-ferrous geometry, polished R0,8		●								
XEET250416R-P	0,05/0,35	non-ferrous geometry, polished R1,6		●								
XEET250432R-P	0,05/0,35	non-ferrous geometry, polished R3,2		●								
XEET250440R-P	0,05/0,35	non-ferrous geometry, polished R4,0		●								
XEET250450R-P ¹⁾	0,05/0,35	non-ferrous geometry, polished R5,0		●								

¹⁾ Cutter body has to be modified

● = P ● = M ● = K ● = N ● = S ○ = H

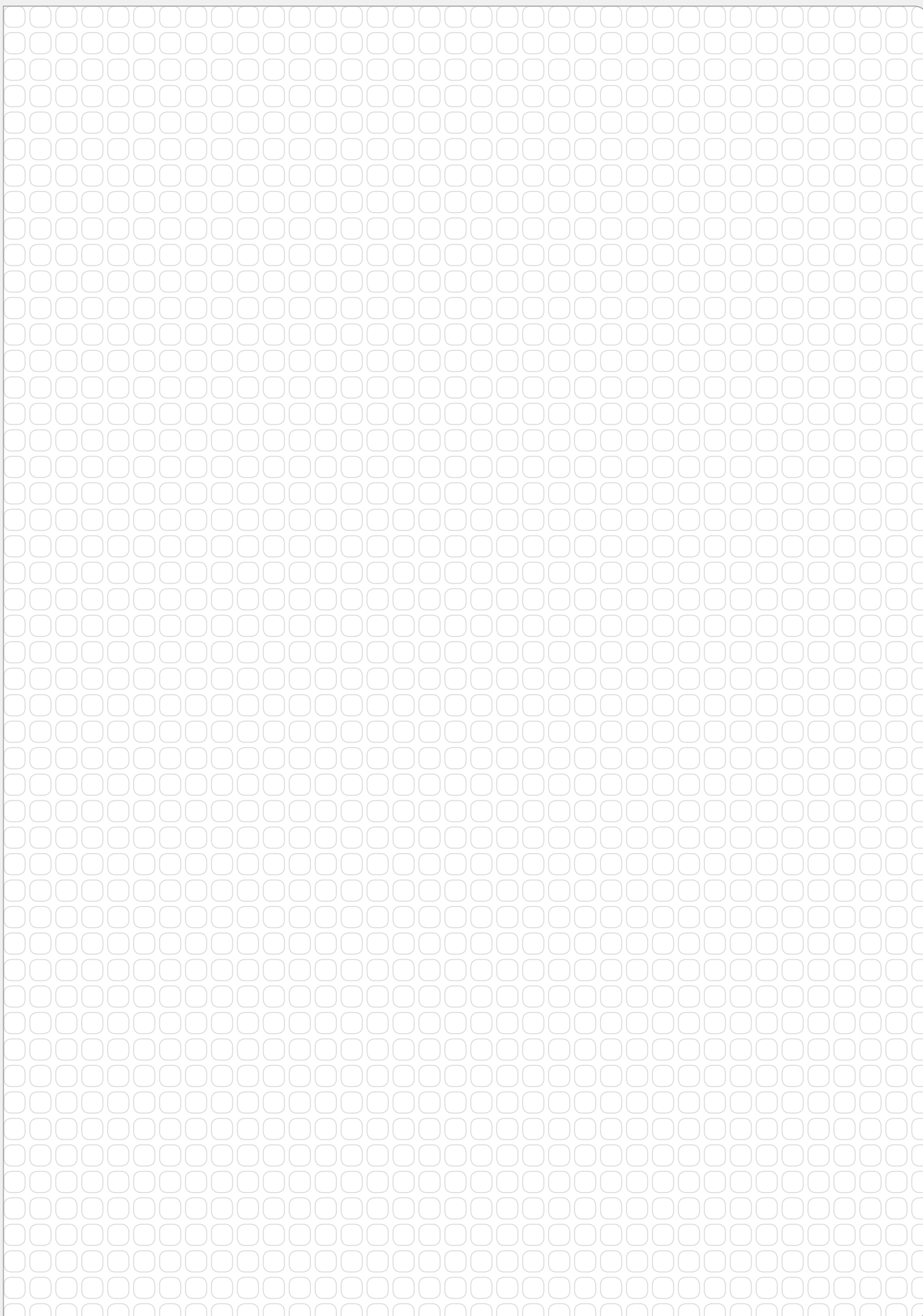
SPARE PARTS



SM40-070-00 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

END MILLS



NOTES

HELICAL END MILLS

	D	a	Description	Code	Page
	16 - 25	16,5 - 27	HIPOS MICRO IA06D03	IA06D03	40
	16 - 25	17 - 27	HIPOS MICRO IA06M01	IA06M01	41
	25 - 32	26 - 34	HIPOS PLUS IB09D03	IB09D03	42
	25 - 40	26 - 42,5	HIPOS PLUS IB09M01	IB09M01	43
	32 - 40	35 - 46	HIPOS PLUS IB13D02B	IB13D02B	44
	40 - 80	35 - 46	HIPOS PLUS IB13D10B	IB13D10B	46
	32 - 63	35 - 138	HIPOS PLUS IB13M01B	IB13M01B	48
	63 - 125	45 - 88	HIPOS PLUS IA16D10	IA16D10	50
	40 - 80	45 - 146	HIPOS PLUS IA16M01	IA16M01	51

Subject to printing error or technical changes.

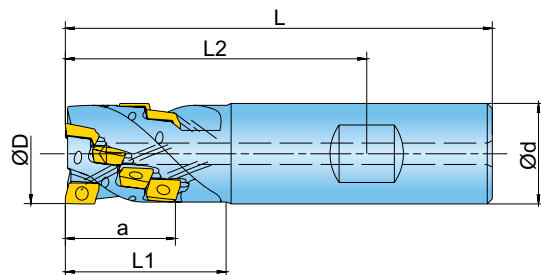
HELICAL END MILLS

Subject to printing error or technical changes.



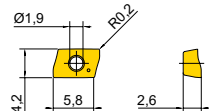
HELICAL END MILLS

ADAPTION ACC. TO DIN 1835 B (WELDON)

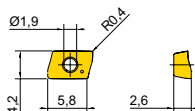


Designation	D	d	L	L1	L2	a	Z	Z _{eff}			
IA.016.001	16	16	80	30	56	16,5	6	2	4,0°	✓	0,10
IA.019.001	19	20	85	32	60	22	12	3	2,6°	✓	0,16
IA.020.003	20	20	85	32	60	22	12	3	2,5°	✓	0,16
IA.022.001	22	20	85	32	60	22	16	4	2,3°	✓	0,17
IA.025.003	25	25	95	36	63	27	20	4	2,0°	✓	0,29

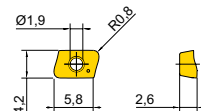
AOMT060202R



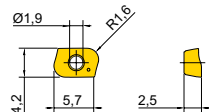
AOMT060204R



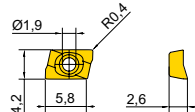
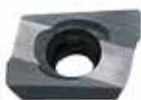
AOMT060208R



AOMT060216R



AOCT060204FR-P



Designation	fz(min/max)	Design	Grade	IN05S	IN2035	IN2505	IN2530	IN6535			
AOMT060202R	0,06/0,12	positive geometry R0,2									
AOMT060204R	0,06/0,12	positive geometry R0,4									
AOMT060208R	0,06/0,12	positive geometry R0,8									
AOMT060216R ¹⁾	0,06/0,12	positive geometry R1,6									
AOCT060204FR-P	0,05/0,12	non-ferrous geometry, polished R0,4									

¹⁾ Cutter body has to be modified

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



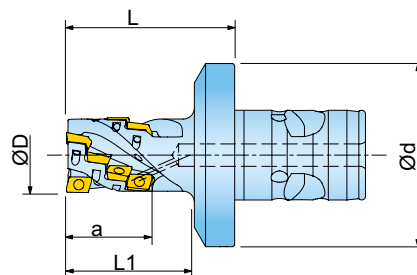
SM18-041-00 (0,5Nm) DS-TP06S (TX-Plus)

① = Insert screw ② = Screw driver

HIPOS MICRO IA06D03

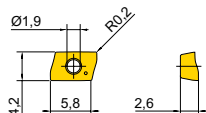
HELICAL END MILLS

MODULAR MILLING ADAPTOR INNOFIT

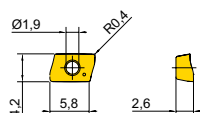


Designation	D	d	L	L1	a	MOD	Z	Zeff			
IA.016.002	16	49	45	32	17	40	6	2	4,0°	✓	0,27
IA.020.004	20	49	45	32	22	40	12	3	2,5°	✓	0,28
IA.025.004	25	49	55	43	27	40	20	4	2,0°	✓	0,34

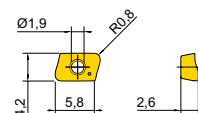
AOMT060202R



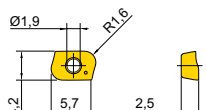
AOMT060204R



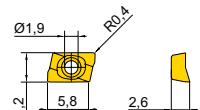
AOMT060208R



AOMT060216R



AOCT060204FR-P



Designation	fz(min/max)	Design	Grade	IN05S	IN203S	IN250S	IN2530	IN653S			
AOMT060202R	0,06/0,12	positive geometry R0,2									
AOMT060204R	0,06/0,12	positive geometry R0,4									
AOMT060208R	0,06/0,12	positive geometry R0,8									
AOMT060216R ¹⁾	0,06/0,12	positive geometry R1,6									
AOCT060204FR-P	0,05/0,12	non-ferrous geometry, polished R0,4									

¹⁾ Cutter body has to be modified

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

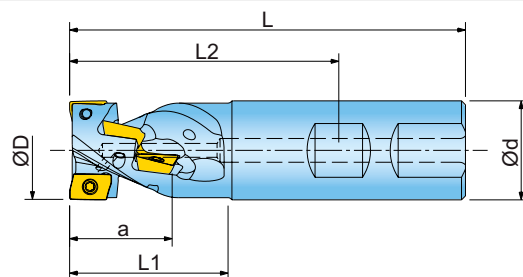


SM18-041-00 (0,5Nm) DS-TP06S (TX-Plus)

① = Insert screw ② = Screw driver

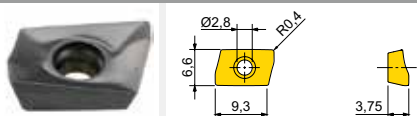
HELICAL END MILLS

ADAPTION ACC. TO DIN 1835 B (WELDON)

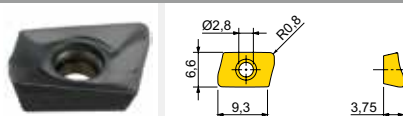


Designation	D	d	L	L1	L2	a	Z	Zeff			
IB.025.001	25	25	100	40	68	26	6	2	4,4°	✓	0,28
IB.032.007	32	32	110	50	74	34	8	2	2,8°	✓	0,56
IB.032.005	32	32	110	50	74	34	12	3	2,8°	✓	0,52

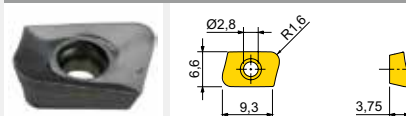
BOMT09T304R



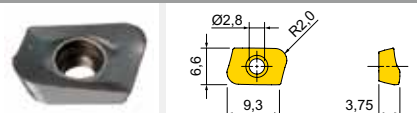
BOMT09T308R



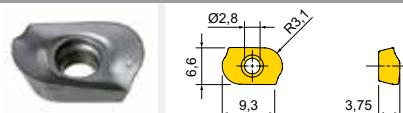
BOMT09T316R



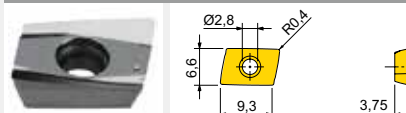
BOMT09T320R



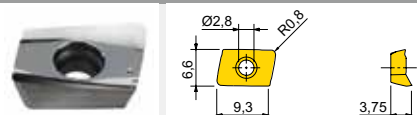
BOMT09T331R



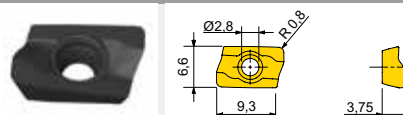
BOCT090304FR-P



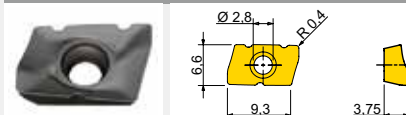
BOCT090308FR-P



BODT09T308R



ZOMT09T304R



Designation	fz(min/max)	Design	Grade	IN10K	IN2035	IN2504	IN2505	IN2530	IN4030	IN6535
BOMT09T304R	0,10/0,15	positive geometry R0,4								
BOMT09T308R	0,10/0,15	positive geometry R0,8								
BOMT09T316R ¹⁾	0,10/0,15	positive geometry R1,6								
BOMT09T320R ¹⁾	0,10/0,15	positive geometry R2,0								
BOMT09T331R ¹⁾	0,10/0,15	positive geometry R3,1								
BOCT090304FR-P	0,05/0,20	non-ferrous geometry, polished R0,4								
BOCT090308FR-P	0,05/0,20	non-ferrous geometry, polished R0,8								
BODT09T308R	0,05/0,15	ground finishing geometry R0,8								
ZOMT09T304R ²⁾	0,10/0,15	chip splitter geometry R0,4								

¹⁾ Cutter body has to be modified; ²⁾ Best results are achieved on tools with an even number of teeth. Please mount inserts alternating.

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



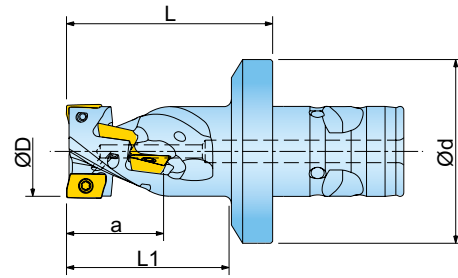
SM25-064-00 (1,1Nm) DS-T08S

① = Insert screw ② = Screw driver

HIPOS PLUS IB09D03

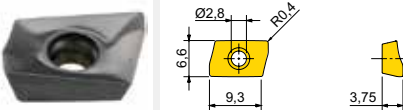
HELICAL END MILLS

MODULAR MILLING ADAPTOR INNOFIT

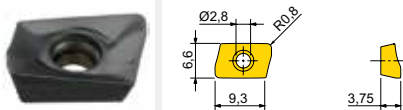


Designation	D	d	L	L1	a	MOD	Z	Zeff			
IB.025.002	25	49	55	43	26	40	6	2	4,4°	✓	0,33
IB.028.001	28	49	72	60	34	40	8	2	3,7°	✓	0,42
IB.032.008	32	49	72	60	34	40	8	2	2,8°	✓	0,51
IB.032.006	32	49	72	60	34	40	12	3	2,8°	✓	0,48
IB.040.014	40	49	72	60	42,5	40	20	4	2,4°	✓	0,58

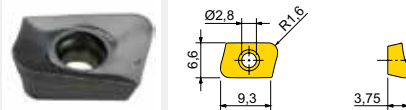
BOMT09T304R



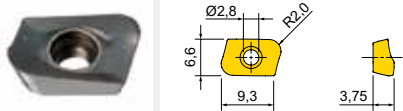
BOMT09T308R



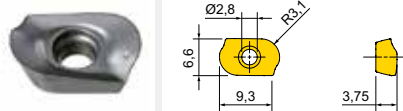
BOMT09T316R



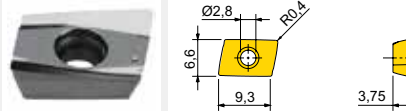
BOMT09T320R



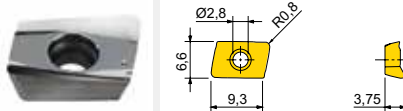
BOMT09T331R



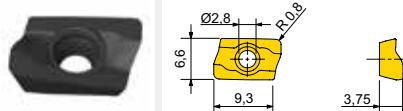
BOCT090304FR-P



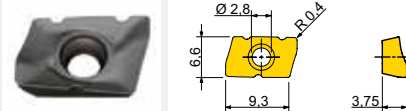
BOCT090308FR-P



BODT09T308R



ZOMT09T304R



Designation	fz(min/max)	Design	Grade	IN10K	IN2035	IN2504	IN2505	IN2530	IN4030	IN6535
BOMT09T304R	0,10/0,15	positive geometry R0,4								
BOMT09T308R	0,10/0,15	positive geometry R0,8								
BOMT09T316R ¹⁾	0,10/0,15	positive geometry R1,6								
BOMT09T320R ¹⁾	0,10/0,15	positive geometry R2,0								
BOMT09T331R ¹⁾	0,10/0,15	positive geometry R3,1								
BOCT090304FR-P	0,05/0,20	non-ferrous geometry, polished R0,4								
BOCT090308FR-P	0,05/0,20	non-ferrous geometry, polished R0,8								
BODT09T308R	0,05/0,15	ground finishing geometry R0,8								
ZOMT09T304R ²⁾	0,10/0,15	chip splitter geometry R0,4								

¹⁾ Cutter body has to be modified; ²⁾ Best results are achieved on tools with an even number of teeth. Please mount inserts alternating.

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

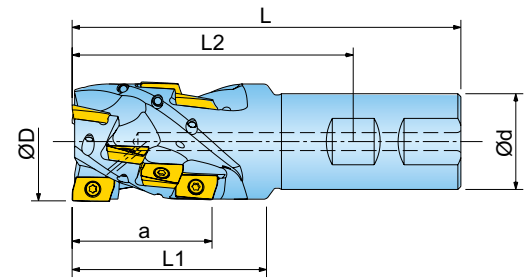


SM25-064-00 (1,1Nm) DS-T08S

① = Insert screw ② = Screw driver

HELICAL END MILLS

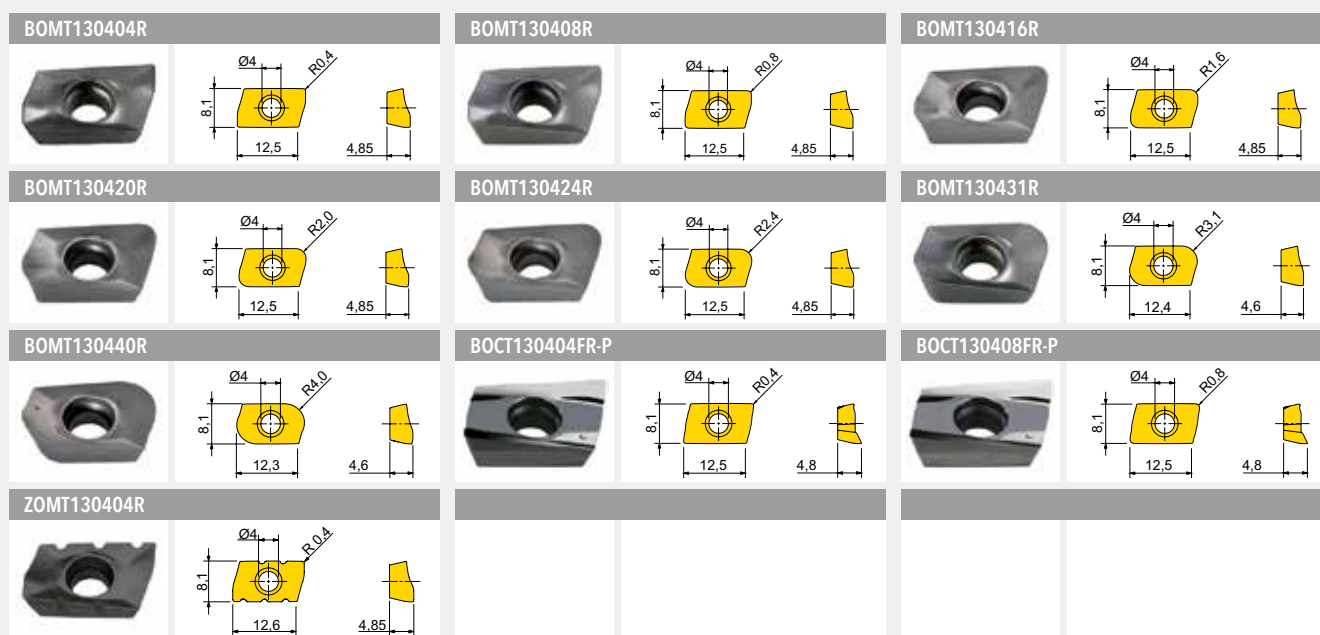
ADAPTION ACC. TO DIN 1835 B (WELDON)



Designation	D	d	L	L1	L2	a	Z	Zeff			
IB.032.003	32	32	110	48	74	35	6	2	5,0°	✓	0,50
IB.040.015	40	32	130	65	94	46	8	2	3,2°	✓	0,77
IB.040.008	40	32	130	65	94	46	12	3	3,2°	✓	0,71

HIPOS PLUS IB13D02B

HELICAL END MILLS



Designation	fz(min/max)	Design	Grade	IN10K	IN2035	IN2505	IN2530	IN4030	IN6535		
BOMT130404R	0,12/0,20	positive geometry R0,4									
BOMT130408R	0,12/0,20	positive geometry R0,8									
BOMT130416R	0,12/0,20	positive geometry R1,6									
BOMT130420R	0,12/0,20	positive geometry R2,0									
BOMT130424R ¹⁾	0,12/0,20	positive geometry R2,4									
BOMT130431R ¹⁾	0,12/0,20	positive geometry R3,1									
BOMT130440R ¹⁾	0,12/0,20	positive geometry R4,0									
BOCT130404FR-P	0,05/0,25	non-ferrous geometry, polished R0,4									
BOCT130408FR-P	0,05/0,25	non-ferrous geometry, polished R0,8									
ZOMT130404R ²⁾	0,12/0,20	chip splitter geometry R0,4									

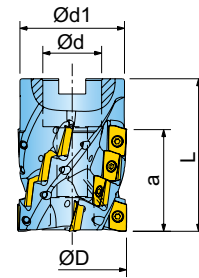
¹⁾ Cutter body has to be modified; ²⁾ Best results are achieved on tools with an even number of teeth. Please mount inserts alternating. ● = P ● = M ● = K ● = N ● = S ○ = H



① = Insert screw ② = Screw driver

HELICAL END MILLS

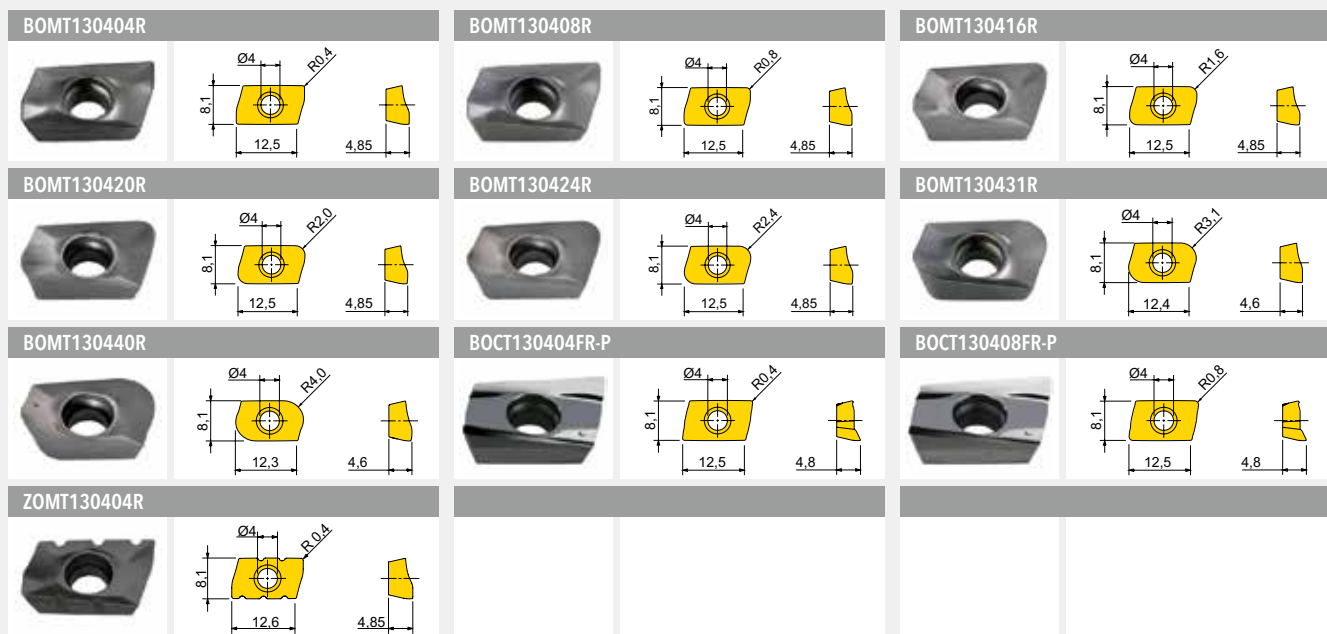
ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	L	a	Z	Z _{eff}			
IB.040.016	40	16	36	55	35	6	2	3,2°	✓	0,28
IB.040.009	40	16	36	55	35	9	3	3,2°	✓	0,23
IB.050.008	50	27	48	70	46	16	4	2,1°	✓	0,48
IB.063.006	63	27	55	70	46	16	4	1,4°	✓	0,98
IB.080.004	80	32	73	70	46	16	4	1,0°	✓	1,66
IB.080.003	80	32	73	70	46	20	5	1,0°	✓	1,62

HIPOS PLUS IB13D10B

HELICAL END MILLS



Designation	fz(min/max)	Design	Grade	IN10K	IN2035	IN2505	IN2530	IN4030	IN6535		
BOMT130404R	0,12/0,20	positive geometry R0,4									
BOMT130408R	0,12/0,20	positive geometry R0,8									
BOMT130416R	0,12/0,20	positive geometry R1,6									
BOMT130420R	0,12/0,20	positive geometry R2,0									
BOMT130424R ¹⁾	0,12/0,20	positive geometry R2,4									
BOMT130431R ¹⁾	0,12/0,20	positive geometry R3,1									
BOMT130440R ¹⁾	0,12/0,20	positive geometry R4,0									
BOCT130404FR-P	0,05/0,25	non-ferrous geometry, polished R0,4									
BOCT130408FR-P	0,05/0,25	non-ferrous geometry, polished R0,8									
ZOMT130404R ²⁾	0,12/0,20	chip splitter geometry R0,4									

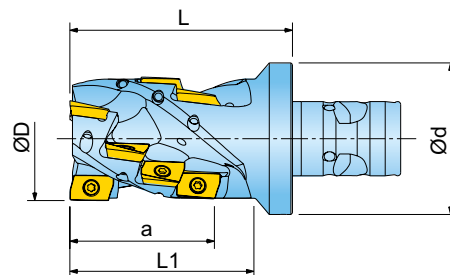
¹⁾ Cutter body has to be modified; ²⁾ Best results are achieved on tools with an even number of teeth. Please mount inserts alternating. ● = P ● = M ● = K ● = N ● = S ○ = H



① = Insert screw ② = Screw driver

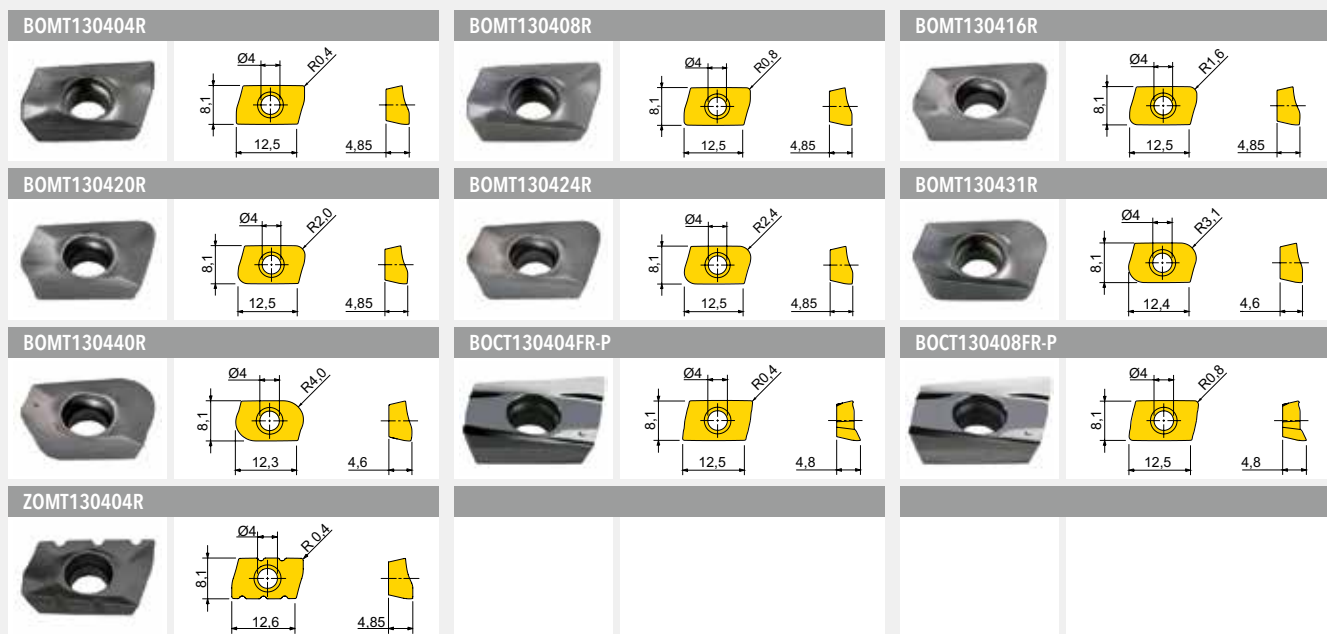
HELICAL END MILLS

MODULAR MILLING ADAPTOR INNOFIT



Designation	D	d	L	L1	a	MOD	Z	Zeff			
IB.032.004	32	49	60	49	35	40	6	2	5,0°	✓	0,38
IB.040.017	40	49	72	60	46	40	8	2	3,2°	✓	0,60
IB.040.010	40	49	72	60	46	40	12	3	3,2°	✓	0,54
IB.040.018	40	49	94	83	69	40	12	2	3,2°	✓	0,70
IB.040.011	40	49	94	83	69	40	18	3	3,2°	✓	0,64
IB.040.019	40	78	100	79	69	50	12	2	3,2°	✓	1,34
IB.040.012	40	78	100	79	69	50	18	3	3,2°	✓	1,28
IB.040.020	40	78	112	91	81	50	14	2	3,2°	✓	1,40
IB.040.013	40	78	112	91	81	50	21	3	3,2°	✓	1,32
IB.050.009	50	49	72	72	46	40	16	4	2,1°	✓	0,80
IB.050.010	50	78	100	80	69	50	24	4	2,1°	✓	1,60
IB.063.007	63	78	120	102	92	50	32	4	1,4°	✓	2,43
IB.063.008	63	78	143	125	115	50	40	4	1,4°	✓	2,76
IB.063.009	63	78	166	148	138	50	48	4	1,4°	✓	3,09

HELICAL END MILLS



Designation	fz(min/max)	Design	Grade	IN10K	IN2035	IN2505	IN2530	IN4030	IN6535		
BOMT130404R	0,12/0,20	positive geometry R0,4									
BOMT130408R	0,12/0,20	positive geometry R0,8									
BOMT130416R	0,12/0,20	positive geometry R1,6									
BOMT130420R	0,12/0,20	positive geometry R2,0									
BOMT130424R ¹⁾	0,12/0,20	positive geometry R2,4									
BOMT130431R ¹⁾	0,12/0,20	positive geometry R3,1									
BOMT130440R ¹⁾	0,12/0,20	positive geometry R4,0									
BOCT130404FR-P	0,05/0,25	non-ferrous geometry, polished R0,4									
BOCT130408FR-P	0,05/0,25	non-ferrous geometry, polished R0,8									
ZOMT130404R ²⁾	0,12/0,20	chip splitter geometry R0,4									

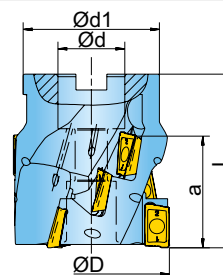
¹⁾ Cutter body has to be modified; ²⁾ Best results are achieved on tools with an even number of teeth. Please mount inserts alternating. ● = P ● = M ● = K ● = N ● = S ○ = H



① = Insert screw ② = Screw driver

HELICAL END MILLS

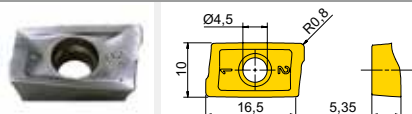
ADAPTION ACC. TO DIN 8030



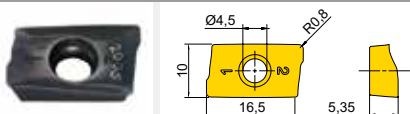
Designation	D	d	d1	L	a	Z	Zeff			
IA.063.001	63	27	55	70	45	9	3	1,4°	✓	0,90
IA.063.002 ¹⁾²⁾	63	27	55	70	50	8	2	1,4°	✓	0,85
IA.063.003	63	27	55	85	59	12	3	1,4°	✓	1,13
IA.063.010	63	27	55	85	59	16	4	1,4°	✓	1,04
IA.080.001	80	32	73	99	74	20	4	1,0°	✓	2,33
IA.080.002	80	32	73	99	74	25	5	1,0°	✓	2,43
IA.080.003 ¹⁾²⁾	80	32	73	99	72	12	2	1,0°	✓	2,23
IA.100.001	100	40	92	114	88	36	6	0,8°	✓	4,76
IA.125.001 ³⁾	125	40	114	85	59	24	6	0,6°	✓	3,98

¹⁾ Recommended for slotting; ²⁾ Half effective; ³⁾ Additional bolt circle Ø66,7 mm

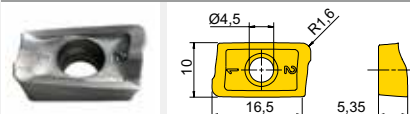
AOMT160508R



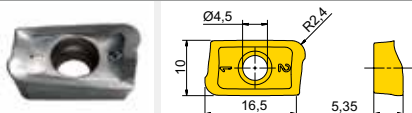
AOMT160508R-HS



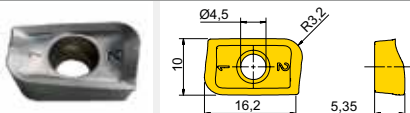
AOMT160516R



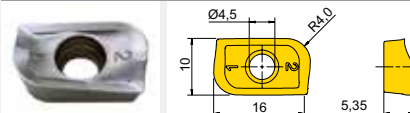
AOMT160524R



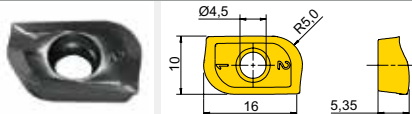
AOMT160532R



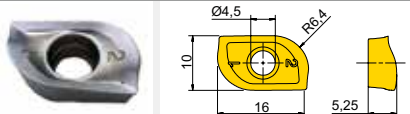
AOMT160540R



AOMT160550R



AOMT160564R



Designation	fz(min/max)	Design	Grade	IN05S	IN1030	IN2005	IN2015	IN2030	IN2040	IN2505	IN4030
AOMT160508R	0,16/0,30	positive geometry R0,8									
AOMT160508R-HS	0,10/0,25	positive titanium geometry R0,8									
AOMT160516R	0,16/0,30	positive geometry R1,6									
AOMT160524R	0,16/0,30	positive geometry R2,4									
AOMT160532R ¹⁾	0,16/0,30	positive geometry R3,2									
AOMT160540R ¹⁾	0,16/0,30	positive geometry R4,0									
AOMT160550R ¹⁾	0,16/0,30	positive geometry R5,0									
AOMT160564R ¹⁾	0,16/0,30	positive geometry R6,4									

¹⁾ Cutter body has to be modified

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



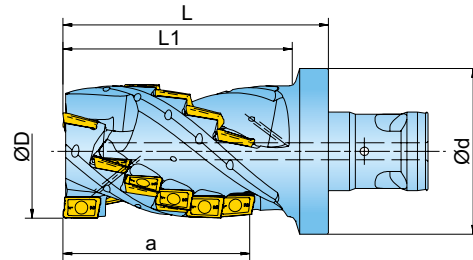
SM40-093-20 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

HIPOS PLUS IA16D10

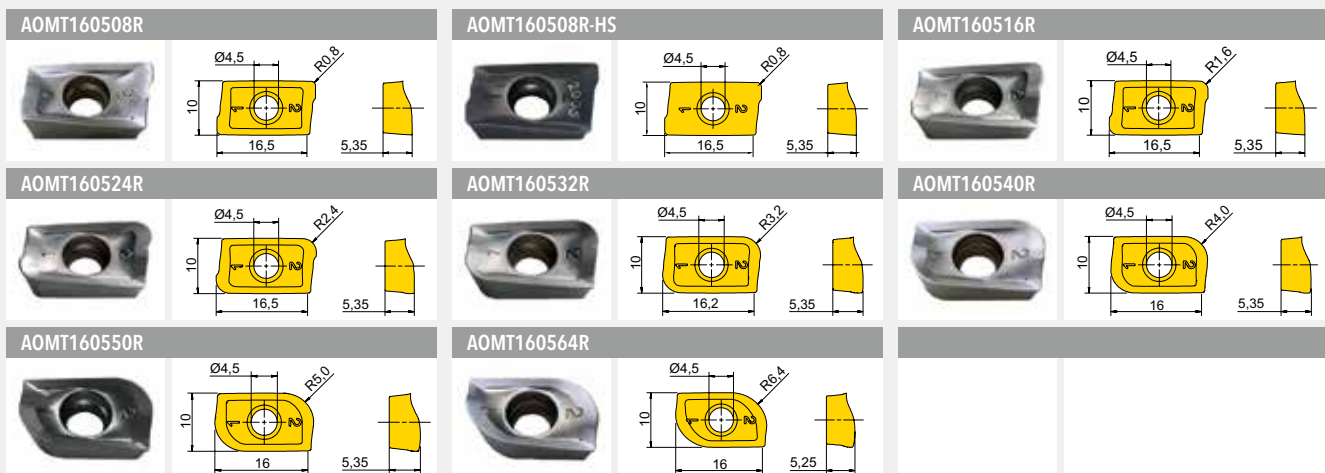
HELICAL END MILLS

MODULAR MILLING ADAPTOR INNOFIT



Designation	D	d	L	L1	a	MOD	Z	Zeff			
IA.040.001	40	78	82	65	45	50	6	2	2,6°	✓	1,21
IA.050.001	50	78	96	79	59	50	12	3	1,9°	✓	1,54
IA.063.004	63	78	96	79	59	50	12	3	1,4°	✓	2,08
IA.063.006	63	78	125	108	88	50	18	3	1,4°	✓	2,49
IA.063.007	63	78	154	137	117	50	24	3	1,4°	✓	2,89
IA.063.008	63	78	183	166	146	50	30	3	1,4°	✓	3,28
IA.080.004	80	78	125	125	88	50	24	4	1,0°	✓	3,66
IA.080.005 ¹⁾²⁾	80	78	125	125	84	50	14	2	1,0°	✓	3,71
IA.080.006	80	78	154	154	117	50	40	5	1,0°	✓	4,50

¹⁾ Recommended for slotting; ²⁾ Half effective



Designation	fz(min/max)	Design	Grade	IN05S	IN1030	IN2005	IN2015	IN2030	IN2040	IN2505	IN4030
AOMT160508R	0,16/0,30	positive geometry R0,8									
AOMT160508R-HS	0,10/0,25	positive titanium geometry R0,8									
AOMT160516R	0,16/0,30	positive geometry R1,6									
AOMT160524R	0,16/0,30	positive geometry R2,4									
AOMT160532R ¹⁾	0,16/0,30	positive geometry R3,2									
AOMT160540R ¹⁾	0,16/0,30	positive geometry R4,0									
AOMT160550R ¹⁾	0,16/0,30	positive geometry R5,0									
AOMT160564R ¹⁾	0,16/0,30	positive geometry R6,4									

¹⁾ Cutter body has to be modified

= P = M = K = N = S = H



SPARE PARTS

SM40-093-20 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

SQUARE SHOULDER CUTTERS

	D	a	Description	Code	Page
	32 - 40	5,7	HIPOS-MICRO EA06D10	EA06D10	54
	32 - 80	9	HIPOS-PLUS EB09D10A	EB09D10A	55
	32 - 63	9	HIPOS-PLUS EB09D10	EB09D10	56
	35 - 125	12	HIPOS-PLUS EB13D10B	EB13D10B	58
	40 - 160	16	HIPOS-PLUS EA16D10	EA16D10	60
	40 - 80	7,5	HIPOS-QUAD ES08D10	ES08D10	62
	40 - 80	8,7	HIPOS-QUAD ES09D10	ES09D10	63
	50 - 100	10	HIPOS-QUAD ES11D10	ES11D10	64
	40 - 125	5,8	ECO-6 EW06D10	EW06D10	65
	50 - 80	15,5	ALUMINATOR EX14D10	EX14D10	66
	50 - 125	21	ALUMINATOR EX25D10	EX25D10	67
	40 - 160	7	SUPER-6 EW07D10	EW07D10	68
	50 - 200	0,5	SUPER-FINISH PYD10	PYD10	69

Subject to printing error or technical changes.

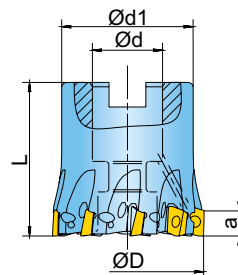
SQUARE SHOULDER CUTTERS

Subject to printing error or technical changes.



SQUARE SHOULDER CUTTERS

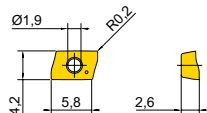
ADAPTION ACC. TO DIN 8030



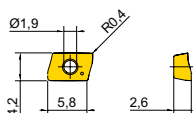
Designation	D	d	d1	L	a	Z			
EA.032.003	32	16	30	32	5,7	8	1,6°	✓	0,11
EA.035.002	35	16	30	35	5,7	9	1,4°	✓	0,14
EA.040.005	40	22	38	40	5,7	10	1,2°	✓	0,22

Programming radius 1mm

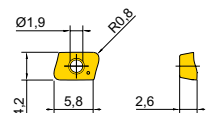
AOMT060202R



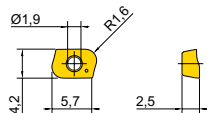
AOMT060204R



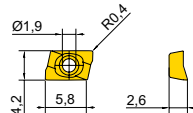
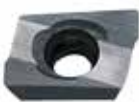
AOMT060208R



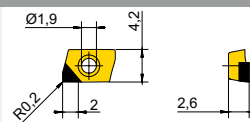
AOMT060216R



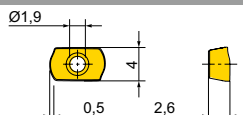
AOCT060204FR-P



AOMT060202R-DT1



UOMT0602TR



Designation	fz(min/max)	Design	Grade	IN05S	IN2035	IN2505	IN2530	IN6535	IN90D		
AOMT060202R	0,06/0,12	positive geometry R0,2									
AOMT060204R	0,06/0,12	positive geometry R0,4									
AOMT060208R	0,06/0,12	positive geometry R0,8									
AOMT060216R ¹⁾	0,06/0,12	positive geometry R1,6									
AOCT060204FR-P	0,05/0,12	non-ferrous geometry, polished R0,4									
AOMT060202R-DT1	0,05/0,12	with short PCD-tip R0,2									
UOMT0602TR	0,30/0,80	high feed geometry									

¹⁾ Cutter body has to be modified

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



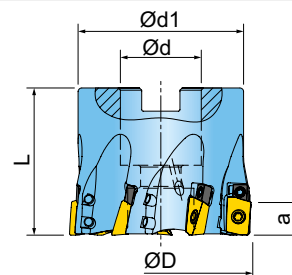
SM18-041-00 (0,5Nm) DS-TP06S (TX-Plus)

① = Insert screw ② = Screw driver

HIPOS MICRO EA06D10

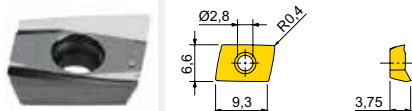
SQUARE SHOULDER CUTTERS

ADAPTION ACC. TO DIN 8030

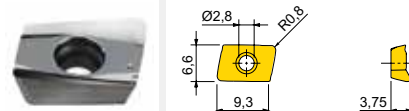


Designation	D	d	d1	L	a	Z	IK	kg
EB.032.002	32	16	30	32	9	5	✓	0,09
EB.040.005	40	16	30	40	9	6	✓	0,16
EB.050.004	50	22	45	40	9	7	✓	0,32
EB.063.004	63	22	55	40	9	8	✓	0,56
EB.080.003	80	27	70	50	9	10	✓	1,30

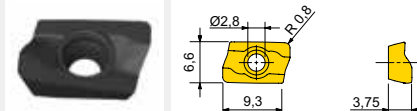
BOCT090304FR-P



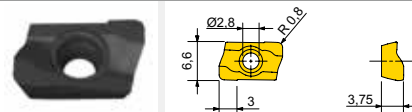
BOCT090308FR-P



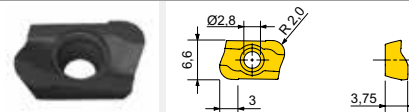
BODT09T308R



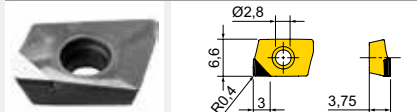
BODT09T308R-001



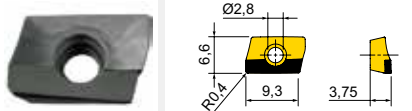
BODT09T320R-001



BOMT09T304R-DT1



BOMT09T304R-DT2



Designation	fz(min/max)	Design	Grade	IN10K	IN2504	IN90D					
BOCT090304FR-P	0,05/0,20	non-ferrous geometry, polished R0,4		●							
BOCT090308FR-P	0,05/0,20	non-ferrous geometry, polished R0,8		●							
BODT09T308R	0,05/0,15	ground finishing geometry R0,8			○						
BODT09T308R-001	0,05/0,15	finishing geometry, short R0,8			○						
BODT09T320R-001	0,05/0,15	finishing geometry, short R2,0			○						
BOMT09T304R-DT1	0,05/0,20	with short PCD-tip R0,4				●					
BOMT09T304R-DT2	0,05/0,20	with long PCD-tip R0,4				●					

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



SM25-064-00 (1,1Nm) DS-T08S

PAR5092

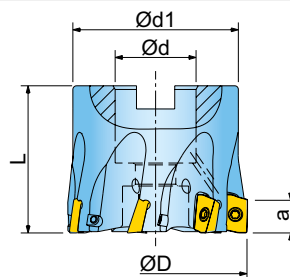
SB025-00

DS-T05F

① = Insert screw ② = Screw driver ③ = Wedge ④ = Differential screw ⑤ = Screw driver

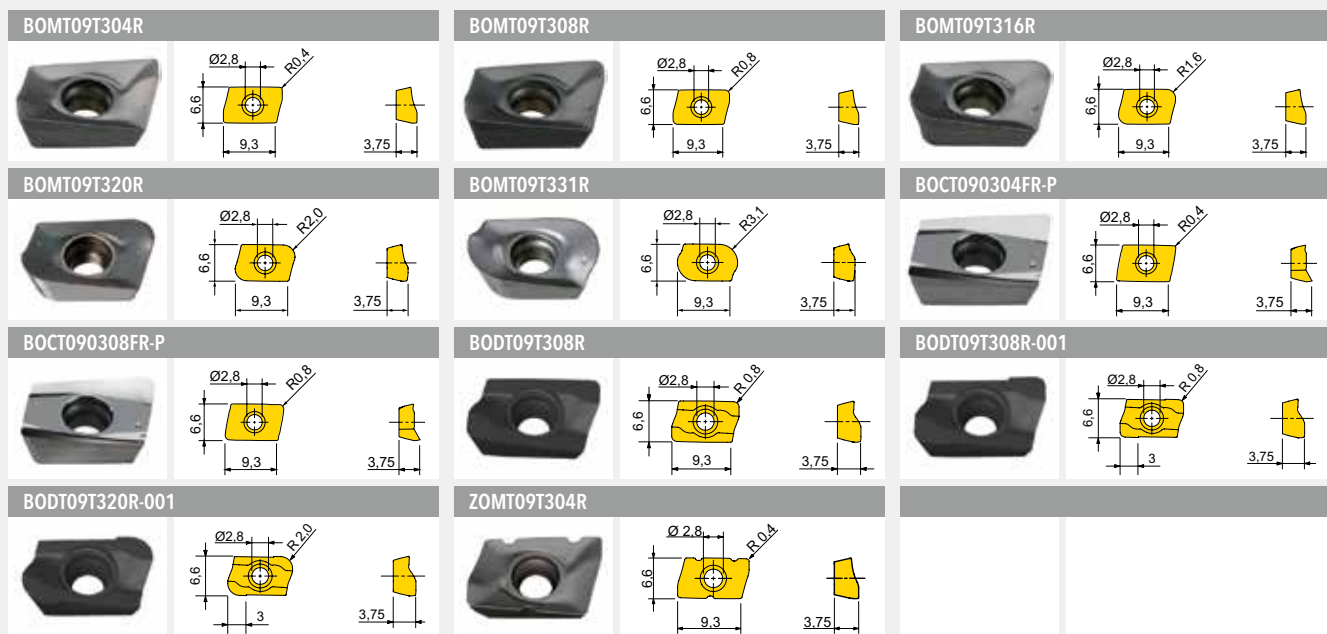
SQUARE SHOULDER CUTTERS

ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	L	a	Z			
EB.032.003	32	16	30	32	9	4	2,8°	✓	0,09
EB.032.001	32	16	30	32	9	5	2,8°	✓	0,09
EB.040.006	40	16	30	40	9	4	2,4°	✓	0,15
EB.040.004	40	16	30	40	9	6	2,4°	✓	0,16
EB.050.005	50	22	45	40	9	4	1,3°	✓	0,32
EB.050.003	50	22	45	40	9	7	1,3°	✓	0,32
EB.063.005	63	22	55	40	9	6	1,0°	✓	0,55
EB.063.003	63	22	55	40	9	8	1,0°	✓	0,55

SQUARE SHOULDER CUTTERS



Designation	fz(min/max)	Design	Grade	IN10K	IN2035	IN2504	IN2505	IN2530	IN4030	IN6535
BOMT09T304R	0,10/0,15	positive geometry R0,4								
BOMT09T308R	0,10/0,15	positive geometry R0,8								
BOMT09T316R ¹⁾	0,10/0,15	positive geometry R1,6								
BOMT09T320R ¹⁾	0,10/0,15	positive geometry R2,0								
BOMT09T331R ¹⁾	0,10/0,15	positive geometry R3,1								
BOCT090304FR-P	0,05/0,20	non-ferrous geometry, polished R0,4								
BOCT090308FR-P	0,05/0,20	non-ferrous geometry, polished R0,8								
BODT09T308R	0,05/0,15	ground finishing geometry R0,8								
BODT09T308R-001	0,05/0,15	finishing geometry, short R0,8								
BODT09T320R-001	0,05/0,15	finishing geometry, short R2,0								
ZOMT09T304R ²⁾	0,10/0,15	chip splitter geometry R0,4								

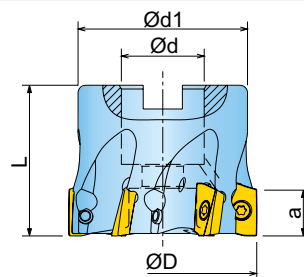
¹⁾ Cutter body has to be modified; ²⁾ Best results are achieved on tools with an even number of teeth. Please mount inserts alternating. ● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS	① 	② 
SM25-064-00 (1,1Nm) DS-T08S		

① = Insert screw ② = Screw driver

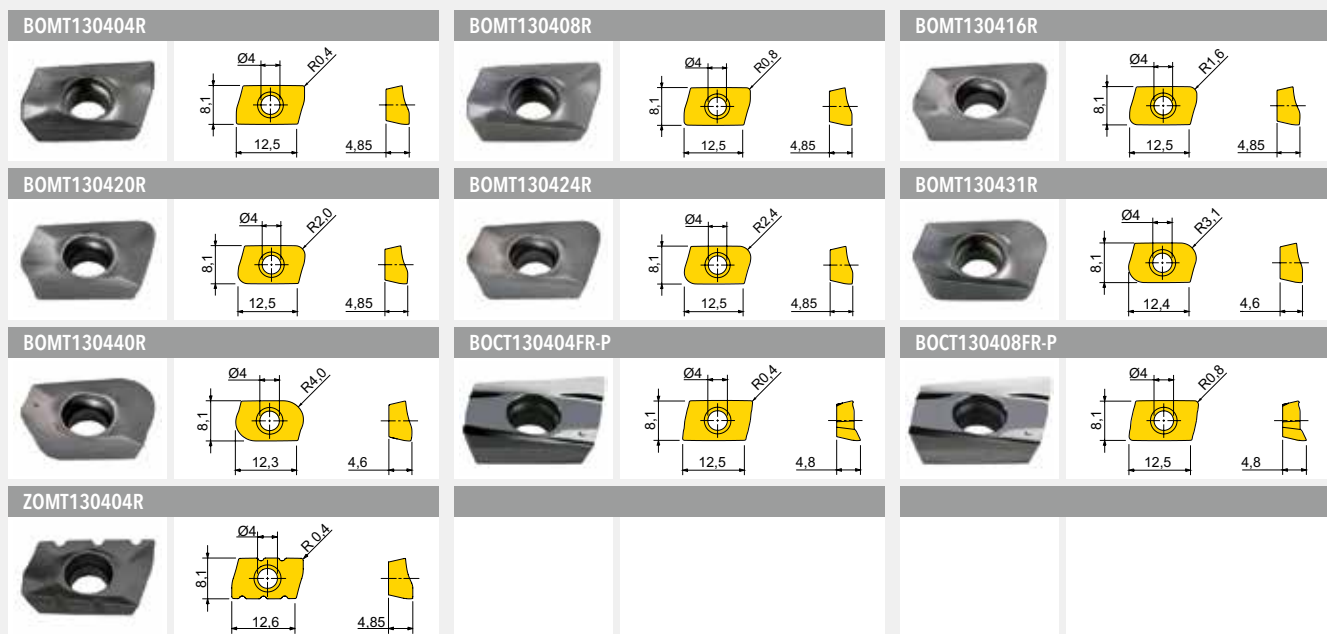
SQUARE SHOULDER CUTTERS

ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	L	a	Z			
EB.035.001	35	16	30	35	12	4	4,2°	✓	0,10
EB.040.007	40	16	38	40	12	4	3,2°	✓	0,22
EB.040.002	40	16	38	40	12	5	3,2°	✓	0,21
EB.040.008	40	22	38	40	12	4	3,2°	✓	0,18
EB.040.003	40	22	38	40	12	5	3,2°	✓	0,18
EB.050.006	50	22	45	40	12	4	2,1°	✓	0,29
EB.050.002	50	22	45	40	12	6	2,1°	✓	0,30
EB.052.001	52	22	40	50	12	5	2,0°	✓	0,37
EB.063.006	63	22	55	40	12	6	1,4°	✓	0,54
EB.063.002	63	22	55	40	12	7	1,4°	✓	0,54
EB.066.001	66	27	48	50	12	6	1,2°	✓	0,60
EB.080.004	80	27	70	50	12	6	1,0°	✓	1,21
EB.080.002	80	27	70	50	12	9	1,0°	✓	1,20
EB.085.001	85	27	70	50	12	7	0,9°	✓	1,33
EB.100.003	100	32	85	50	12	8	0,8°	✓	1,88
EB.100.002	100	32	85	50	12	11	0,8°	✓	1,89
EB.125.003	125	40	100	63	12	10	0,6°	✓	3,70
EB.125.002	125	40	100	63	12	13	0,6°	✓	3,76

SQUARE SHOULDER CUTTERS



Designation	fz(min/max)	Design	Grade	IN10K	IN2035	IN2505	IN2530	IN4030	IN6535		
BOMT130404R	0,12/0,20	positive geometry R0,4									
BOMT130408R	0,12/0,20	positive geometry R0,8									
BOMT130416R	0,12/0,20	positive geometry R1,6									
BOMT130420R	0,12/0,20	positive geometry R2,0									
BOMT130424R ¹⁾	0,12/0,20	positive geometry R2,4									
BOMT130431R ¹⁾	0,12/0,20	positive geometry R3,1									
BOMT130440R ¹⁾	0,12/0,20	positive geometry R4,0									
BOCT130404FR-P	0,05/0,25	non-ferrous geometry, polished R0,4									
BOCT130408FR-P	0,05/0,25	non-ferrous geometry, polished R0,8									
ZOMT130404R ²⁾	0,12/0,20	chip splitter geometry R0,4									

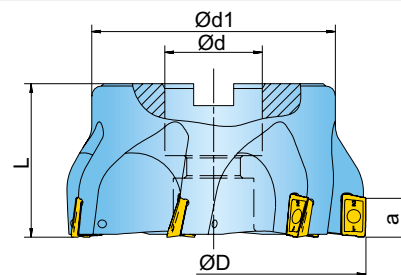
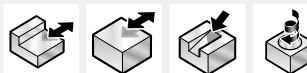
¹⁾ Cutter body has to be modified; ²⁾ Best results are achieved on tools with an even number of teeth. Please mount inserts alternating. ● = P ● = M ● = K ● = N ● = S ○ = H



① = Insert screw ② = Screw driver

SQUARE SHOULDER CUTTERS

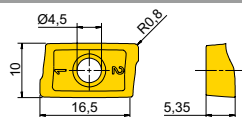
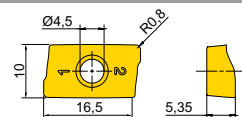
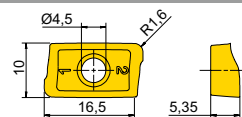
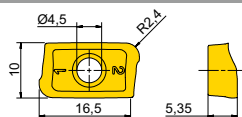
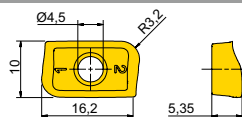
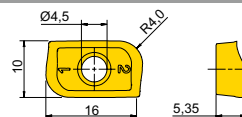
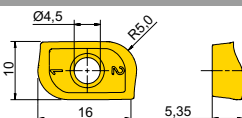
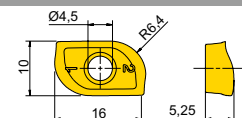
ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	L	a	Z			
EA.040.003	40	16	30	40	16	3	2,6°	✓	0,17
EA.050.003	50	22	45	40	16	4	1,9°	✓	0,30
EA.050.004 ¹⁾	50	22	45	40	16	5	1,9°	✓	0,31
EA.063.003	63	22	55	40	16	5	1,4°	✓	0,52
EA.063.004 ¹⁾	63	22	55	40	16	6	1,4°	✓	0,53
EA.080.003	80	27	70	50	16	6	1,0°	✓	1,19
EA.080.004 ¹⁾	80	27	70	50	16	8	1,0°	✓	1,25
EA.100.003	100	32	85	50	16	6	0,8°		1,79
EA.100.004 ¹⁾	100	32	85	50	16	9	0,8°		1,92
EA.125.001	125	40	100	63	16	7	0,6°		3,56
EA.125.002 ¹⁾	125	40	100	63	16	10	0,6°		3,74
EA.160.001	160	40	100	63	16	8	0,5°		5,36
EA.160.002 ¹⁾	160	40	100	63	16	12	0,5°		5,65

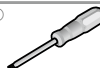
¹⁾Narrow spacing (only for short chip producing materials)

SQUARE SHOULDER CUTTERS

AOMT160508R			AOMT160508R-HS			AOMT160516R					
											
AOMT160524R			AOMT160532R			AOMT160540R					
											
AOMT160550R			AOMT160564R								
											
Designation	fz(min/max)	Design	Grade	IN05S	IN1030	IN2005	IN2015	IN2030	IN2040	IN2505	IN4030
AOMT160508R	0,16/0,30	positive geometry R0,8									
AOMT160508R-HS	0,10/0,25	positive titanium geometry R0,8									
AOMT160516R	0,16/0,30	positive geometry R1,6									
AOMT160524R	0,16/0,30	positive geometry R2,4									
AOMT160532R ¹⁾	0,16/0,30	positive geometry R3,2									
AOMT160540R ¹⁾	0,16/0,30	positive geometry R4,0									
AOMT160550R ¹⁾	0,16/0,30	positive geometry R5,0									
AOMT160564R ¹⁾	0,16/0,30	positive geometry R6,4									

¹⁾ Cutter body has to be modified

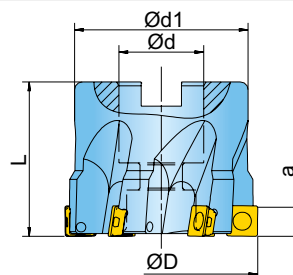
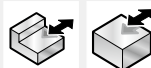
● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS		① 	② 
SM40-093-20 (4,5Nm) DS-T15S			

① = Insert screw ② = Screw driver

SQUARE SHOULDER CUTTERS

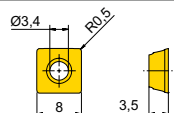
ADAPTION ACC. TO DIN 8030



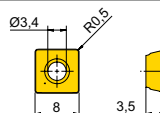
Designation	D	d	d1	L	a	Z		
ES.040.001	40	22	38	40	7,5	5	1,5°	0,21
ES.050.002	50	22	45	40	7,5	6	1,2°	0,34
ES.063.003	63	22	55	40	7,5	5	1,0°	0,56
ES.063.002 ¹⁾	63	22	55	40	7,5	7	1,0°	0,59
ES.080.004	80	27	70	50	7,5	7	0,5°	1,26
ES.080.003 ¹⁾	80	27	70	50	7,5	9	0,5°	1,25

¹⁾ Narrow spacing (only for short chip producing materials)

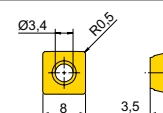
SDMT080305N



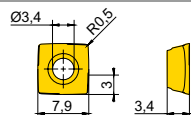
SDMW080305TN



SDCT080305FN-P



SDMW080305TN-W



Designation	fz(min/max)	Design	Grade	IN05S	IN2505	IN2515	IN4030				
SDMT080305N	0,13/0,17	positive geometry R0,5									
SDMW080305TN	0,13/0,20	neutral geometry, K-land R0,5									
SDCT080305FN-P	0,05/0,20	non-ferrous geometry, polished R0,5									
SDMW080305TN-W	0,13/0,20	wiper insert R0,5									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



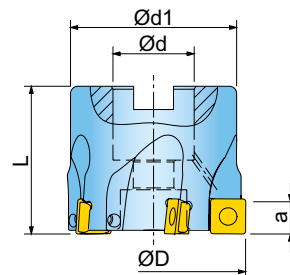
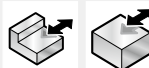
SM30-065-00 (2,0Nm) DS-T09S

① = Insert screw ② = Screw driver

HIPOS QUAD ES08D10

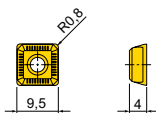
SQUARE SHOULDER CUTTERS

ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	L	a	Z		IK	kg
ES.040.002	40	22	38	40	8,7	5	1,9°	✓	0,17
ES.050.005	50	22	45	40	8,7	6	1,3°	✓	0,30
ES.063.006	63	22	55	40	8,7	7	0,9°	✓	0,52
ES.080.008	80	27	70	50	8,7	9	0,6°	✓	1,15

SHLT090308N-HR



Designation	fz(min/max)	Design	Grade	IN1030	IN2005						
SHLT090308N-HR	0,12/0,20	positive geometry									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

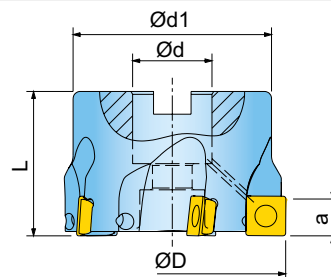
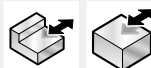


SM30-065-00 (2,0Nm) DS-T09S

① = Insert screw ② = Screw driver

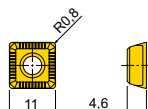
SQUARE SHOULDER CUTTERS

ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	L	a	Z			
ES.050.006	50	22	45	40	10	5	1,8°	✓	0,28
ES.063.007	63	22	55	40	10	6	1,2°	✓	0,50
ES.080.009	80	27	70	50	10	8	0,8°	✓	1,12
ES.100.005	100	32	85	50	10	9	0,6°	✓	1,83

SHLT110408TN-HR



Designation	fz(min/max)	Design	Grade	IN1030	IN2005	IN2035					
SHLT110408TN-HR	0,12/0,25	positive geometry R0,8									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



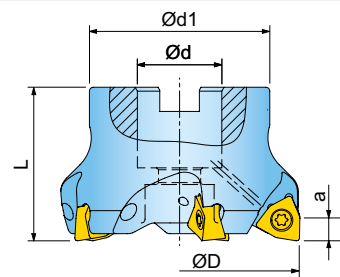
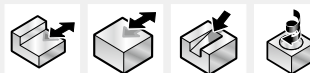
SM40-093-20 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

HIPOS QUAD ES11D10

SQUARE SHOULDER CUTTERS

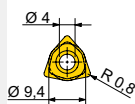
ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	L	a	Z			
EW.040.002 ¹⁾	40	16	38	40	5,8	4	1,8°	✓	0,22
EW.050.003	50	22	45	40	5,8	4	1,7°	✓	0,32
EW.050.004 ¹⁾	50	22	45	40	5,8	6	1,7°	✓	0,31
EW.063.003	63	22	47	40	5,8	5	2,6°	✓	0,45
EW.063.004 ¹⁾	63	22	47	40	5,8	7	2,6°	✓	0,46
EW.080.003	80	27	58	50	5,8	7	2,9°	✓	0,94
EW.080.004 ¹⁾	80	27	58	50	5,8	9	2,9°	✓	0,94
EW.100.003	100	32	85	50	5,8	8	2,2°	✓	1,80
EW.100.004 ¹⁾	100	32	85	50	5,8	11	2,2°	✓	1,80
EW.125.003	125	40	85	63	5,8	10	1,3°	✓	2,87
EW.125.004 ¹⁾	125	40	85	63	5,8	14	1,3°	✓	2,87

¹⁾ Narrow spacing (only for short chip producing materials)

WNMU060608N



Designation	fz(min/max)	Design	Grade	IN2505	IN2530						
WNMU060608N	0,13/0,35	positive geometry R0,8									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

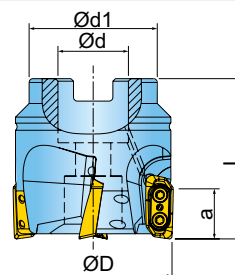
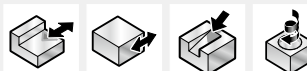


SM35-088-60 (3,0Nm) DS-T10S

① = Insert screw ② = Screw driver

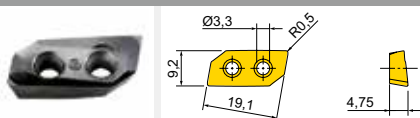
SQUARE SHOULDER CUTTERS

ADAPTION ACC. TO DIN 8030

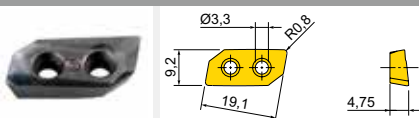


Designation	D	d	d1	L	a	Z		IK	kg
EX.050.002	50	22	40	50	15,5	4	6,2°	✓	0,36
EX.052.002	52	22	40	50	15,5	4	5,9°	✓	0,39
EX.063.002	63	27	50	50	15,5	5	4,7°	✓	0,59
EX.066.002	66	27	50	50	15,5	5	4,4°	✓	0,65
EX.080.002	80	27	60	50	15,5	5	3,5°	✓	1,08

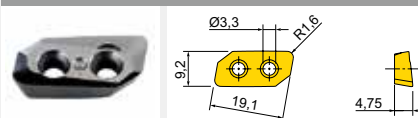
XPET140405FR-P



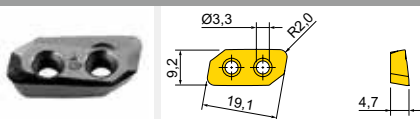
XPET140408FR-P



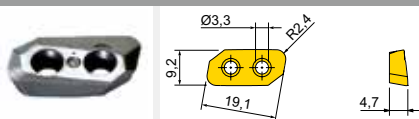
XPET140416FR-P



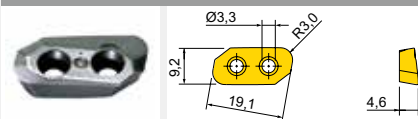
XPET140420FR-P



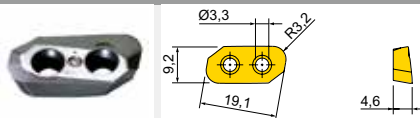
XPET140424FR-P



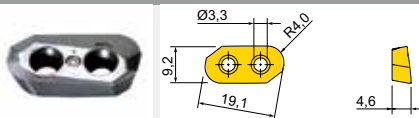
XPET140430FR-P



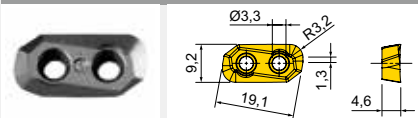
XPET140432FR-P



XPET140440FR-P



XPET140432FR-PW



Designation	fz(min/max)	Design	Grade	IN15K								
XPET140405FR-P	0,05/0,30	non-ferrous geometry, polished R0,5		●								
XPET140408FR-P	0,05/0,30	non-ferrous geometry, polished R0,8		●								
XPET140416FR-P	0,05/0,30	non-ferrous geometry, polished R1,6		●								
XPET140420FR-P	0,05/0,30	non-ferrous geometry, polished R2,0		●								
XPET140424FR-P	0,05/0,30	non-ferrous geometry, polished R2,4		●								
XPET140430FR-P ¹⁾	0,05/0,30	non-ferrous geometry, polished R3,0		●								
XPET140432FR-P ¹⁾	0,05/0,30	non-ferrous geometry, polished R3,2		●								
XPET140440FR-P ¹⁾	0,05/0,30	non-ferrous geometry, polished R4,0		●								
XPET140432FR-PW ¹⁾	0,05/0,30	Wiper non-ferrous geometry, polished R3,2		●								

¹⁾ Cutter body has to be modified

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



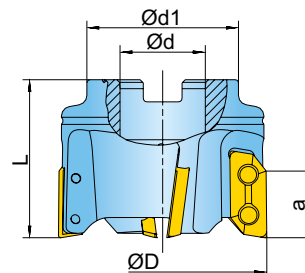
SM30-082-00 (2,0Nm) DS-T09S

① = Insert screw ② = Screw driver

ALUMINATOR EX14D10

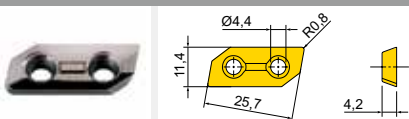
SQUARE SHOULDER CUTTERS

ADAPTION ACC. TO DIN 8030

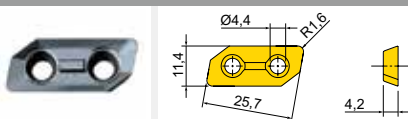


Designation	D	d	d1	L	a	Z		 (K)	 (kg)
EX.050.001	50	22	40	50	21	3	9,0°	✓	0,32
EX.052.001	52	22	40	50	21	3	9,0°	✓	0,35
EX.063.001	63	27	48	50	21	4	6,0°	✓	0,55
EX.066.001	66	27	48	50	21	4	6,0°	✓	0,60
EX.080.001	80	27	60	50	21	5	5,0°	✓	1,00
EX.100.001	100	32	70	50	21	5	4,0°		1,60
EX.125.001	125	40	90	63	21	6	3,0°		3,20

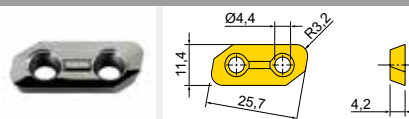
XEET250408R-P



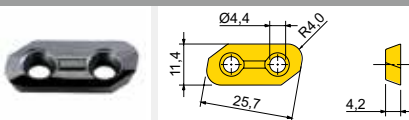
XEET250416R-P



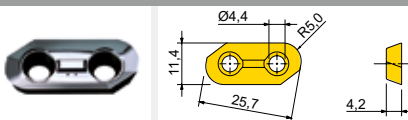
XEET250432R-P



XEET250440R-P



XEET250450R-P



Designation	fz(min/max)	Design	Grade	IN15K								
XEET250408R-P	0,05/0,35	non-ferrous geometry, polished R0,8		●								
XEET250416R-P	0,05/0,35	non-ferrous geometry, polished R1,6		●								
XEET250432R-P	0,05/0,35	non-ferrous geometry, polished R3,2		●								
XEET250440R-P	0,05/0,35	non-ferrous geometry, polished R4,0		●								
XEET250450R-P ¹⁾	0,05/0,35	non-ferrous geometry, polished R5,0		●								

¹⁾ Cutter body has to be modified

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

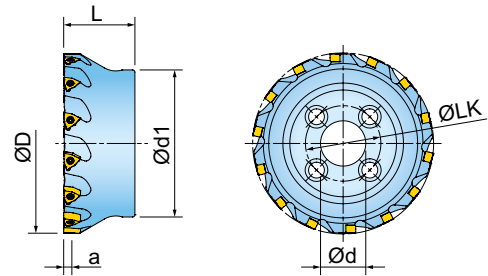


SM40-090-00 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

SQUARE SHOULDER CUTTERS

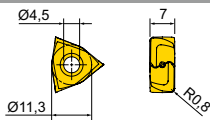
ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	LK	L	a	Z	IK	kg
EW.040.001 ¹⁾	40	16	38	-	40	7	4	✓	0,21
EW.050.001	50	22	45	-	40	7	4	✓	0,32
EW.050.002 ¹⁾	50	22	45	-	40	7	5	✓	0,32
EW.063.001	63	22	55	-	40	7	5	✓	0,56
EW.063.002 ¹⁾	63	22	55	-	40	7	7	✓	0,56
EW.080.001	80	27	70	-	50	7	7	✓	1,25
EW.080.002 ¹⁾	80	27	70	-	50	7	9	✓	1,24
EW.100.001	100	32	85	-	50	7	8	✓	1,94
EW.100.002 ¹⁾	100	32	85	-	50	7	11	✓	1,94
EW.125.001	125	40	100	-	63	7	11	✓	3,60
EW.125.002 ¹⁾	125	40	100	-	63	7	14	✓	3,74
EW.160.001	160	40	110	66,7	63	7	14		4,70
EW.160.002 ¹⁾	160	40	110	66,7	63	7	18		4,90

¹⁾ Narrow spacing (only for short chip producing materials)

WFM-34R100



Designation	fz(min/max)	Design	Grade	IN2005	IN4005	IN6515					
WFM-34R100	0,12/0,35	positive geometry R0,8									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



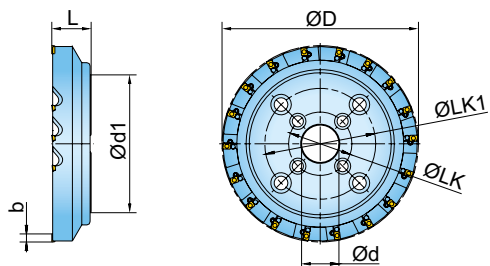
SM40-120-00 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

SUPER 6 EW07D10

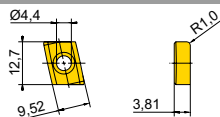
SQUARE SHOULDER CUTTERS

ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	LK	H	a	b	Z	kg
PY.050.001	50	22	44	-	40	0,5	10	3	0,40
PY.063.001	63	22	48	-	40	0,5	10	3	0,60
PY.080.001	80	27	70	-	50	0,5	10	4	1,50
PY.100.001	100	32	80	-	50	0,5	10	6	2,00
PY.125.001	125	40	100	-	63	0,5	10	6	3,50
PY.160.001	160	40	130	66,7	63	0,5	10	8	5,00
PY.200.001	200	60	160	101,6	63	0,5	10	10	8,00

YDA322L101



Designation	fz(min/max)	Design	Grade	IN10K	IN0560	IN2040						
YDA322L101	fu 1/5	wiper finishing insert										

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



SM40-110-00 (4,5Nm) DS-T15S

SC050-01

PN072-03

① = Insert screw ② = Screw driver ③ = Setting screw ④ = Eccentric pin

FACE MILLS

	D	a	Description	Code	Page
	40 - 160	3	OBT-PLUS PO05D10B	PO05D10B	72
	63 - 315	5	OBT-PLUS PO09D10a	PO09D10a	74
	80 - 315	5	OBT-PLUS PO09D10b	PO09D10b	76
	80 - 315	5	OBT-PLUS PO09D10c	PO09D10c	78
	80 - 315	5	OBT-PLUS PO09D10D	PO09D10D	80
	24,3 - 32	3,4	RGTO-MILL PO05E01	PO05E01	82
	33 - 125	3,4	RGTO-MILL PO05D10a	PO05D10a	83
	50 - 160	4,8	RGTO-MILL PO07D10a	PO07D10a	84
	40 - 160	6	HIPDS-DEKA PP08D10	PP08D10	85
	80 - 315	12	HIPDS-DEKA PP17D10C	PP17D10C	86
	100 - 315	12	HIPDS-DEKA PP17D10B	PP17D10B	87
	20 - 42	1	HFD-MINI KP05E01	KP05E01	88
	40 - 66	1	HFD-MINI KP05D10	KP05D10	89
	35 - 42	1,5	HIFEED-DEKA KP08E01	KP08E01	90

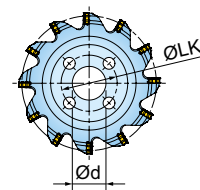
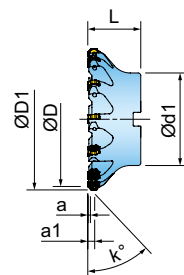
Subject to printing error or technical changes.

FACE MILLS

Subject to printing error or technical changes.

FACE MILLS

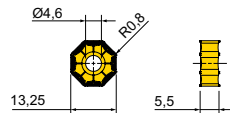
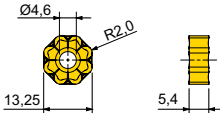
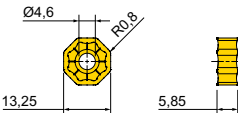
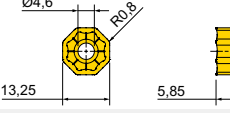
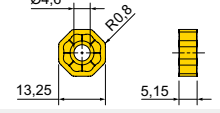
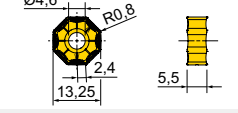
ADAPTION ACC. TO DIN 8030



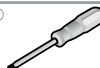
Designation	D	D1	d	d1	LK	L	κ	a	a1	Z	IK	kg
PO.040.003	40	48,3	16	30	-	40	43	3	8	4	✓	0,17
PO.050.003	50	58,3	22	45	-	40	43	3	8	4	✓	0,31
PO.050.004 ¹⁾	50	58,3	22	45	-	40	43	3	8	6	✓	0,32
PO.063.003	63	71,3	22	55	-	40	43	3	8	6	✓	0,53
PO.063.004 ¹⁾	63	71,3	22	55	-	40	43	3	8	8	✓	0,55
PO.080.003	80	88,3	27	70	-	50	43	3	8	7	✓	1,17
PO.080.004 ¹⁾	80	88,3	27	70	-	50	43	3	8	10	✓	1,25
PO.100.003	100	108,3	32	85	-	55	43	3	8	8	✓	2,00
PO.100.004 ¹⁾	100	108,3	32	85	-	55	43	3	8	12	✓	2,16
PO.125.003	125	133,3	40	100	-	63	43	3	8	10	✓	3,54
PO.125.004 ¹⁾	125	133,3	40	100	-	63	43	3	8	16	✓	3,70
PO.160.002	160	168,3	40	110	66,7	63	43	3	8	12		3,62
PO.160.003 ¹⁾	160	168,3	40	110	66,7	63	43	3	8	20		3,74

¹⁾Narrow spacing (only for short chip producing materials)

FACE MILLS

ONCU0505ANTN-HR			ONCU050520TN			ONCU0505ANEN				
										
ONCU0505ANFN-P			ONCU0505ANN			ONCU0505ANTN-W				
										
Designation	fz(min/max)	Design	Grade	IN10K	IN2035	IN2505	IN4010	IN4030	IN6535	IN70N
ONCU0505ANTN-HR	0,22/0,40	positive geometry								
ONCU050520TN	0,08/0,35	roughing geometry								
ONCU0505ANEN	0,08/0,30	high positive geometry								
ONCU0505ANFN-P	0,05/0,30	non-ferrous geometry, polished								
ONCU0505ANN	0,10/0,18	positive geometry silicon nitride								
ONCU0505ANTN-W	fu max. = 2,4	wiper finishing insert								

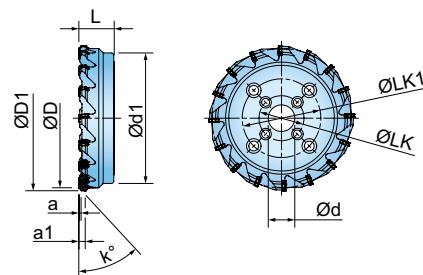
● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS			
①		②	
SM40-100-10 (4,5Nm) DS-T15S			

① = Insert screw ② = Screw driver

FACE MILLS

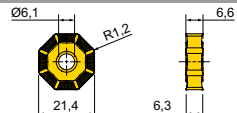
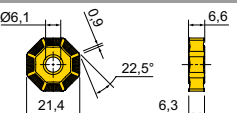
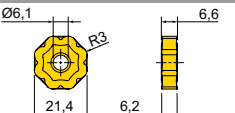
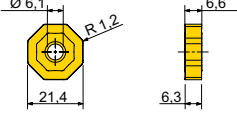
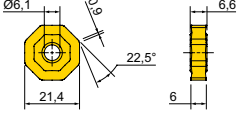
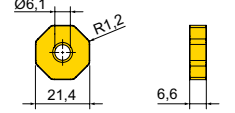
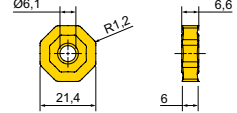
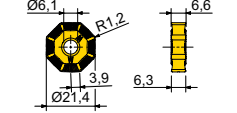
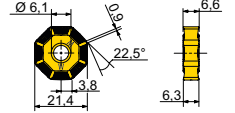
ADAPTION ACC. TO DIN 8030



Designation	D	D1	d	d1	LK	LK1	L	κ	a	a1	Z	✓	kg
P0.063.005	63	76,6	22	55	-	-	40	43	5	14	5	✓	0,55
P0.063.006 ¹⁾	63	76,6	22	55	-	-	40	43	5	14	5	✓	0,55
P0.080.005	80	93,6	27	70	-	-	55	43	5	14	6	✓	1,37
P0.080.009 ¹⁾	80	93,6	27	70	-	-	55	43	5	14	6	✓	1,37
P0.100.005	100	113,6	32	85	-	-	55	43	5	14	7	✓	2,16
P0.100.009 ¹⁾	100	113,6	32	85	-	-	55	43	5	14	7	✓	2,16
P0.125.005	125	138,6	40	100	-	-	63	43	5	14	8	✓	3,87
P0.125.009 ¹⁾	125	138,6	40	100	-	-	63	43	5	14	8	✓	3,87
P0.160.004	160	173,6	40	130	66,7	-	63	43	5	14	10		5,95
P0.160.008 ¹⁾	160	173,6	40	130	66,7	-	63	43	5	14	10		5,95
P0.200.001	200	213,6	60	160	101,6	-	63	43	5	14	12		8,65
P0.200.003 ¹⁾	200	213,6	60	160	101,6	-	63	43	5	14	12		8,65
P0.250.001	250	263,6	60	190	101,6	-	63	43	5	14	14		14,05
P0.250.003 ¹⁾	250	263,6	60	190	101,6	-	63	43	5	14	14		14,05
P0.315.001	315	328,6	60	255	101,6	177,8	80	43	5	14	16		26,38
P0.315.003 ¹⁾	315	328,6	60	255	101,6	177,8	80	43	5	14	16		26,38

¹⁾Left hand rotating tool

FACE MILLS

ONCU090612TN-HR			ONCU0906ANTN-HR			ONCU090630TN					
											
ONCQ090612TN			ONCU0906ANFN-WE			ONCQ0906ANN					
											
ONCU090612FN-P			ONCU090612TN-W			ONCU0906ANTN-W					
											
Designation	fz(min/max)	Design	Grade	IN10K	IN2035	IN2505	IN2510	IN4005	IN4010	IN4030	IN70N
ONCU090612TN-HR	0,30/0,40	positive geometry R1,2									
ONCU0906ANTN-HR	0,30/0,40	positive geometry									
ONCU090630TN	0,08/0,40	roughing geometry									
ONCQ090612TN	0,25/0,50	neutral geometry, K-land									
ONCU0906ANFN-WE	0,08/0,40	positive cast iron geometry									
ONCQ0906ANN	0,10/0,30	neutral geometry silicon nitride									
ONCU090612FN-P	0,05/0,40	non-ferrous geometry, polished									
ONCU090612TN-W	fz max. = 3,9	wiper finishing insert									
ONCU0906ANTN-W	fz max. = 3,8	wiper finishing insert									

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● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

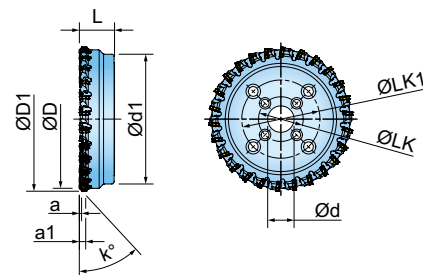


SM50-130-R0 (6,0Nm) DS-T20T

① = Insert screw ② = Screw driver

FACE MILLS

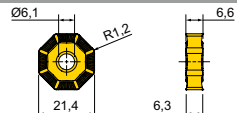
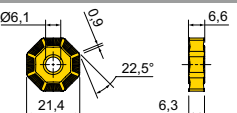
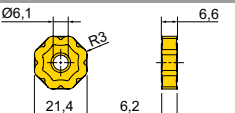
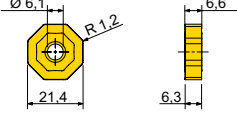
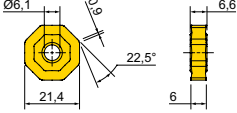
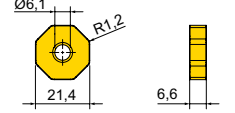
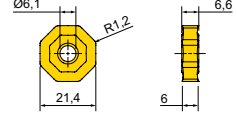
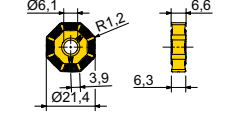
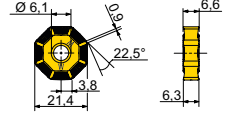
ADAPTION ACC. TO DIN 8030



Designation	D	D1	d	d1	LK	LK1	L	κ	a	a1	Z	✓	kg
P0.080.006	80	93,8	27	70	-	-	55	43	5	14	7	✓	1,42
P0.080.010 ¹⁾	80	93,8	27	70	-	-	55	43	5	14	7	✓	1,42
P0.100.006	100	113,7	32	85	-	-	55	43	5	14	9	✓	2,15
P0.100.010 ¹⁾	100	113,7	32	85	-	-	55	43	5	14	9	✓	2,15
P0.125.006	125	138,6	40	100	-	-	63	43	5	14	12	✓	3,87
P0.125.010 ¹⁾	125	138,6	40	100	-	-	63	43	5	14	12	✓	3,87
P0.160.005	160	173,6	40	130	66,7	-	63	43	5	14	15		6,03
P0.160.009 ¹⁾	160	173,6	40	130	66,7	-	63	43	5	14	15		6,03
P0.200.005	200	213,6	60	160	101,6	-	63	43	5	14	18		8,77
P0.200.006 ¹⁾	200	213,6	60	160	101,6	-	63	43	5	14	18		8,77
P0.250.005	250	263,4	60	190	101,6	-	63	43	5	14	22		14,15
P0.250.006 ¹⁾	250	263,4	60	190	101,6	-	63	43	5	14	22		14,15
P0.315.005	315	328,5	60	255	101,6	177,8	80	43	5	14	26		26,71
P0.315.006 ¹⁾	315	328,5	60	255	101,6	177,8	80	43	5	14	26		26,71
Narrow spacing (only for short chip producing materials)													

¹⁾Left hand rotating tool

FACE MILLS

ONCU090612TN-HR			ONCU0906ANTN-HR			ONCU090630TN					
											
ONCQ090612TN			ONCU0906ANFN-WE			ONCQ0906ANN					
											
ONCU090612FN-P			ONCU090612TN-W			ONCU0906ANTN-W					
											
Designation	fz(min/max)	Design	Grade	IN10K	IN2035	IN2505	IN2510	IN4005	IN4010	IN4030	IN70N
ONCU090612TN-HR	0,30/0,40	positive geometry R1,2									
ONCU0906ANTN-HR	0,30/0,40	positive geometry									
ONCU090630TN	0,08/0,40	roughing geometry									
ONCQ090612TN	0,25/0,50	neutral geometry, K-land									
ONCU0906ANFN-WE	0,08/0,40	positive cast iron geometry									
ONCQ0906ANN	0,10/0,30	neutral geometry silicon nitride									
ONCU090612FN-P	0,05/0,40	non-ferrous geometry, polished									
ONCU090612TN-W	fz max. = 3,9	wiper finishing insert									
ONCU0906ANTN-W	fz max. = 3,8	wiper finishing insert									

<

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

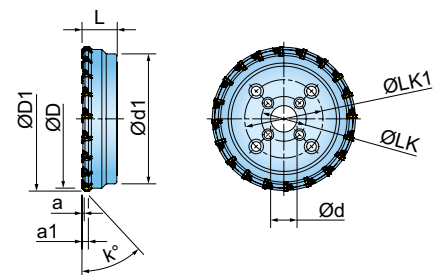
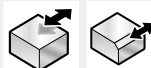


SM50-130-R0 (6,0Nm) DS-T20T

① = Insert screw ② = Screw driver

FACE MILLS

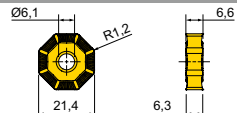
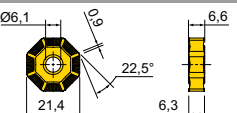
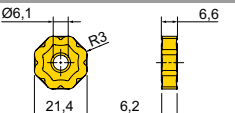
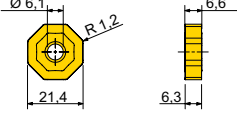
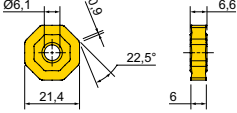
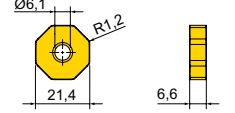
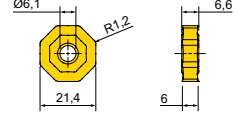
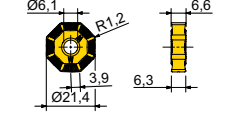
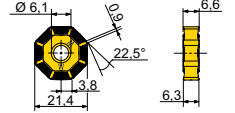
ADAPTION ACC. TO DIN 8030



Designation	D	D1	d	d1	LK	LK1	L	κ	a	a1	Z	kg
P0.080.007	80	93,6	27	70	-	-	55	43	5	14	6	1,64
P0.080.011 ¹⁾	80	93,6	27	70	-	-	55	43	5	14	6	1,64
P0.100.007	100	113,6	32	85	-	-	55	43	5	14	7	2,45
P0.100.011 ¹⁾	100	113,6	32	85	-	-	55	43	5	14	7	2,45
P0.125.007	125	138,5	40	100	-	-	63	43	5	14	8	4,32
P0.125.011 ¹⁾	125	138,5	40	100	-	-	63	43	5	14	8	4,32
P0.160.006	160	173,5	40	130	66,7	-	63	43	5	14	10	6,60
P0.160.010 ¹⁾	160	173,5	40	130	66,7	-	63	43	5	14	10	6,60
P0.200.002	200	213,6	60	160	101,6	-	63	43	5	14	12	9,45
P0.200.004 ¹⁾	200	213,6	60	160	101,6	-	63	43	5	14	12	9,45
P0.250.002	250	263,5	60	190	101,6	-	63	43	5	14	16	14,98
P0.250.004 ¹⁾	250	263,5	60	190	101,6	-	63	43	5	14	16	14,98
P0.315.002	315	328,6	60	255	101,6	177,8	80	43	5	14	20	27,74
P0.315.004 ¹⁾	315	328,6	60	255	101,6	177,8	80	43	5	14	20	27,74

¹⁾Left hand rotating tool

FACE MILLS

ONCU090612TN-HR			ONCU0906ANTN-HR			ONCU090630TN					
											
ONCQ090612TN			ONCU0906ANFN-WE			ONCQ0906ANN					
											
ONCU090612FN-P			ONCU090612TN-W			ONCU0906ANTN-W					
											
Designation	fz(min/max)	Design	Grade	IN10K	IN2035	IN2505	IN2510	IN4005	IN4010	IN4030	IN70N
ONCU090612TN-HR	0,30/0,40	positive geometry R1,2									
ONCU0906ANTN-HR	0,30/0,40	positive geometry									
ONCU090630TN	0,08/0,40	roughing geometry									
ONCQ090612TN	0,25/0,50	neutral geometry, K-land									
ONCU0906ANFN-WE	0,08/0,40	positive cast iron geometry									
ONCQ0906ANN	0,10/0,30	neutral geometry silicon nitride									
ONCU090612FN-P	0,05/0,40	non-ferrous geometry, polished									
ONCU090612TN-W	fz max. = 3,9	wiper finishing insert									
ONCU0906ANTN-W	fz max. = 3,8	wiper finishing insert									

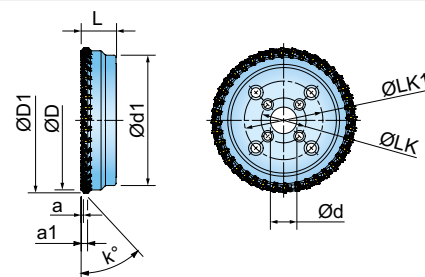
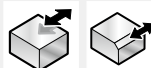
● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS			
① 	② 	③ 	
SB080-03	2M0813-01	DS-H04T	

① = Differential screw ② = Locking wedge ③ = Wrench

FACE MILLS

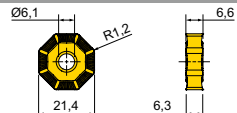
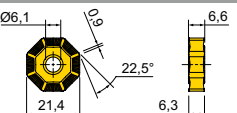
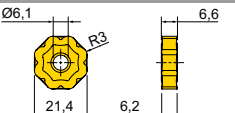
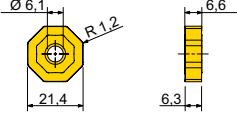
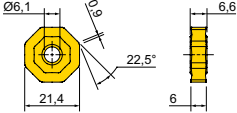
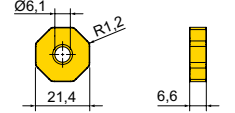
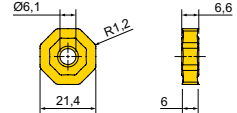
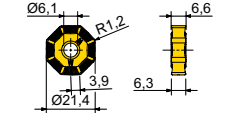
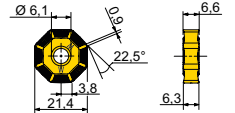
ADAPTION ACC. TO DIN 8030



Designation	D	D1	d	d1	LK	LK1	L	κ	a	a1	Z	kg
P0.080.008	80	93,5	27	70	-	-	55	43	5	14	9	1,54
P0.080.012 ¹⁾	80	93,5	27	70	-	-	55	43	5	14	9	1,54
P0.100.008	100	113,5	32	85	-	-	55	43	5	14	12	2,30
P0.100.012 ¹⁾	100	113,5	32	85	-	-	55	43	5	14	12	2,30
P0.125.008	125	138,5	40	100	-	-	63	43	5	14	15	4,11
P0.125.012 ¹⁾	125	138,5	40	100	-	-	63	43	5	14	15	4,11
P0.160.007	160	173,5	40	130	66,7	-	63	43	5	14	20	6,30
P0.160.011 ¹⁾	160	173,5	40	130	66,7	-	63	43	5	14	20	6,30
P0.200.007	200	213,5	60	160	101,6	-	63	43	5	14	24	9,07
P0.200.008 ¹⁾	200	213,5	60	160	101,6	-	63	43	5	14	24	9,07
P0.250.007	250	263,5	60	190	101,6	-	63	43	5	14	30	14,55
P0.250.008 ¹⁾	250	263,5	60	190	101,6	-	63	43	5	14	30	14,55
P0.315.007	315	328,5	60	255	101,6	177,8	80	43	5	14	40	27,32
P0.315.008 ¹⁾	315	328,5	60	255	101,6	177,8	80	43	5	14	40	27,32
Narrow spacing (only for short chip producing materials)												

¹⁾Left hand rotating tool

FACE MILLS

ONCU090612TN-HR			ONCU0906ANTN-HR			ONCU090630TN					
											
ONCQ090612TN			ONCU0906ANFN-WE			ONCQ0906ANN					
											
ONCU090612FN-P			ONCU090612TN-W			ONCU0906ANTN-W					
											
Designation	fz(min/max)	Design	Grade	IN10K	IN2035	IN2505	IN2510	IN4005	IN4010	IN4030	IN70N
ONCU090612TN-HR	0,30/0,40	positive geometry R1,2									
ONCU0906ANTN-HR	0,30/0,40	positive geometry									
ONCU090630TN	0,08/0,40	roughing geometry									
ONCQ090612TN	0,25/0,50	neutral geometry, K-land									
ONCU0906ANFN-WE	0,08/0,40	positive cast iron geometry									
ONCQ0906ANN	0,10/0,30	neutral geometry silicon nitride									
ONCU090612FN-P	0,05/0,40	non-ferrous geometry, polished									
ONCU090612TN-W	fz max. = 3,9	wiper finishing insert									
ONCU0906ANTN-W	fz max. = 3,8	wiper finishing insert									

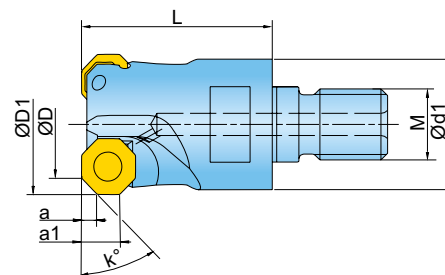
● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS			
① 	② 	③ 	
SB080-03	2M0813-01	DS-H04T	

① = Differential screw ② = Locking wedge ③ = Wrench

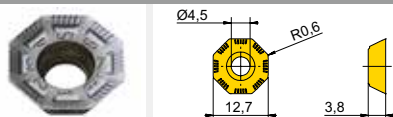
FACE MILLS

SCREW-IN TYPE ADAPTION

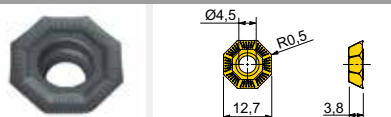


Designation	D	D1	d1	L	κ	a	a1	M	Z			
PO.032.002	24,3	32	29	43	43	3,4	8,3	16	2	17,0°	✓	0,19
PO.040.002	32	40	29	43	43	3,4	8,3	16	3	9,0°	✓	0,21

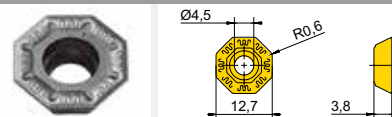
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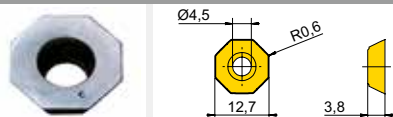
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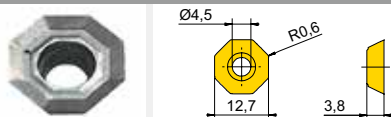
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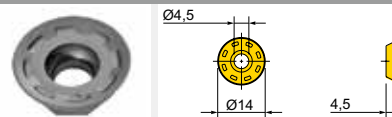
OFMW05T3AFTN



OFCT05T3AFFN-P



RFMT1404M0N-F



Designation	fz(min/max)	Design	Grade	IN10K	IN2035	IN2505	IN2510	IN2530	IN2540	IN4030	IN6535
OFMT05T3AFN-HR	0,10/0,25	high-positive geometry									
OFCT05T3AFTN-HR	0,18/0,30	positive geometry, ground									
OFCT05T3TN	0,20/0,35	semi-positive geometry									
OFMW05T3AFTN	0,20/0,40	neutral geometry, K-land									
OFCT05T3AFFN-P	0,05/0,30	non-ferrous geometry, polished									
RFMT1404M0N-F	0,15/0,30	positive geometry, K-land									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

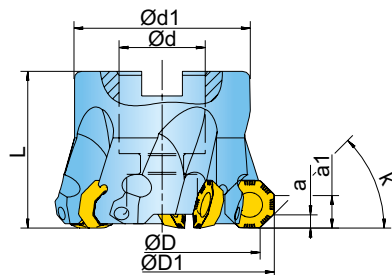


SM40-080-10 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

FACE MILLS

ADAPTION ACC. TO DIN 8030



Designation	D	D1	d	d1	L	κ	a	a1	Z			
PO.032.001	33	41,2	16	30	40	43	3,4	8,3	3	8,7°	✓	0,14
PO.040.001	40	48,1	16	30	40	43	3,4	8,3	4	6,4°	✓	0,18
PO.040.004 ¹⁾	40	48,1	16	30	40	43	3,4	8,3	5	6,4°	✓	0,15
PO.050.002	50	58	22	45	40	43	3,4	8,3	5	4,7°	✓	0,34
PO.050.005 ¹⁾	50	58	22	45	40	43	3,4	8,3	6	4,7°	✓	0,31
PO.063.002	63	71	22	55	40	43	3,4	8,3	6	3,4°	✓	0,57
PO.063.007 ¹⁾	63	71	22	55	40	43	3,4	8,3	8	3,4°	✓	0,55
PO.080.002	80	87,9	27	70	50	43	3,4	8,3	7	2,6°	✓	1,23
PO.080.013 ¹⁾	80	87,9	27	70	50	43	3,4	8,3	9	2,6°	✓	1,22
PO.100.002	100	108	32	85	50	43	3,4	8,3	8	2,0°	✓	1,91
PO.100.013 ¹⁾	100	108	32	85	50	43	3,4	8,3	10	2,0°	✓	1,82
PO.125.002	125	133	40	100	63	43	3,4	8,3	9	1,5°	✓	3,66
PO.125.013 ¹⁾	125	133	40	100	63	43	3,4	8,3	11	1,5°	✓	3,64

¹⁾ Narrow spacing (only for short chip producing materials)

OFMT05T3AFN-HR			OFCT05T3AFTN-HR			OFCT05T3TN		
OFMW05T3AFTN			OFCT05T3AFFN-P			RFMT1404MON-F		

Designation	fz(min/max)	Design	Grade	IN10K	IN2035	IN2505	IN2510	IN2530	IN2540	IN4030	IN6535
OFMT05T3AFN-HR	0,10/0,25	high-positive geometry									
OFCT05T3AFTN-HR	0,18/0,30	positive geometry, ground									
OFCT05T3TN	0,20/0,35	semi-positive geometry									
OFMW05T3AFTN	0,20/0,40	neutral geometry, K-land									
OFCT05T3AFFN-P	0,05/0,30	non-ferrous geometry, polished									
RFMT1404MON-F	0,15/0,30	positive geometry, K-land									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

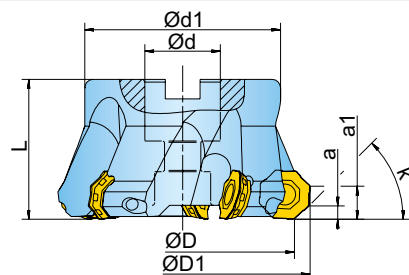


SM40-100-R0 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

FACE MILLS

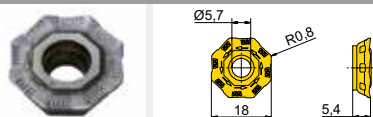
ADAPTION ACC. TO DIN 8030



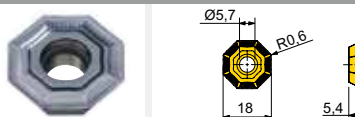
Designation	D	D1	d	d1	L	κ	a	a1	Z			kg
PO.050.001	50	62	22	45	50	41	4,8	11,8	3	7,1°	✓	0,41
PO.050.006 ¹⁾	50	62	22	45	50	41	4,8	11,8	4	7,1°	✓	0,38
PO.063.001	63	75	22	55	40	41	4,8	11,8	4	5,1°	✓	0,51
PO.063.008 ¹⁾	63	75	22	55	40	41	4,8	11,8	5	5,1°	✓	0,50
PO.080.001	80	92	27	70	50	41	4,8	11,8	5	3,7°	✓	1,22
PO.080.014 ¹⁾	80	92	27	70	50	41	4,8	11,8	7	3,7°	✓	1,17
PO.100.001	100	112	32	85	50	41	4,8	11,8	6	2,8°	✓	1,82
PO.100.014 ¹⁾	100	112	32	85	50	41	4,8	11,8	8	2,8°	✓	1,74
PO.125.001	125	137	40	100	63	41	4,8	11,8	8	2,2°	✓	3,58
PO.125.014 ¹⁾	125	137	40	90	63	41	4,8	11,8	9	2,2°	✓	3,40
PO.160.001	160	172	40	100	63	41	4,8	11,8	10	1,6°		5,28
PO.160.013 ¹⁾	160	172	40	90	63	41	4,8	11,8	11	1,6°		5,12

¹⁾Narrow spacing (only for short chip producing materials)

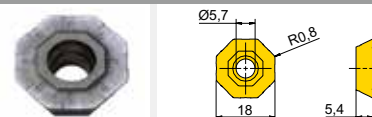
OFMT0705AFR-HR



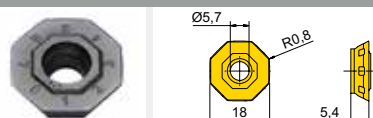
OFCT0705AFTN-HR



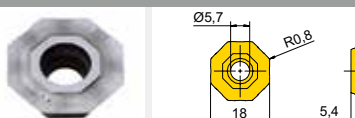
OFMT0705AFTN



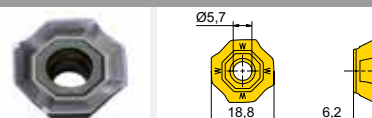
OFMW0705AFTN



OFCT0705AFFN-P



OFCT0705AFFR-W



Designation	fz(min/max)	Design	Grade	IN05S	IN2035	IN2505	IN4005	IN4030	IN6535		
OFMT0705AFR-HR	0,15/0,30	high-positive geometry									
OFCT0705AFTN-HR	0,25/0,35	positive geometry, ground									
OFMT0705AFTN	0,15/0,30	semi-positive geometry									
OFMW0705AFTN	0,25/0,50	neutral geometry, K-land									
OFCT0705AFFN-P	0,05/0,30	positive non-ferrous geometry, polished									
OFCT0705AFFR-W	0,15/0,30	wiper finishing insert									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



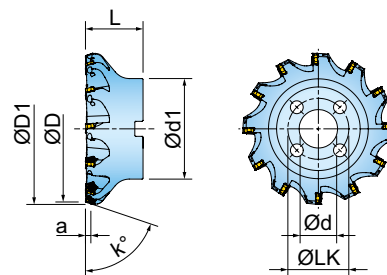
SM50-130-R0 (6,0Nm) DS-T20T

① = Insert screw ② = Screw driver

ROBOMILL P007D10A

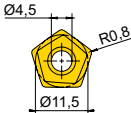
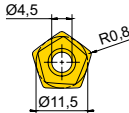
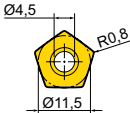
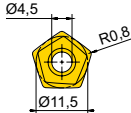
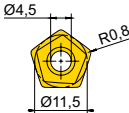
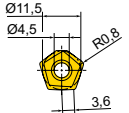
FACE MILLS

ADAPTION ACC. TO DIN 8030



Designation	D	D1	d	d1	LK	L	κ	a	Z	IK	kg
PP.040.001	40	45,4	16	30	-	40	70	6	4	✓	0,18
PP.050.002 ¹⁾	50	55,4	22	45	-	40	70	6	6	✓	0,34
PP.050.001	50	55,4	22	45	-	40	70	6	4	✓	0,32
PP.063.002 ¹⁾	63	68,4	22	55	-	40	70	6	8	✓	0,58
PP.063.001	63	68,4	22	55	-	40	70	6	6	✓	0,58
PP.080.002 ¹⁾	80	85,4	27	70	-	50	70	6	10	✓	1,31
PP.080.001	80	85,4	27	70	-	50	70	6	7	✓	1,30
PP.100.002 ¹⁾	100	105,4	32	85	-	50	70	6	12	✓	2,00
PP.100.001	100	105,4	32	85	-	50	70	6	8	✓	1,97
PP.125.002 ¹⁾	125	130,4	40	100	-	63	70	6	16	✓	3,84
PP.125.001	125	130,4	40	100	-	63	70	6	10	✓	3,82
PP.160.002 ¹⁾	160	165,5	40	110	66,7	63	70	6	20		3,95
PP.160.001	160	165,5	40	110	66,7	63	70	6	12		3,82

¹⁾ Narrow spacing (only for short chip producing materials)

PNCU0805GNTR			PNCU0805GNFR-HS			PNCQ0804GNTN				
										
PNCU0805GNFR-P			PNCU0805GNR			PNCU0805GNTR-W				
										
Designation	fz(min/max)	Design	Grade	IN05S	IN203S	IN250S	IN400S	IN401S	IN4030	IN70N
PNCU0805GNTR	0,22/0,40	positive geometry								
PNCU0805GNFR-HS	0,08/0,30	high positive geometry								
PNCQ0804GNTN	0,21/0,40	neutral geometry, K-land								
PNCU0805GNFR-P	0,05/0,40	positive non-ferrous geometry, polished								
PNCU0805GNR	0,10/0,18	positive geometry silicon nitride								
PNCU0805GNTR-W	fu max. = 3,6	wiper insert								

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

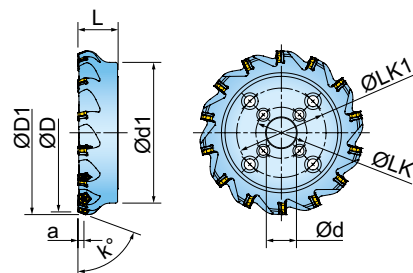


SM40-100-10 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

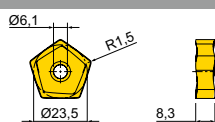
FACE MILLS

ADAPTION ACC. TO DIN 8030

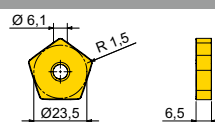


Designation	D	D1	d	d1	LK	LK1	L	κ	a	Z	✓	kg
PP.080.004	80	91,3	27	70	-	-	55	70	12	4	✓	1,32
PP.100.005	100	111,3	32	85	-	-	55	70	12	5	✓	2,02
PP.125.005	125	136,3	40	100	-	-	63	70	12	6	✓	3,68
PP.160.005	160	171,3	40	130	66,7	-	63	70	12	8		5,06
PP.200.003	200	211,2	60	160	101,6	-	63	70	12	10		8,24
PP.250.003	250	261,2	60	190	101,6	-	63	70	12	12		14,97
PP.315.003	315	326,2	60	225	101,6	177,8	80	70	12	14		25,64

PNCU1708GNTR



PNCQ1706GNTN



Designation	fz(min/max)	Design	Grade	IN2005	IN2030	IN2040	IN2505	IN2530	IN4030	IN6515
PNCU1708GNTR	0,30/0,50	positive geometry								
PNCQ1706GNTN	0,30/0,50	neutral geometry, K-land								

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

①



②



③



④



⑤



Diameter Range

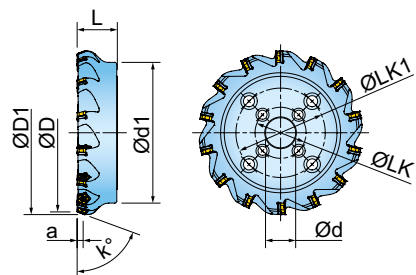
80 - 160	SM50-170-R0 (6,0Nm)	DS-T20T	SJ-5061	SF070R01	DS-H05T
200 - 315	SM50-170-R0 (6,0Nm)	DS-T20T	SJ-5062	SF070R01	DS-H05T

① = Insert screw ② = Screw driver ③ = Shim ④ = Bushing ⑤ = Wrench

HIPOS-DEKA^{HD} PP17D10C

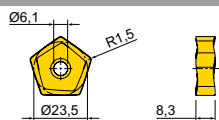
FACE MILLS

ADAPTION ACC. TO DIN 8030

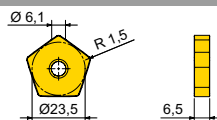


Designation	D	D1	d	d1	LK	LK1	L	κ	a	Z	IK	kg
PP.100.006	100	111,3	32	85	-	-	55	70	12	6	✓	2,05
PP.125.006	125	136,4	40	100	-	-	63	70	12	8	✓	3,73
PP.160.006	160	171,4	40	130	66,7	-	63	70	12	10		5,13
PP.200.004	200	211,3	60	160	101,6	-	63	70	12	12		8,38
PP.250.004	250	261,3	60	190	101,6	-	63	70	12	16		15,12
PP.315.004	315	326,3	60	225	101,6	177,8	80	70	12	20		25,95

PNCU1708GNTR



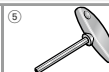
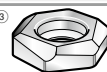
PNCQ1706GNTN



Designation	fz(min/max)	Design	Grade	IN2005	IN2030	IN2040	IN2505	IN2530	IN4030	IN6515
PNCU1708GNTR	0,30/0,50	positive geometry		●	●	●			●	
PNCQ1706GNTN	0,30/0,50	neutral geometry, K-land					●	●		●

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



SM50-170-R0 (6,0Nm) DS-T20T

SJ-5062

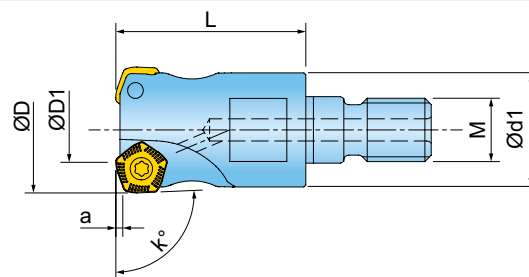
SF070R01

DS-H05T

① = Insert screw ② = Screw driver ③ = Shim ④ = Bushing ⑤ = Wrench

FACE MILLS

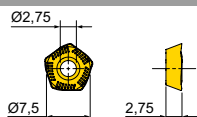
SCREW-IN TYPE ADAPTION



Designation	D	D1	d1	L	κ	a	M	Z			
KP.020.001	20	10,6	18	30	92	1	10	2	9,6°	✓	0,05
KP.025.001	25	15,4	21	35	92	1	12	3	5,2°	✓	0,09
KP.032.001	32	22,4	29	43	92	1	16	5	3,4°	✓	0,20
KP.035.002	35	25,4	29	43	92	1	16	5	3,0°	✓	0,21
KP.040.001	40	30,4	29	43	92	1	16	5	2,5°	✓	0,22
KP.042.002	42	32,4	29	43	92	1	16	5	2,3°	✓	0,24

Programming radius 2,5mm

PEMT0502ZCTR-HR



Designation	fz(min/max)	Design	Grade	IN2035	IN2505	IN2530	IN6535				
PEMT0502ZCTR-HR	0,50/1,50	positive geometry									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



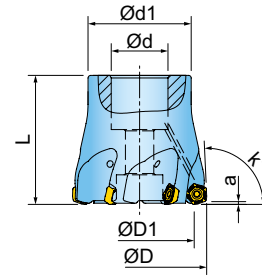
SM25-064-00 (1,1Nm) DS-T08S

① = Insert screw ② = Screw driver

HFD-MINI KP05E01

FACE MILLS

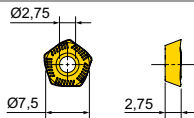
ADAPTION ACC. TO DIN 8030



Designation	D	D1	d	d1	L	κ	α	Z			
KP.040.002	40	30,4	16	30	40	92	1	5	2,5°	✓	0,16
KP.050.002	50	40,4	22	40	50	92	1	6	1,8°	✓	0,37
KP.052.002	52	42,4	22	40	50	92	1	6	1,7°	✓	0,38
KP.063.002	63	53,4	27	48	50	92	1	7	1,4°	✓	0,58
KP.066.002	66	56,4	27	48	50	92	1	7	1,4°	✓	0,61

Programming radius 2,5mm

PEMT0502ZCTR-HR



Designation	fz(min/max)	Design	Grade	IN2035	IN2505	IN2530	IN6535				
PEMT0502ZCTR-HR	0,50/1,50	positive geometry									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

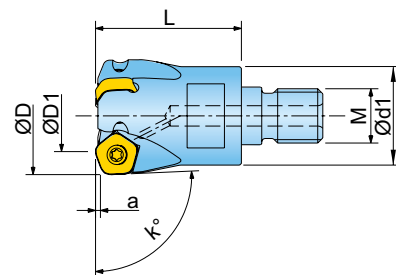


SM25-064-00 (1,1Nm) DS-T08S

① = Insert screw ② = Screw driver

FACE MILLS

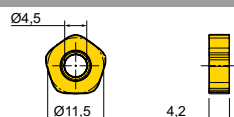
SCREW-IN TYPE ADAPTION



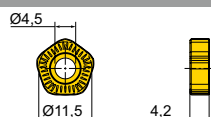
Designation	D	D1	d1	L	κ	a	M	Z			
KP.035.001	35	21,5	29	43	92	1,5	16	3	0,1°	✓	0,21
KP.042.001	42	28,5	29	43	92	1,5	16	4	0,2°	✓	0,24

Programming radius 4,5mm

PNCQ0804ZNTN



PNCT0804ZNN-HR



Designation	fz(min/max)	Design	Grade	IN2035	IN2505	IN4005	IN4030				
PNCQ0804ZNTN	0,50/2,50	neutral geometry, K-land									
PNCT0804ZNN-HR	0,22/1,50	positive geometry									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

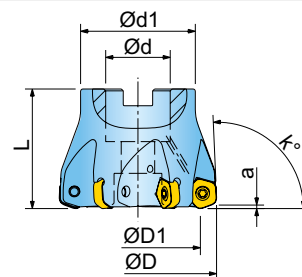


SM40-093-20 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

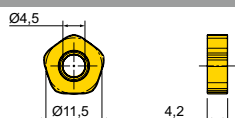
FACE MILLS

ADAPTION ACC. TO DIN 8030

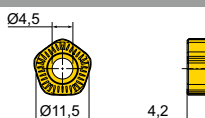


Designation	D	D1	d	d1	L	κ	a	Z			
KP.050.001	50	36,5	22	40	50	92	1,5	5	0,2°	✓	0,37
KP.052.001	52	38,5	22	40	50	92	1,5	5	0,6°	✓	0,40
KP.063.001	63	49,4	27	48	50	92	1,5	6	0,7°	✓	0,58
KP.066.001	66	52,4	27	48	50	92	1,5	6	0,7°	✓	0,65
KP.080.001	80	66,4	27	60	50	92	1,5	7	0,7°	✓	1,10
KP.100.001	100	86,4	32	70	55	92	1,5	8	0,7°	✓	1,75
KP.125.001	125	111,4	40	90	55	92	1,5	10	0,9°		2,60
KP.160.001	160	146,4	40	110	55	92	1,5	12	0,7°		3,50
Programming radius 4,5mm											

PNCQ0804ZNTN



PNCT0804ZNN-HR



Designation	fz(min/max)	Design	Grade	IN2035	IN2505	IN4005	IN4030				
PNCQ0804ZNTN	0,50/2,50	neutral geometry, K-land									
PNCT0804ZNN-HR	0,22/1,50	positive geometry									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



SM40-093-20 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

SIDE AND FACE CUTTERS

	D	b	Description	Code	Page
	75 - 125	1,6 - 2,2	SLOT-IN DFD01	DFD01	94
	100 - 160	2,4 - 4,1	SLOT-IN DFD01A for Flange Drive	DFD01A for Flange Drive	95
	63 - 200	10 - 14	HIPDS-QUAD DS08D01	DS08D01	96
	63 - 200	10 - 14	HIPDS-QUAD DS08D10	DS08D10	97
	63 - 200	4 - 10	POWER-SLOT DTD01 4-10mm	DTD01 4-10mm	98
	63 - 200	12 - 15	POWER-SLOT DTD01 12-15mm	DTD01 12-15mm	100
	63 - 160	4 - 10	POWER-SLOT DTD10 4-10mm	DTD10 4-10mm	102
	63 - 160	12 - 15	POWER-SLOT DTD10 12-15mm	DTD10 12-15mm	104
	50	3 - 6	THIN-PRO DLE01 3-6 mm	DLE01 3-6 mm	106
	63 - 200	3 - 6	THIN-PRO DLD01 3-6 mm	DLD01 3-6 mm	108
	63 - 200	7 - 10	THIN-PRO DLD01 7-10 mm	DLD01 7-10 mm	110
	63 - 160	3 - 6	THIN-PRO DLD10 3-6 mm	DLD10 3-6 mm	112
	63 - 160	7 - 10	THIN-PRO DLD10 7-10 mm	DLD10 7-10 mm	114

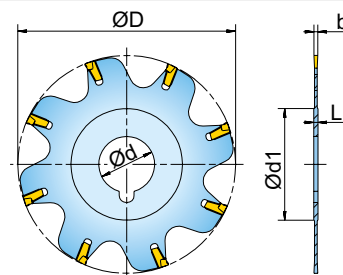
Subject to printing error or technical changes.

A close-up photograph of a person's eye. The eye is a vibrant green color. It is heavily lined with black eyeliner, and the upper and lower eyelashes are coated with thick black mascara. The eye is looking directly at the camera.



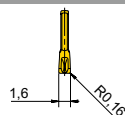
SIDE AND FACE CUTTERS

ADAPTION ACC. TO DIN 138

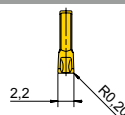


Designation	D	d	d1	L	b	n max.	Z	kg	Related Insert
DF.075.1.6B	75	22	39	2,4	1,6	1050	8	0,03	A
DF.075.2.2B	75	22	39	2,4	2,2	1050	8	0,04	B
DF.100.1.6B	100	22	39	2,4	1,6	800	10	0,06	A
DF.100.2.2B	100	22	39	2,4	2,2	800	10	0,08	B
DF.125.1.6B	125	27	64	2,4	1,6	640	12	0,11	A
DF.125.2.2B	125	27	64	2,4	2,2	640	12	0,15	B

A GCXF071601N



B GCXF082202N



Designation	fz(min/max)	Design	Grade	IN1030	IN2005
GCXF071601N	0,08/0,15	positive geometry R0,15			
GCXF082202N	0,08/0,15	positive geometry R0,2			

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

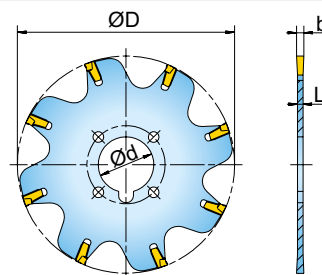


DR-0032

① = Ejector

SIDE AND FACE CUTTERS

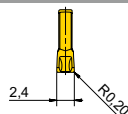
ADAPTION ACC. TO DIN 138



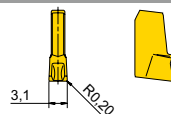
Designation	D	d	L	b	n max.	Z	kg	Related Insert
DF.100.2.4F	100	22	1,9	2,4	800	10	0,09	A
DF.100.3.1F	100	22	2,4	3,1	800	6	0,10	B
DF.100.4.1F	100	22	3,2	4,1	800	6	0,12	C
DF.125.2.4F	125	32	1,9	2,4	640	12	0,14	A
DF.125.3.1F	125	32	2,4	3,1	640	8	0,15	B
DF.125.4.1F	125	32	3,2	4,1	640	8	0,20	C
DF.160.2.4F	160	32	1,9	2,4	500	16	0,25	A
DF.160.3.1F	160	40	2,4	3,1	500	10	0,27	B
DF.160.4.1F	160	40	3,2	4,1	500	10	0,35	C

Spigot set has to be ordered separately

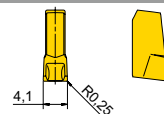
A GCXF092402N



B GCXF113102N



C GCXF114103N



Designation	fz(min/max)	Design	Grade	IN1030	IN2005						
GCXF092402N	0,08/0,15	positive geometry R0,2									
GCXF113102N	0,08/0,15	positive geometry R0,2									
GCXF114103N	0,08/0,15	positive geometry R0,25									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



Cutting Width

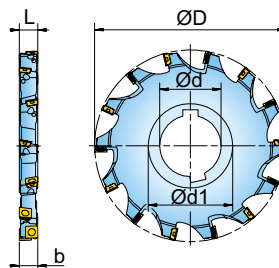
2,4 DR-0032

3,1 - 4,1 DR-0031

① = Ejector

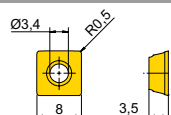
SIDE AND FACE CUTTERS

ADAPTION ACC. TO DIN 138

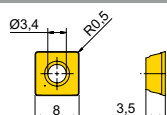


Designation	D	d	d1	L	b	Z	Zeff	kg
DS.063.007	63	22	34	10	10	8	4	0,11
DS.063.008	63	22	34	12	12	8	4	0,13
DS.063.009	63	22	34	14	14	8	4	0,16
DS.080.007	80	22	34	10	10	10	5	0,19
DS.080.008	80	22	34	12	12	10	5	0,24
DS.080.009	80	22	34	14	14	10	5	0,29
DS.100.005	100	27	41	10	10	12	6	0,32
DS.100.006	100	27	41	12	12	12	6	0,40
DS.100.007	100	27	41	14	14	12	6	0,48
DS.125.005	125	40	55	10	10	14	7	0,47
DS.125.006	125	40	55	12	12	14	7	0,60
DS.125.007	125	40	55	14	14	14	7	0,72
DS.160.005	160	40	55	10	10	16	8	0,88
DS.160.006	160	40	55	12	12	16	8	1,10
DS.160.007	160	40	55	14	14	16	8	1,33
DS.200.003	200	50	69	10	10	18	9	1,40
DS.200.004	200	50	69	12	12	18	9	1,79
DS.200.005	200	50	69	14	14	18	9	2,16

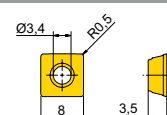
SDMT080305N



SDMW080305TN



SDCT080305FN-P



Designation	fz(min/max)	Design	Grade	IN05S	IN2505	IN4030						
SDMT080305N	0,13/0,17	positive geometry R0,5										
SDMW080305TN	0,13/0,20	neutral geometry, K-land R0,5										
SDCT080305FN-P	0,05/0,20	non-ferrous geometry, polished R0,5										

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

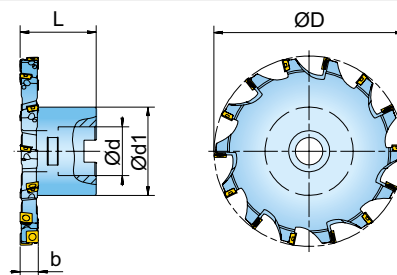


SM30-065-00 (2,0Nm) DS-T09S

① = Insert screw ② = Screw driver

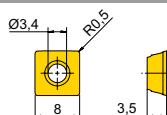
SIDE AND FACE CUTTERS

ADAPTION ACC. TO DIN 8030

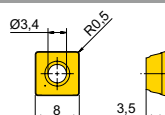


Designation	D	d	d1	L	b	Z	Ze _{ff}	kg
DS.063.010	63	16	30	32	10	8	4	0,20
DS.063.011	63	16	30	32	12	8	4	0,22
DS.063.012	63	16	30	32	14	8	4	0,24
DS.080.010	80	22	40	40	10	10	5	0,41
DS.080.011	80	22	40	40	12	10	5	0,44
DS.080.012	80	22	40	40	14	10	5	0,48
DS.100.012	100	27	45	45	10	12	6	0,68
DS.100.013	100	27	45	45	12	12	6	0,75
DS.100.014	100	27	45	45	14	12	6	0,80
DS.125.012	125	32	58	50	10	14	7	1,21
DS.125.013	125	32	58	50	12	14	7	1,30
DS.125.014	125	32	58	50	14	14	7	1,40
DS.160.008	160	40	70	60	10	16	8	2,10
DS.160.009	160	40	70	60	12	16	8	2,29
DS.160.010	160	40	70	60	14	16	8	2,52
DS.200.006	200	40	70	60	10	18	9	2,70
DS.200.007	200	40	70	60	12	18	9	3,03
DS.200.008	200	40	70	60	14	18	9	3,35

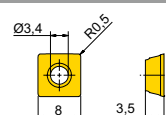
SDMT080305N



SDMW080305TN



SDCT080305FN-P



Designation	fz(min/max)	Design	Grade	IN05S	IN2505	IN4030						
SDMT080305N	0,13/0,17	positive geometry R0,5										
SDMW080305TN	0,13/0,20	neutral geometry, K-land R0,5										
SDCT080305FN-P	0,05/0,20	non-ferrous geometry, polished R0,5										

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

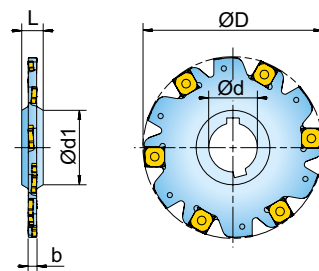


SM30-065-00 (2,0Nm) DS-T09S

① = Insert screw ② = Screw driver

SIDE AND FACE CUTTERS

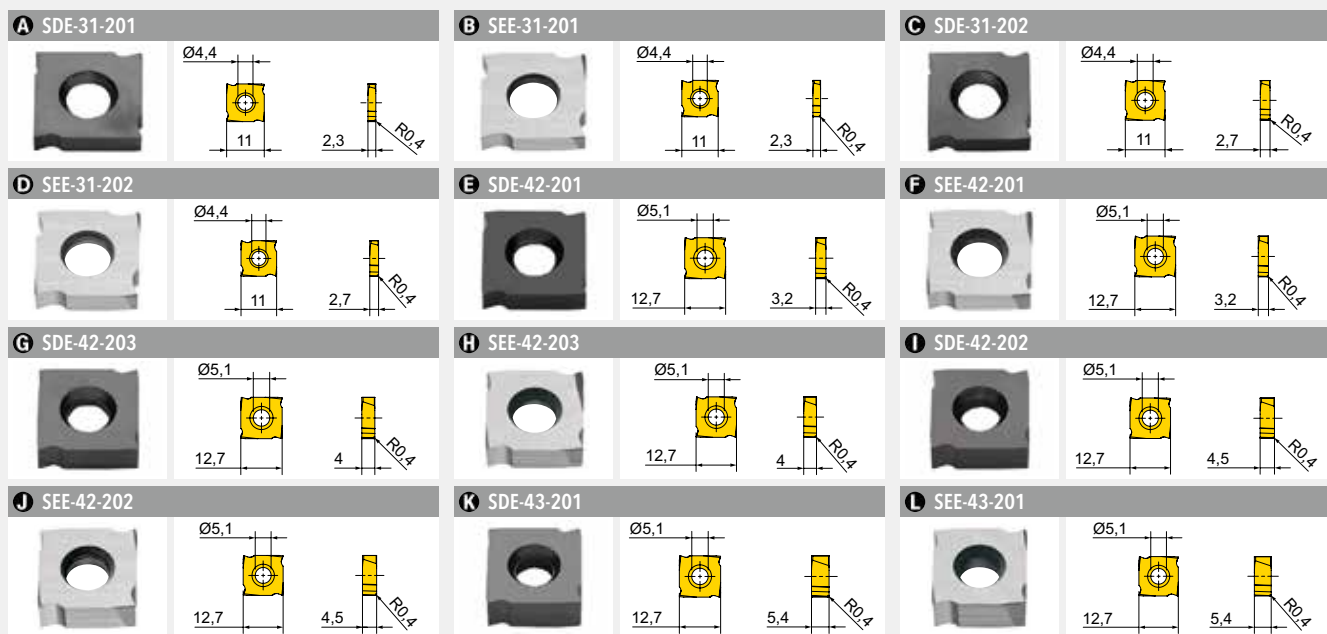
ADAPTION ACC. TO DIN 138



Designation	D	d	d1	L	b	Z	Z _{eff}	kg	Related Insert
DS.063.001	63	22	34	8	4	8	4	0,06	AB
DS.063.002	63	22	34	8	5	8	4	0,07	CD
DS.063.003	63	22	34	8	6	6	3	0,07	EF
DS.063.013	63	22	34	12	7/8	6	3	0,09	GH1J
DS.063.015	63	22	34	12	9	6	3	0,10	KL
DS.063.016	63	22	34	12	10	6	3	0,12	KL
DS.080.001	80	22	34	8	4	10	5	0,11	AB
DS.080.002	80	22	34	8	5	10	5	0,13	CD
DS.080.003	80	22	34	8	6	8	4	0,14	EF
DS.080.013	80	22	34	12	7/8	8	4	0,16	GH1J
DS.080.015	80	22	34	12	9	8	4	0,19	KL
DS.080.016	80	22	34	12	10	8	4	0,22	KL
DS.100.001	100	27	41	12	4	12	6	0,20	AB
DS.100.002	100	27	41	12	5	12	6	0,24	CD
DS.100.003	100	27	41	12	6	10	5	0,25	EF
DS.100.004	100	27	41	12	7/8	10	5	0,28	GH1J
DS.100.015	100	27	41	12	9	10	5	0,34	KL
DS.100.016	100	27	41	12	10	10	5	0,38	KL
DS.125.001	125	40	55	12	4	14	7	0,33	AB
DS.125.002	125	40	55	12	5	14	7	0,38	CD
DS.125.003	125	40	55	12	6	12	6	0,39	EF
DS.125.004	125	40	55	12	7/8	12	6	0,44	GH1J
DS.125.015	125	40	55	12	9	12	6	0,54	KL
DS.125.016	125	40	55	12	10	12	6	0,60	KL
DS.160.001	160	40	55	12	4	18	9	0,52	AB
DS.160.002	160	40	55	12	5	18	9	0,64	CD
DS.160.003	160	40	55	12	6	16	8	0,65	EF
DS.160.004	160	40	55	12	7/8	16	8	0,75	GH1J
DS.160.013	160	40	55	12	9	16	8	0,96	KL
DS.160.014	160	40	55	12	10	16	8	1,08	KL
DS.200.001	200	50	69	12	6	18	9	1,05	EF
DS.200.002	200	50	69	12	7/8	18	9	1,23	GH1J
DS.200.009	200	50	69	12	9	18	9	1,57	KL
DS.200.010	200	50	69	12	10	18	9	1,76	KL

POWER SLOT
DTD01 4-10MM

SIDE AND FACE CUTTERS



Designation	fz(min/max)	Design	Grade	IN30M	IN4030						
SDE-31-201	0,15/0,20	positive geometry									
SEE-31-201	0,05/0,20	non-ferrous geometry									
SDE-31-202	0,15/0,20	positive geometry									
SEE-31-202	0,05/0,20	non-ferrous geometry									
SDE-42-201	0,15/0,20	positive geometry									
SEE-42-201	0,05/0,20	non-ferrous geometry									
SDE-42-203	0,15/0,20	positive geometry									
SEE-42-203	0,05/0,20	non-ferrous geometry									
SDE-42-202	0,15/0,20	positive geometry									
SEE-42-202	0,05/0,20	non-ferrous geometry									
SDE-43-201	0,15/0,20	positive geometry									
SEE-43-201	0,05/0,20	non-ferrous geometry									

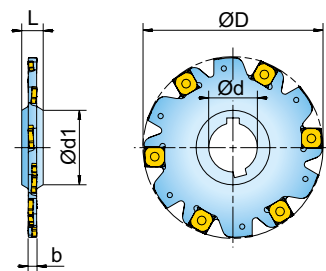
● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS		①	②
Cutting Width			
4	SM35-034-50 (1,4Nm) DS-T09S		
5	SM35-042-50 (1,4Nm) DS-T09S		
6	SM40-050-50 (4,5Nm) DS-T15S		
7/8	SM40-060-50 (4,5Nm) DS-T15S		
9 - 10	SM40-080-50 (4,5Nm) DS-T15S		

① = Insert screw ② = Screw driver

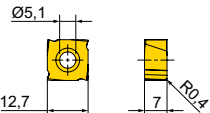
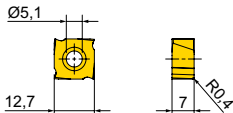
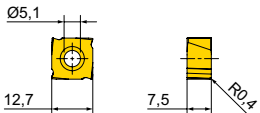
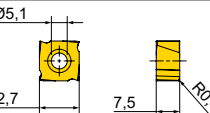
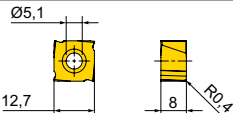
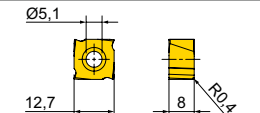
SIDE AND FACE CUTTERS

ADAPTION ACC. TO DIN 138



Designation	D	d	d1	L	b	Z	Z _{eff}	 kg	Related Insert
DS.063.019	63	22	34	12	12/13	6	3	0,12	A B C D
DS.063.020	63	22	34	14	14/15	6	3	0,16	C D E F
DS.080.019	80	22	34	12	12/13	8	4	0,25	A B C D
DS.080.020	80	22	34	14	14/15	8	4	0,30	C D E F
DS.100.019	100	27	41	12	12/13	10	5	0,43	A B C D
DS.100.020	100	27	41	14	14/15	10	5	0,52	C D E F
DS.125.019	125	40	55	12	12/13	12	6	0,70	A B C D
DS.125.020	125	40	55	14	14/15	12	6	0,84	C D E F
DS.160.017	160	40	55	12	12/13	16	8	1,29	A B C D
DS.160.018	160	40	55	14	14/15	16	8	1,54	C D E F
DS.200.011	200	50	69	12	12/13	18	9	2,10	A B C D
DS.200.012	200	50	69	14	14/15	18	9	2,50	C D E F

SIDE AND FACE CUTTERS

A SDE-44-201			B SEE-44-201			C SDE-44-202			D SEE-44-202			E SDE-45-201			F SEE-45-201		
																	
Designation	fz(min/max)	Design	Grade	IN30M	IN4030												
SDE-44-201	0,15/0,20	positive geometry															
SEE-44-201	0,05/0,20	non-ferrous geometry															
SDE-44-202	0,15/0,20	positive geometry															
SEE-44-202	0,05/0,20	non-ferrous geometry															
SDE-45-201	0,15/0,20	positive geometry															
SEE-45-201	0,05/0,20	non-ferrous geometry															

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



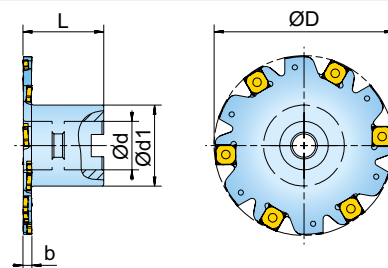
Cutting Width

12/13 - 14/15 SM40-106-50 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

SIDE AND FACE CUTTERS

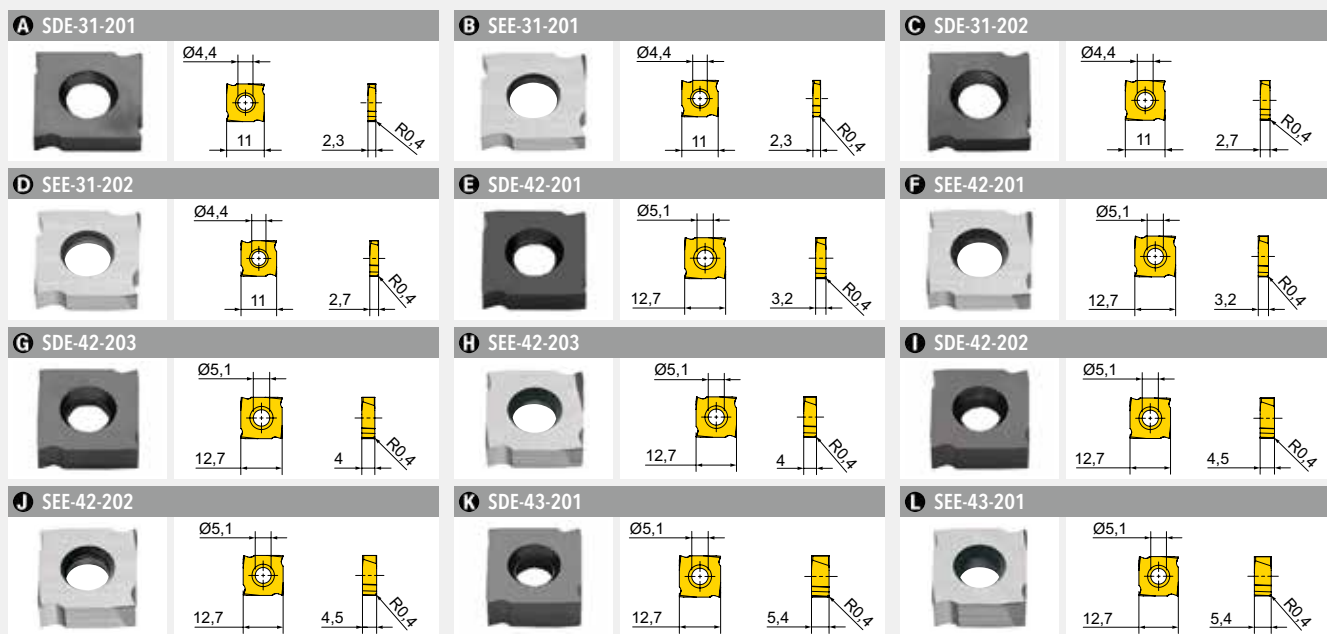
ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	L	b	Z	Z _{eff}	kg	Related Insert
DS.063.004	63	16	30	32	4	8	4	0,17	AB
DS.063.005	63	16	30	32	5	8	4	0,18	CD
DS.063.006	63	16	30	32	6	6	3	0,18	EF
DS.063.014	63	16	30	32/32,5	7/8	6	3	0,20	GH10
DS.063.017	63	16	30	32	9	6	3	0,21	KL
DS.063.018	63	16	30	32	10	6	3	0,22	KL
DS.080.004	80	22	38	40	4	10	5	0,33	AB
DS.080.005	80	22	38	40	5	10	5	0,35	CD
DS.080.006	80	22	38	40	6	8	4	0,36	EF
DS.080.014	80	22	38	40/40,5	7/8	8	4	0,37	GH10
DS.080.017	80	22	38	40	9	8	4	0,38	KL
DS.080.018	80	22	38	40	10	8	4	0,40	KL
DS.100.008	100	27	45	45	4	12	6	0,52	AB
DS.100.009	100	27	45	45	5	12	6	0,56	CD
DS.100.010	100	27	45	45	6	10	5	0,57	EF
DS.100.011	100	27	45	45/45,5	7/8	10	5	0,61	GH10
DS.100.017	100	27	45	45	9	10	5	0,62	KL
DS.100.018	100	27	45	45	10	10	5	0,66	KL
DS.125.008	125	32	58	50	4	14	7	0,99	AB
DS.125.009	125	32	58	50	5	14	7	1,05	CD
DS.125.010	125	32	58	50	6	12	6	1,08	EF
DS.125.023	125	22	38	40/40,5	7/8	12	6	0,64	GH10
DS.125.011	125	32	58	50/50,5	7/8	12	6	1,13	GH10
DS.125.017	125	32	58	50	9	12	6	1,15	KL
DS.125.018	125	32	58	50	10	12	6	1,21	KL
DS.140.001	140	22	38	40	7/8	12	6	0,89	GH10
DS.160.011	160	40	70	60	6	16	8	1,89	EF
DS.160.012	160	40	70	60/60,5	7/8	16	8	1,99	GH10
DS.160.015	160	40	70	60	9	16	8	2,01	KL
DS.160.016	160	40	70	60	10	16	8	2,12	KL

POWER SLOT DTD10 4-10MM

SIDE AND FACE CUTTERS



Designation	fz(min/max)	Design	Grade	IN30M	IN4030						
SDE-31-201	0,15/0,20	positive geometry									
SEE-31-201	0,05/0,20	non-ferrous geometry									
SDE-31-202	0,15/0,20	positive geometry									
SEE-31-202	0,05/0,20	non-ferrous geometry									
SDE-42-201	0,15/0,20	positive geometry									
SEE-42-201	0,05/0,20	non-ferrous geometry									
SDE-42-203	0,15/0,20	positive geometry									
SEE-42-203	0,05/0,20	non-ferrous geometry									
SDE-42-202	0,15/0,20	positive geometry									
SEE-42-202	0,05/0,20	non-ferrous geometry									
SDE-43-201	0,15/0,20	positive geometry									
SEE-43-201	0,05/0,20	non-ferrous geometry									

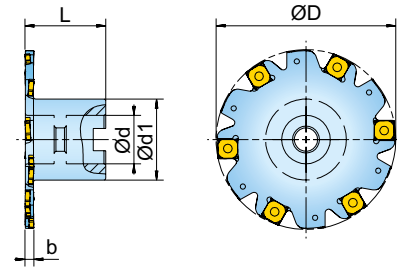
● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS		①	②
Cutting Width			
4	SM35-034-50 (1,4Nm) DS-T09S		
5	SM35-042-50 (1,4Nm) DS-T09S		
6	SM40-050-50 (4,5Nm) DS-T15S		
7/8	SM40-060-50 (4,5Nm) DS-T15S		
9 - 10	SM40-080-50 (4,5Nm) DS-T15S		

① = Insert screw ② = Screw driver

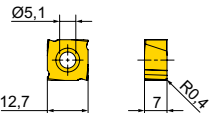
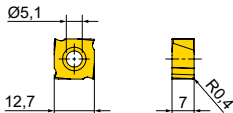
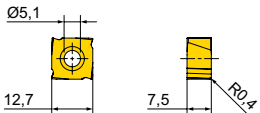
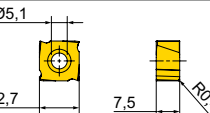
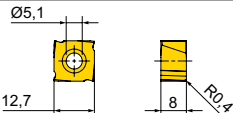
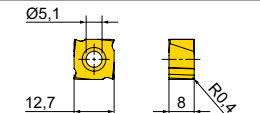
SIDE AND FACE CUTTERS

ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	L	b	Z	Z _{eff}	 kg	Related Insert
DS.063.021	63	16	30	32/32,5	12/13	6	3	0,22	A B C D
DS.063.022	63	16	30	32/32,5	14/15	6	3	0,24	C D E F
DS.080.021	80	22	38	40/40,5	12/13	8	4	0,42	A B C D
DS.080.022	80	22	38	40/40,5	14/15	8	4	0,46	C D E F
DS.100.021	100	27	45	45/45,5	12/13	10	5	0,72	A B C D
DS.100.022	100	27	45	45/45,5	14/15	10	5	0,79	C D E F
DS.125.021	125	32	58	50/50,5	12/13	12	6	1,30	A B C D
DS.125.022	125	32	58	50/50,5	14/15	12	6	1,43	C D E F
DS.160.019	160	40	70	60/60,5	12/13	16	8	2,30	A B C D
DS.160.020	160	40	70	60/60,5	14/15	16	8	2,50	C D E F

SIDE AND FACE CUTTERS

A SDE-44-201			B SEE-44-201			C SDE-44-202			D SEE-44-202			E SDE-45-201			F SEE-45-201		
																	
Designation	fz(min/max)	Design	Grade	IN30M	IN4030												
SDE-44-201	0,15/0,20	positive geometry															
SEE-44-201	0,05/0,20	non-ferrous geometry															
SDE-44-202	0,15/0,20	positive geometry															
SEE-44-202	0,05/0,20	non-ferrous geometry															
SDE-45-201	0,15/0,20	positive geometry															
SEE-45-201	0,05/0,20	non-ferrous geometry															

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



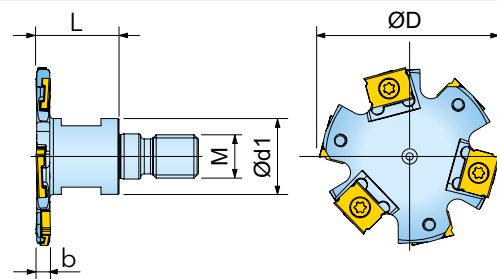
Cutting Width

12/13 - 14/15 SM40-106-50 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

SIDE AND FACE CUTTERS

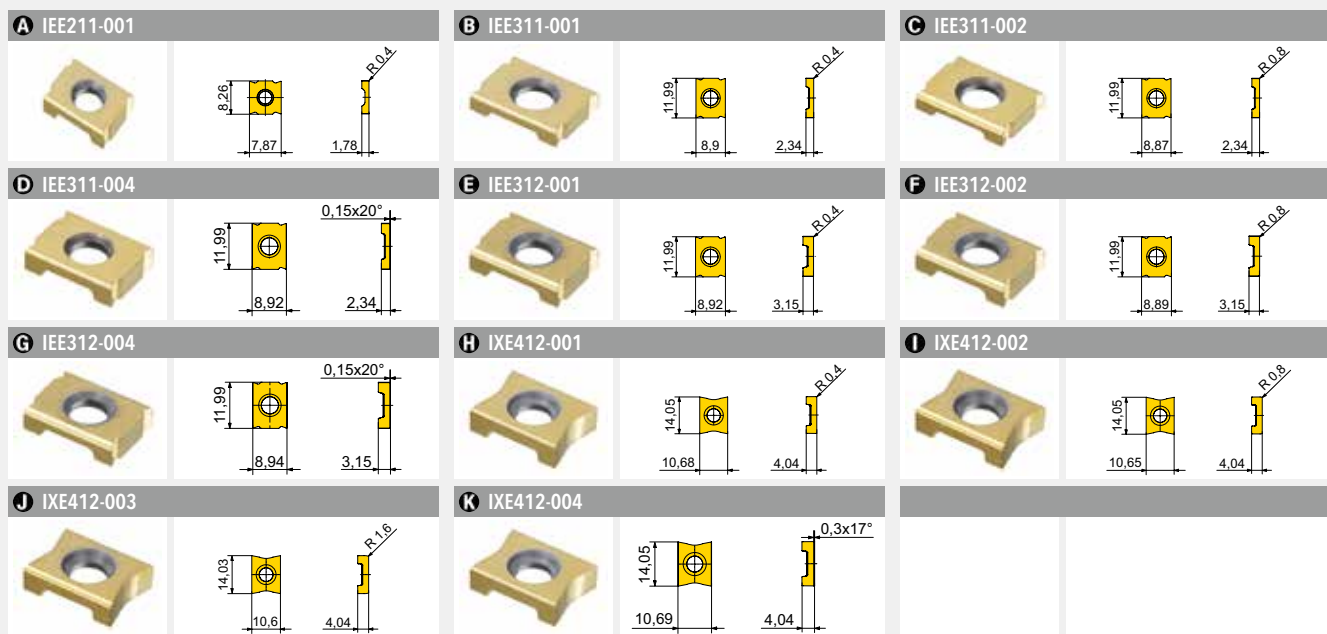
SCREW-IN TYPE ADAPTION



Designation	D	d1	L	b	M	Z	Z _{eff}	 kg	Related Insert
DI.050.001	50	21	23	3	12	6	3	0,10	A
DI.050.002	50	21	23	4	12	6	3	0,10	B C D
DI.050.003	50	21	23	5	12	6	3	0,12	E F G
DI.050.004	50	21	23	6	12	4	2	0,13	H I J K

THIN PRO DLE01 3-6 MM

SIDE AND FACE CUTTERS



Designation	fz(min/max)	Design	Grade	IN05S	IN250S	IN251S	IN2530	IN403S			
IEE211-001	0,05/0,12	positive geometry R0,4		●	●		●	●			
IEE311-001	0,05/0,12	positive geometry R0,4		●	●	●	●	●			
IEE311-002	0,05/0,15	positive geometry R0,8		●	●	●	●	●			
IEE311-004	0,05/0,15	positive geometry 0,15x20°			●		●				
IEE312-001	0,05/0,17	positive geometry R0,4		●	●	●	●	●			
IEE312-002	0,05/0,17	positive geometry R0,8		●	●	●	●	●			
IEE312-004	0,05/0,17	positive geometry 0,15x20°			●		●				
IXE412-001	0,05/0,20	positive geometry R0,4		●	●	●	●	●			
IXE412-002	0,05/0,20	positive geometry R0,8		●	●	●	●	●			
IXE412-003	0,05/0,20	positive geometry R1,6			●		●				
IXE412-004	0,05/0,20	positive geometry 0,3x17°			●		●				

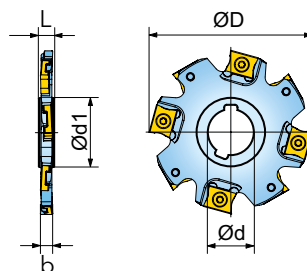
● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS		①	②
Cutting Width			
3	SM25-024-80 (0,7Nm) DS-T06F		
4	SM35-034-50 (1,4Nm) DS-T09S		
5	SM35-042-50 (1,4Nm) DS-T09S		
6	SM40-050-50 (4,5Nm) DS-T15S		

① = Insert screw ② = Screw driver

SIDE AND FACE CUTTERS

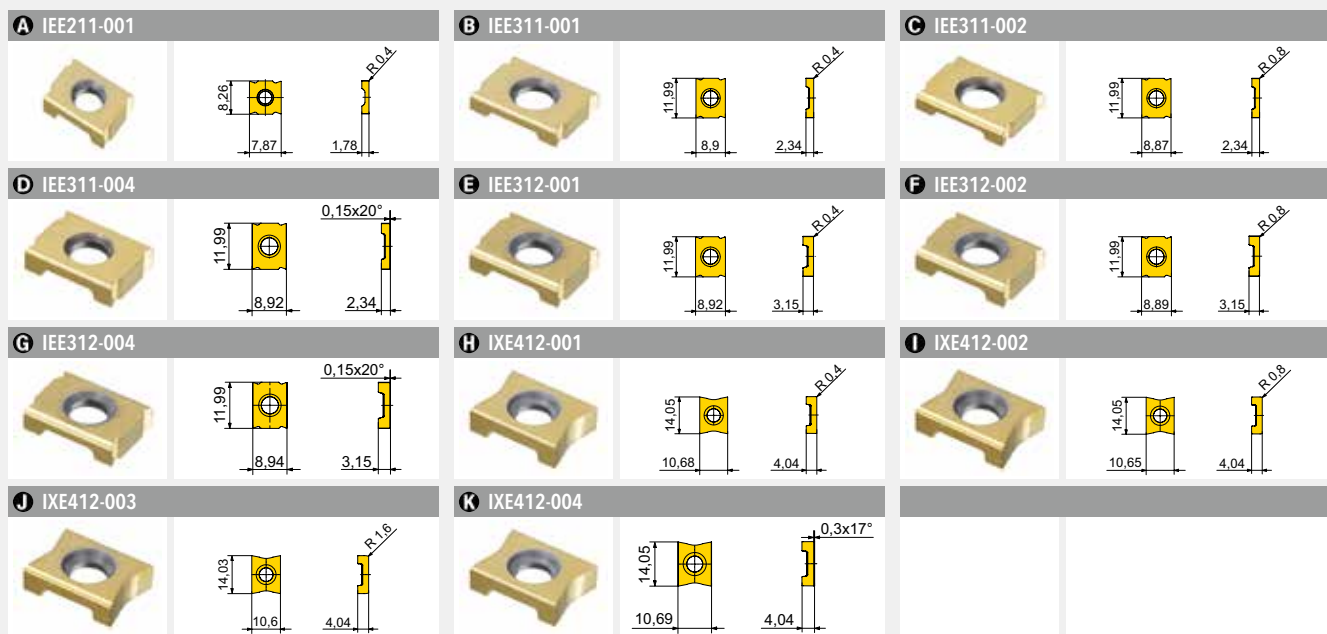
ADAPTION ACC. TO DIN 138



Designation	D	d	d1	L	b	Z	Z _{eff}	kg	Related Insert
DI.063.001	63	22	34	8	3	8	4	0,07	A
DI.063.002	63	22	34	8	4	8	4	0,08	B C D
DI.063.003	63	22	34	8	5	8	4	0,09	E F G
DI.063.004	63	22	34	8	6	6	3	0,10	H I J K
DI.080.001	80	22	34	8	3	10	5	0,10	A
DI.080.002	80	22	34	8	4	10	5	0,13	B C D
DI.080.003	80	22	34	8	5	10	5	0,15	E F G
DI.080.004	80	22	34	8	6	8	4	0,17	H I J K
DI.100.001	100	27	41	12	3	14	7	0,18	A
DI.100.002	100	27	41	12	4	12	6	0,23	B C D
DI.100.003	100	27	41	12	5	12	6	0,26	E F G
DI.100.004	100	27	41	12	6	10	5	0,29	H I J K
DI.125.001	125	40	55	12	4	14	7	0,35	B C D
DI.125.002	125	40	55	12	5	14	7	0,10	E F G
DI.125.003	125	40	55	12	6	12	6	0,45	H I J K
DI.160.001	160	40	55	12	4	18	9	0,56	B C D
DI.160.002	160	40	55	12	5	18	9	0,63	E F G
DI.160.003	160	40	55	12	6	16	8	0,76	H I J K
DI.200.001	200	50	69	12	6	18	9	1,20	H I J K

THIN PRO DLD01 3-6 MM

SIDE AND FACE CUTTERS



Designation	fz(min/max)	Design	Grade	IN05S	IN2505	IN2515	IN2530	IN4035			
IEE211-001	0,05/0,12	positive geometry R0,4		●	●		●	●			
IEE311-001	0,05/0,12	positive geometry R0,4		●	●	●	●	●			
IEE311-002	0,05/0,15	positive geometry R0,8		●	●	●	●	●			
IEE311-004	0,05/0,15	positive geometry 0,15x20°			●		●				
IEE312-001	0,05/0,17	positive geometry R0,4		●	●	●	●	●			
IEE312-002	0,05/0,17	positive geometry R0,8		●	●	●	●	●			
IEE312-004	0,05/0,17	positive geometry 0,15x20°			●		●				
IXE412-001	0,05/0,20	positive geometry R0,4		●	●	●	●	●			
IXE412-002	0,05/0,20	positive geometry R0,8		●	●	●	●	●			
IXE412-003	0,05/0,20	positive geometry R1,6			●		●				
IXE412-004	0,05/0,20	positive geometry 0,3x17°			●		●				

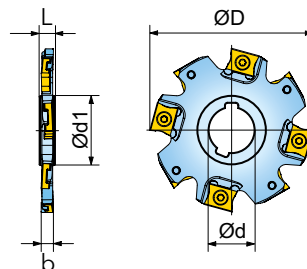
● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS		①	②
Cutting Width			
3	SM25-024-80 (0,7Nm) DS-T06F		
4	SM35-034-50 (1,4Nm) DS-T09S		
5	SM35-042-50 (1,4Nm) DS-T09S		
6	SM40-050-50 (4,5Nm) DS-T15S		

① = Insert screw ② = Screw driver

SIDE AND FACE CUTTERS

ADAPTION ACC. TO DIN 138



Designation	D	d	d1	L	b	Z	Z _{eff}	kg	Related Insert
DI.063.005	63	22	34	12	7	6	3	0,13	ABCD
DI.063.006	63	22	34	12	8	6	3	0,14	ABCD
DI.063.007	63	22	34	12	9	6	3	0,15	EFCH
DI.063.008	63	22	34	12	10	6	3	0,17	EFCH
DI.080.005	80	22	34	12	7	8	4	0,21	ABCD
DI.080.006	80	22	34	12	8	8	4	0,24	ABCD
DI.080.007	80	22	34	12	9	8	4	0,26	EFCH
DI.080.008	80	22	34	12	10	8	4	0,29	EFCH
DI.100.005	100	27	41	12	7	10	5	0,33	ABCD
DI.100.006	100	27	41	12	8	10	5	0,37	ABCD
DI.100.007	100	27	41	12	9	10	5	0,40	EFCH
DI.100.008	100	27	41	12	10	10	5	0,44	EFCH
DI.125.004	125	40	55	12	7	12	6	0,51	ABCD
DI.125.005	125	40	55	12	8	12	6	0,57	ABCD
DI.125.006	125	40	55	12	9	12	6	0,61	EFCH
DI.125.007	125	40	55	12	10	12	6	0,68	EFCH
DI.160.004	160	40	55	12	7	16	8	0,86	ABCD
DI.160.005	160	40	55	12	8	16	8	0,98	ABCD
DI.160.006	160	40	55	12	9	16	8	1,05	EFCH
DI.160.007	160	40	55	12	10	16	8	1,17	EFCH
DI.200.002	200	50	69	12	7	18	9	1,35	ABCD
DI.200.003	200	50	69	12	8	18	9	1,55	ABCD
DI.200.004	200	50	69	12	9	18	9	1,66	EFCH
DI.200.005	200	50	69	12	10	18	9	1,85	EFCH

THIN PRO DLD01 7-10 MM

SIDE AND FACE CUTTERS

A IXE413-001			B IXE413-002			C IXE413-003					
D IXE413-004			E IXE414-001			F IXE414-002					
G IXE414-003			H IXE414-004								
Designation	fz(min/max)	Design	Grade	IN05S	IN250S	IN251S	IN2530	IN403S			
IXE413-001	0,05/0,20	positive geometry R0,4									
IXE413-002	0,05/0,20	positive geometry R0,8									
IXE413-003	0,05/0,20	positive geometry R1,6									
IXE413-004	0,05/0,20	positive geometry 0,3x17°									
IXE414-001	0,05/0,25	positive geometry R0,4									
IXE414-002	0,05/0,25	positive geometry R0,8									
IXE414-003	0,05/0,25	positive geometry R1,6									
IXE414-004	0,05/0,25	positive geometry 0,3x17°									

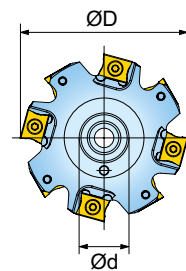
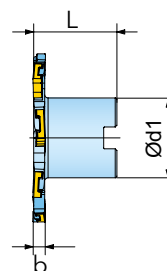
● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS	 	
Cutting Width		
7	SM40-060-50 (4,5Nm) DS-T15S	
8	SM40-070-50 (4,5Nm) DS-T15S	
9 - 10	SM40-080-50 (4,5Nm) DS-T15S	

① = Insert screw ② = Screw driver

SIDE AND FACE CUTTERS

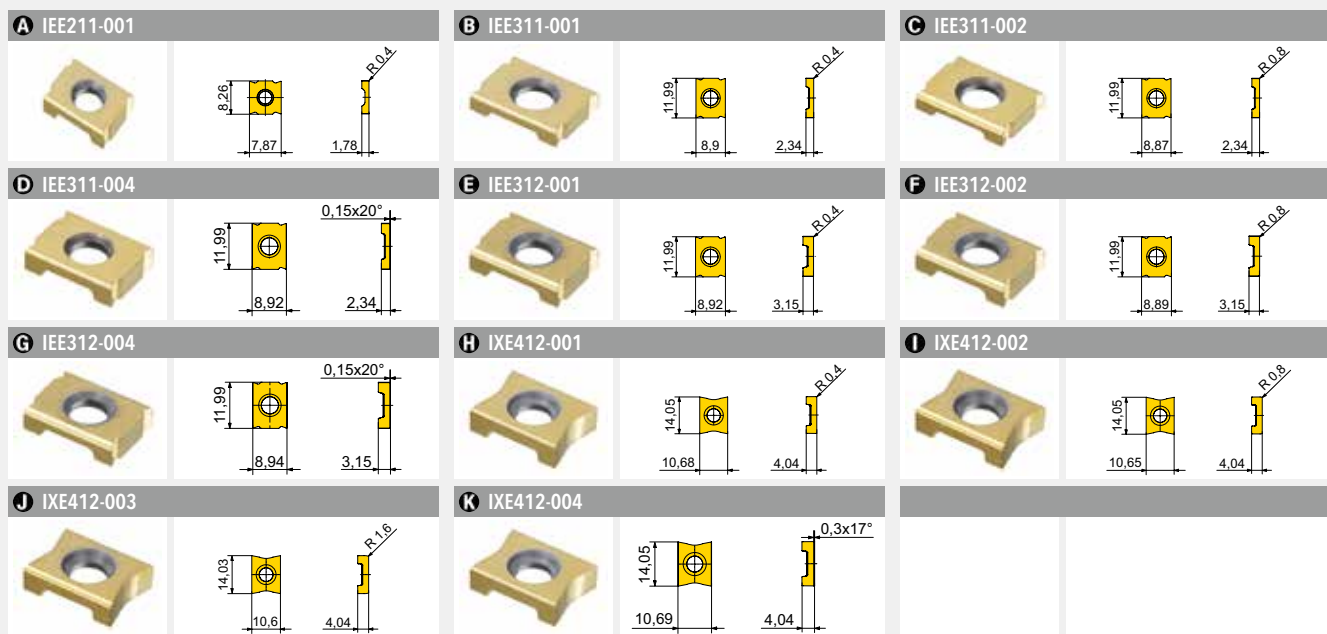
ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	L	b	Z	Z _{eff}	kg	Related Insert
DI.063.009	63	16	30	32	3	8	4	0,16	A
DI.063.010	63	16	30	32	4	8	4	0,19	B C D
DI.063.011	63	16	30	32	5	8	4	0,21	E F G
DI.063.012	63	16	30	32	6	6	3	0,22	H I J K
DI.080.009	80	22	38	40	3	10	5	0,32	A
DI.080.010	80	22	38	40	4	10	5	0,36	B C D
DI.080.011	80	22	38	40	5	10	5	0,38	E F G
DI.080.012	80	22	38	40	6	8	4	0,40	H I J K
DI.100.009	100	27	45	45	3	14	7	0,52	A
DI.100.010	100	27	45	45	4	14	7	0,56	B C D
DI.100.011	100	27	45	45	5	12	6	0,60	E F G
DI.100.012	100	27	45	45	6	10	5	0,62	H I J K
DI.125.008	125	32	58	50	4	14	7	1,04	B C D
DI.125.009	125	32	58	50	5	14	7	1,10	E F G
DI.125.010	125	32	58	50	6	12	6	1,14	H I J K
DI.160.008	160	40	70	60	4	18	9	1,83	B C D
DI.160.009	160	40	70	60	5	18	9	1,93	E F G
DI.160.010	160	40	70	60	6	16	8	2,00	H I J K

THIN PRO DLD10 3-6 MM

SIDE AND FACE CUTTERS



Designation	fz(min/max)	Design	Grade	IN05S	IN250S	IN251S	IN2530	IN403S			
IEE211-001	0,05/0,12	positive geometry R0,4		●	●		●	●			
IEE311-001	0,05/0,12	positive geometry R0,4		●	●	●	●	●			
IEE311-002	0,05/0,15	positive geometry R0,8		●	●	●	●	●			
IEE311-004	0,05/0,15	positive geometry 0,15x20°			●		●				
IEE312-001	0,05/0,17	positive geometry R0,4		●	●	●	●	●			
IEE312-002	0,05/0,17	positive geometry R0,8		●	●	●	●	●			
IEE312-004	0,05/0,17	positive geometry 0,15x20°			●		●				
IXE412-001	0,05/0,20	positive geometry R0,4		●	●	●	●	●			
IXE412-002	0,05/0,20	positive geometry R0,8		●	●	●	●	●			
IXE412-003	0,05/0,20	positive geometry R1,6			●		●				
IXE412-004	0,05/0,20	positive geometry 0,3x17°			●		●				

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



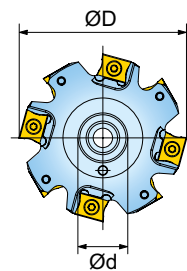
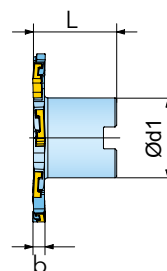
Cutting Width

3	SM25-024-80 (0,7Nm) DS-T06F
4	SM35-034-50 (1,4Nm) DS-T09S
5	SM35-042-50 (1,4Nm) DS-T09S
6	SM40-050-50 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

SIDE AND FACE CUTTERS

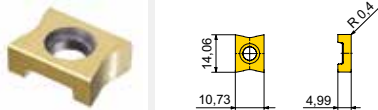
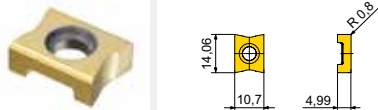
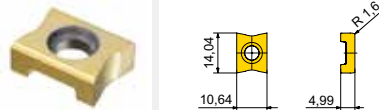
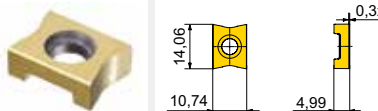
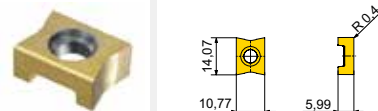
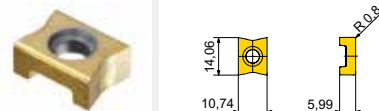
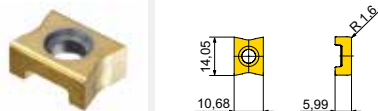
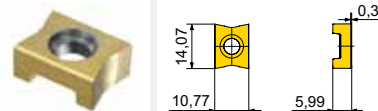
ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	L	b	Z	Z _{eff}	kg	Related Insert
DI.063.013	63	16	30	32	7	6	3	0,23	ABCD
DI.063.014	63	16	30	32	8	6	3	0,24	ABCD
DI.063.015	63	16	30	32	9	6	3	0,26	EFCH
DI.063.016	63	16	30	32	10	6	3	0,27	EFCH
DI.080.013	80	22	38	40	7	8	4	0,42	ABCD
DI.080.014	80	22	38	40	8	8	4	0,45	ABCD
DI.080.015	80	22	38	40	9	8	4	0,48	EFCH
DI.080.016	80	22	38	40	10	8	4	0,50	EFCH
DI.100.013	100	27	45	45	7	10	5	0,66	ABCD
DI.100.014	100	27	45	45	8	10	5	0,70	ABCD
DI.100.015	100	27	45	45	9	10	5	0,72	EFCH
DI.100.016	100	27	45	45	10	10	5	0,76	EFCH
DI.125.011	125	32	58	50	7	12	6	1,20	ABCD
DI.125.012	125	32	58	50	8	12	6	1,26	ABCD
DI.125.013	125	32	58	50	9	12	6	1,29	EFCH
DI.125.014	125	32	58	50	10	12	6	1,35	EFCH
DI.160.011	160	40	70	60	7	16	8	2,10	ABCD
DI.160.012	160	40	70	60	8	16	8	2,21	ABCD
DI.160.013	160	40	70	60	9	16	8	2,27	EFCH
DI.160.014	160	40	70	60	10	16	8	2,38	EFCH

THIN PRO DLD10 7-10 MM

SIDE AND FACE CUTTERS

A IXE413-001			B IXE413-002			C IXE413-003					
											
D IXE413-004			E IXE414-001			F IXE414-002					
											
G IXE414-003			H IXE414-004								
											
Designation	fz(min/max)	Design	Grade	IN05S	IN250S	IN251S	IN2530	IN403S			
IXE413-001	0,05/0,20	positive geometry R0,4									
IXE413-002	0,05/0,20	positive geometry R0,8									
IXE413-003	0,05/0,20	positive geometry R1,6									
IXE413-004	0,05/0,20	positive geometry 0,3x17°									
IXE414-001	0,05/0,25	positive geometry R0,4									
IXE414-002	0,05/0,25	positive geometry R0,8									
IXE414-003	0,05/0,25	positive geometry R1,6									
IXE414-004	0,05/0,25	positive geometry 0,3x17°									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS	①	②
Cutting Width		
7	SM40-060-50 (4,5Nm) DS-T15S	
8	SM40-070-50 (4,5Nm) DS-T15S	
9 - 10	SM40-080-50 (4,5Nm) DS-T15S	

① = Insert screw ② = Screw driver

FORM CUTTERS

	D	a	Description	Code	Page
	8	2,7 - 4,8	HIPOS MICRO FA06D02	FA06D02	118
	20	2,9 - 11,6	HIPOS PLUS FB13D03B	FB13D03B	119
	35	9,0 - 33,9	HIPOS PLUS FB13D10B	FB13D10B	120
	45	6,4 - 24,4	ALUMINATOR FB25D10	FB25D10	121
	10,6	3,2	HIPOS QUAD FS05D02	FS05D02	122
	6 - 16	3,5 - 5,1	HIPOS QUAD FS08D03	FS08D03	123
	20	5	HIPOS QUAD FS08E01	FS08E01	124
	25	1 - 6	FAST BREAK F__D03	F__D03	125
	25	1 - 6	FAST BREAK F__E01	F__E01	126
	25 - 50	11 - 21	HIPOS QUAD TS08D03	TS08D03	127
	25 - 50	11 - 21	HIPOS QUAD TS08M01	TS08M01	128
	32 - 40	14 - 17	HIPOS QUAD TS09M01	TS09M01	129
	50 - 58	21 - 26,5	HIPOS QUAD TS14M01	TS14M01	130

Subject to printing error or technical changes.

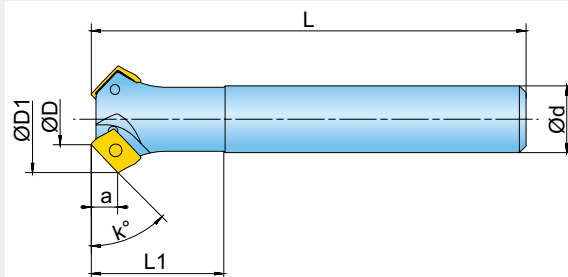
FORM CUTTERS

Subject to printing error or technical changes.



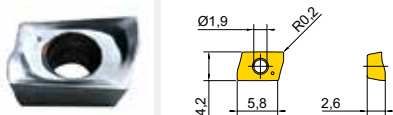
FORM CUTTERS

ADAPTION ACC. TO DIN 1835 A

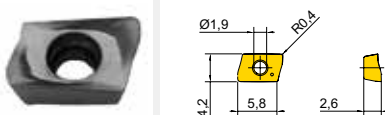


Designation	D	D1	d	L	L1	κ	a	Z	kg
FA.008.001	8	17,7	10	65	20	30	2,7	2	0,04
FA.008.002	8	16,0	10	65	20	45	3,9	2	0,04
FA.008.003	8	13,7	10	65	20	60	4,8	2	0,04

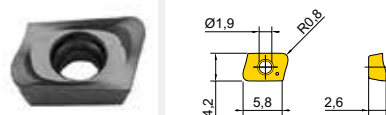
AOMT060202R



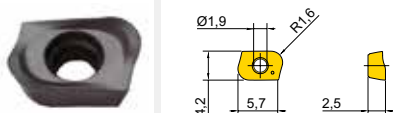
AOMT060204R



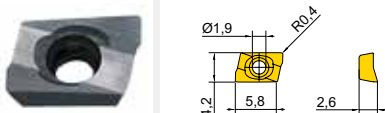
AOMT060208R



AOMT060216R



AOCT060204FR-P



Designation	fz(min/max)	Design	Grade	IN05S	IN203S	IN250S	IN2530	IN653S			
AOMT060202R	0,06/0,12	positive geometry R0,2									
AOMT060204R	0,06/0,12	positive geometry R0,4									
AOMT060208R	0,06/0,12	positive geometry R0,8									
AOMT060216R ¹⁾	0,06/0,12	positive geometry R1,6									
AOCT060204FR-P	0,05/0,12	non-ferrous geometry, polished R0,4									

¹⁾Cutter body has to be modified

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



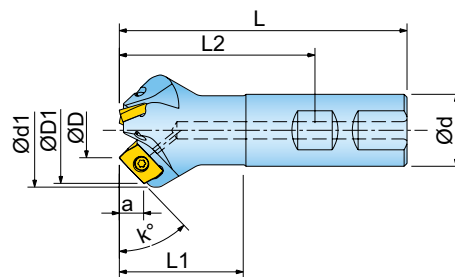
SM18-041-00 (0,5Nm) DS-TP06S (TX-Plus)

① = Insert screw ② = Screw driver

HIPOS MICRO FA06D02

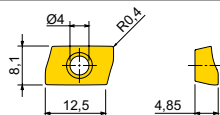
FORM CUTTERS

ADAPTION ACC. TO DIN 1835 B (WELDON)

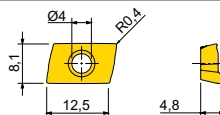


Designation	D	D1	d	d2	L	L1	L2	κ	a	Z	IK	kg
FB.020.006	20	42,1	25	43,2	100	44	68	15	2,9	3	✓	0,38
FB.020.007	20	40,4	25	40,7	100	44	68	30	5,9	3	✓	0,35
FB.020.008	20	36,9	25	39,5	100	44	68	45	8,4	3	✓	0,36
FB.020.009	20	31,9	25	32,2	100	44	68	60	10,3	3	✓	0,33
FB.020.010	20	26,2	25	26,4	100	44	68	75	11,6	3	✓	0,31

BOMT130404R



BOCT130404FR-P



Designation	fz(min/max)	Design	Grade	IN10K	IN2035	IN2505	IN2530	IN4030	IN6535		
BOMT130404R	0,12/0,20	positive geometry R0,4									
BOCT130404FR-P	0,05/0,25	non-ferrous geometry, polished R0,4									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

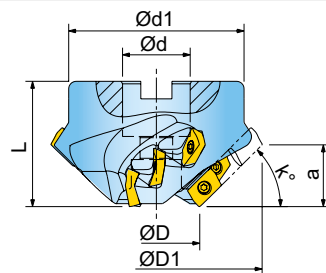


SM35-088-10 (3,0Nm) DS-T10S

① = Insert screw ② = Screw driver

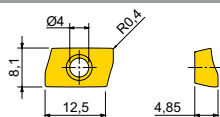
FORM CUTTERS

ADAPTION ACC. TO DIN 8030

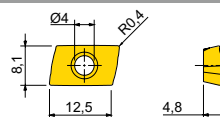


Designation	D	D1	d	d1	L	κ	a	Z	Z _{eff}	kg
FB.035.006	35	102,5	27	70	50	15	9,0	9	3	1,37
FB.035.007	35	95,5	27	70	50	30	17,4	9	3	1,14
FB.035.008	35	84,5	27	70	50	45	24,6	9	3	0,87
FB.035.009	35	70,0	27	70	50	60	30,3	9	3	0,66
FB.035.010	35	53,2	22	45	50	75	33,9	9	3	0,30

BOMT130404R



BOCT130404FR-P



Designation	fz(min/max)	Design	Grade	IN10K	IN2035	IN2505	IN2530	IN4030	IN6535		
BOMT130404R	0,12/0,20	positive geometry R0,4									
BOCT130404FR-P	0,05/0,25	non-ferrous geometry, polished R0,4									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

①



②



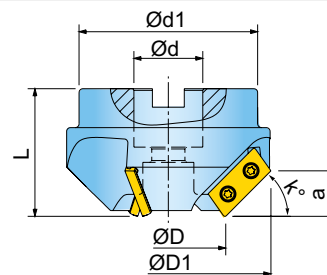
SM35-088-10 (3,0Nm) DS-T10S

① = Insert screw ② = Screw driver

HIPOS PLUS FB13D10B

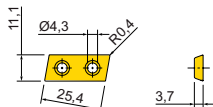
FORM CUTTERS

ADAPTION ACC. TO DIN 8030

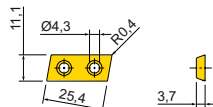


Designation	D	D1	d	d1	L	κ	σ	Z	IK	kg
FB.045.001	45	93,4	27	70	50	15	6,4	3	✓	1,63
FB.045.002	45	88,5	27	70	50	30	12,4	3	✓	1,38
FB.045.003	45	80,7	27	70	50	45	17,8	3	✓	1,05
FB.045.004	45	70,3	27	70	50	60	21,8	3	✓	0,82
FB.045.005	45	58,1	22	45	50	75	24,4	3	✓	0,43

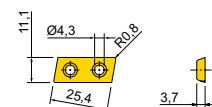
BEHW250304R



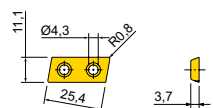
BEHW250304R-P



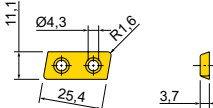
BEHW250308R



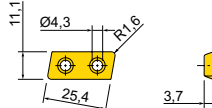
BEHW250308R-P



BEHW250316R



BEHW250316R-P



Designation	fz(min/max)	Design	Grade	IN15K	IN2540							
BEHW250304R	0,08/0,20	neutral geometry R0,4			●							
BEHW250304R-P	0,05/0,20	non-ferrous geometry, polished R0,4		●								
BEHW250308R	0,08/0,20	neutral geometry R0,8			●							
BEHW250308R-P	0,05/0,20	non-ferrous geometry, polished R0,8		●								
BEHW250316R	0,08/0,20	neutral geometry R1,6			●							
BEHW250316R-P	0,05/0,20	non-ferrous geometry, polished R1,6		●								

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

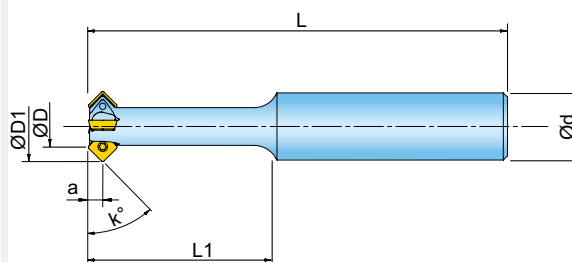


SM35-089-00 (3,0Nm) DS-T15S

① = Insert screw ② = Screw driver

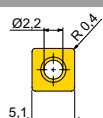
FORM CUTTERS

ADAPTION ACC. TO DIN 1835 A



Designation	D	D1	d	L	L1	κ	a	Z	kg
FS.017.001	10,6	17	16	100	45	45	3,2	4	0,11

SDMT050204N



Designation	fz(min/max)	Design	Grade	IN2505							
SDMT050204N	0,06/0,12	positive geometry R0,4									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



DS-TP06S (TX-Plus)

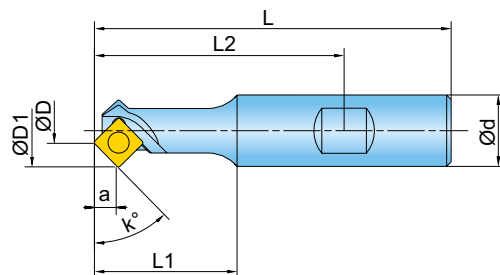
SM20-043-00 (0,7Nm)

① = Screw driver ② = Insert screw

HIPOS QUAD FS05D02

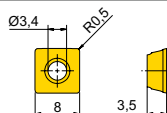
FORM CUTTERS

ADAPTION ACC. TO DIN 1835 B (WELDON)

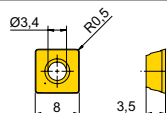


Designation	D	D1	d	L	L1	L2	κ	a	Z	kg
FS.006.003	6	18,6	16	80	32	56	30	3,5	1	0,09
FS.006.001	6	16,3	16	80	32	56	45	5,1	1	0,09
FS.006.002	6	13,1	16	80	32	56	60	6,2	1	0,09
FS.016.001	16	26,4	20	85	35	60	45	5,1	2	0,19

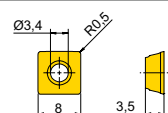
SDMT080305N



SDMW080305TN



SDCT080305FN-P



Designation	fz(min/max)	Design	Grade	IN05S	IN250S	IN4030					
SDMT080305N	0,13/0,17	positive geometry R0,5									
SDMW080305TN	0,13/0,20	neutral geometry, K-land R0,5									
SDCT080305FN-P	0,05/0,20	non-ferrous geometry, polished R0,5									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

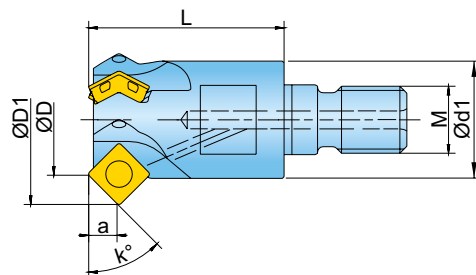


SM30-065-00 (2,0Nm) DS-T09S

① = Insert screw ② = Screw driver

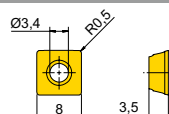
FORM CUTTERS

SCREW-IN TYPE ADAPTION

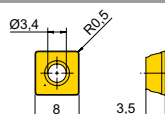


Designation	D	D1	d1	L	κ	a	M	Z	IK	kg
FS.020.001	20	30,4	21	35	45	5	12	3	✓	0,09

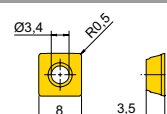
SDMT080305N



SDMW080305TN



SDCT080305FN-P



Designation	fz(min/max)	Design	Grade	IN05S	IN2505	IN4030					
SDMT080305N	0,13/0,17	positive geometry R0,5									
SDMW080305TN	0,13/0,20	neutral geometry, K-land R0,5									
SDCT080305FN-P	0,05/0,20	non-ferrous geometry, polished R0,5									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



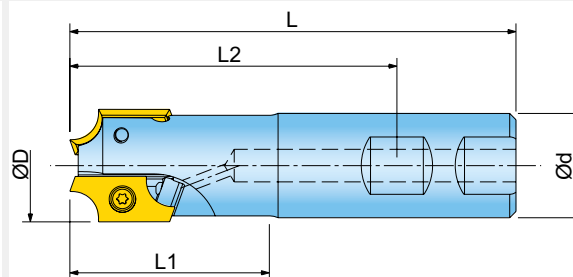
SM30-065-00 (2,0Nm) DS-T09S

① = Insert screw ② = Screw driver

HIPOS QUAD FS08E01

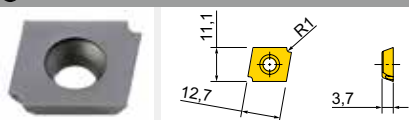
FORM CUTTERS

ADAPTION ACC. TO DIN 1835 B (WELDON)

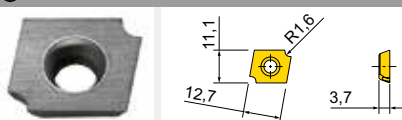


Designation	D	d	L	L1	L2	Z	Insert	IK	kg	Related Insert
FB.025.001	25	25	100	40	68	2	BEEW	✓	0,28	A B C D E
FF.025.001	25	25	100	40	68	2	FEEW	✓	0,34	F G H

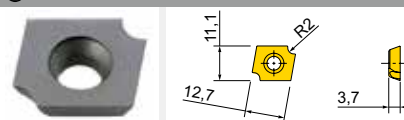
A BEEW120310R-CR



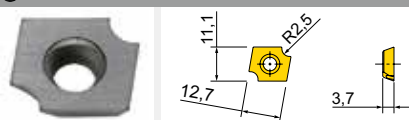
B BEEW120316R-CR



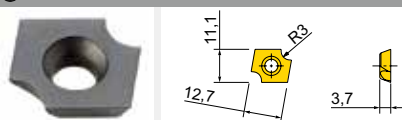
C BEEW120320R-CR



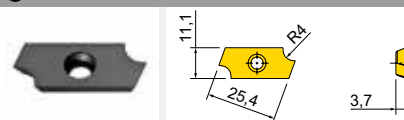
D BEEW120325R-CR



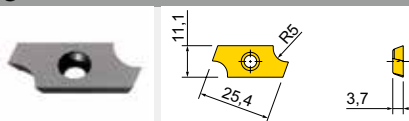
E BEEW120330R-CR



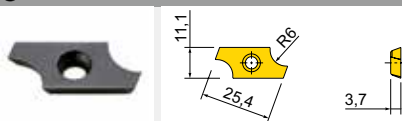
F FEEW250340R-CR



G FEEW250350R-CR



H FEEW250360R-CR



Designation	fz(min/max)	Design	Grade	IN2530										
BEEW120310R-CR	0,08/0,20	neutral geometry R1,0												
BEEW120316R-CR	0,08/0,20	neutral geometry R1,6												
BEEW120320R-CR	0,08/0,20	neutral geometry R2,0												
BEEW120325R-CR	0,08/0,20	neutral geometry R2,5												
BEEW120330R-CR	0,08/0,20	neutral geometry R3,0												
FEEW250340R-CR	0,08/0,20	neutral geometry R4,0												
FEEW250350R-CR	0,08/0,20	neutral geometry R5,0												
FEEW250360R-CR	0,08/0,20	neutral geometry R6,0												

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



Insert-Typ

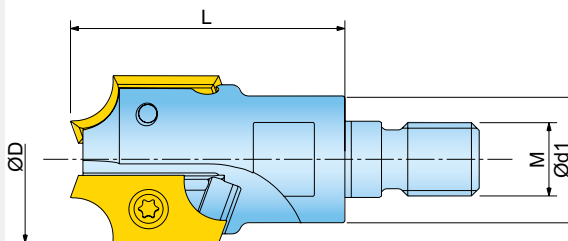
BEEW SM35-070-00 (3,0Nm) DS-T15S

FEEW SM40-093-20 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

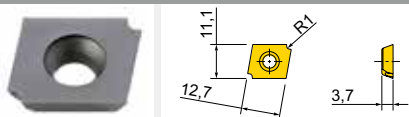
FORM CUTTERS

SCREW-IN TYPE ADAPTION

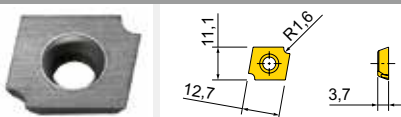


Designation	D	d1	L	M	Z	Insert	IK	kg	Related Insert
FB.025.002	25	21	35	12	2	BEEW	✓	0,10	A B C D E
FF.025.002	25	21	43	12	2	FEEW	✓	0,11	F G H

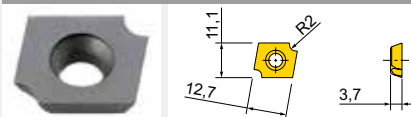
A BEEW120310R-CR



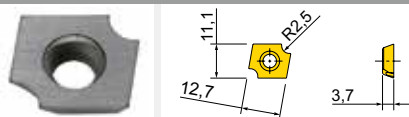
B BEEW120316R-CR



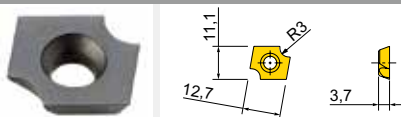
C BEEW120320R-CR



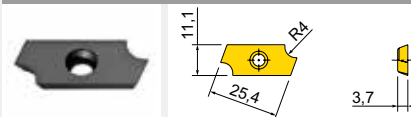
D BEEW120325R-CR



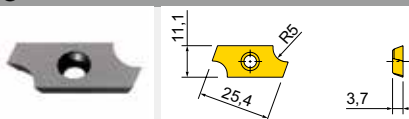
E BEEW120330R-CR



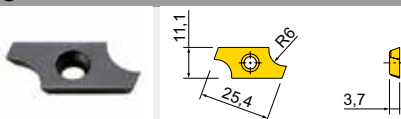
F FEEW250340R-CR



G FEEW250350R-CR



H FEEW250360R-CR



Designation	fz(min/max)	Design	Grade	IN2530										
BEEW120310R-CR	0,08/0,20	neutral geometry R1,0												
BEEW120316R-CR	0,08/0,20	neutral geometry R1,6												
BEEW120320R-CR	0,08/0,20	neutral geometry R2,0												
BEEW120325R-CR	0,08/0,20	neutral geometry R2,5												
BEEW120330R-CR	0,08/0,20	neutral geometry R3,0												
FEEW250340R-CR	0,08/0,20	neutral geometry R4,0												
FEEW250350R-CR	0,08/0,20	neutral geometry R5,0												
FEEW250360R-CR	0,08/0,20	neutral geometry R6,0												

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

①



②



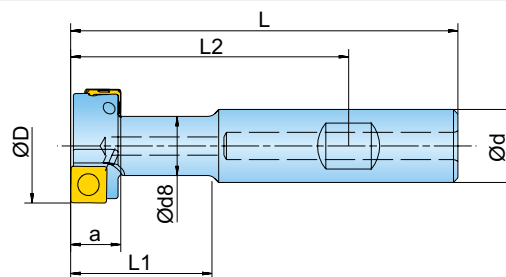
Insert-Typ

BEEW	SM35-070-00 (3,0Nm) DS-T15S
FEEW	SM40-093-20 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

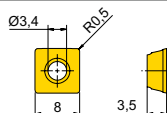
FORM CUTTERS

ADAPTION ACC. TO DIN 1835 B (WELDON)

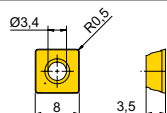


Designation	D	d	d8	L	L1	L2	a	Z	Zeff	IK	kg
TS.025.001	25	16	13	85	31	61	11	2	1	✓	0,11
TS.032.001	32	20	17	100	39	75	14	4	2	✓	0,21
TS.040.001	40	25	21	110	50	78	17	6	2	✓	0,38
TS.050.001	50	32	27	125	60	89	21	6	2	✓	0,72

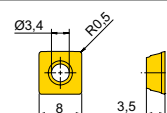
SDMT080305N



SDMW080305TN



SDCT080305FN-P



Designation	fz(min/max)	Design	Grade	IN05S	IN2505	IN4030					
SDMT080305N	0,13/0,17	positive geometry R0,5									
SDMW080305TN	0,13/0,20	neutral geometry, K-land R0,5									
SDCT080305FN-P	0,05/0,20	non-ferrous geometry, polished R0,5									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

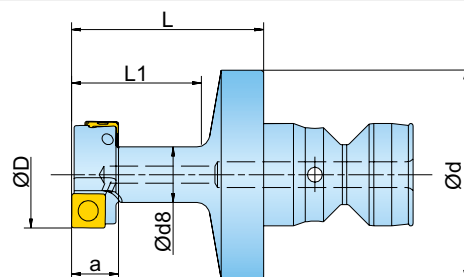


SM30-065-00 (2,0Nm) DS-T09S

① = Insert screw ② = Screw driver

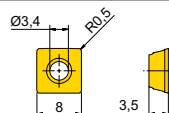
FORM CUTTERS

MODULAR MILLING ADAPTOR INNOFIT

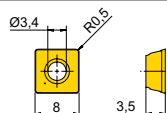


Designation	D	d	d8	L	L1	a	MOD	Z	Z _{eff}	IK	kg
TS.025.002	25	49	13	45	31	11	40	2	1	✓	0,29
TS.032.002	32	49	17	55	39	14	40	4	2	✓	0,34
TS.040.002	40	49	21	65	50	17	40	6	2	✓	0,41
TS.050.002	50	49	27	75	60	21	40	6	2	✓	0,60

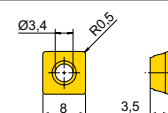
SDMT080305N



SDMW080305TN



SDCT080305FN-P



Designation	fz(min/max)	Design	Grade	IN05S	IN2505	IN4030					
SDMT080305N	0,13/0,17	positive geometry R0,5									
SDMW080305TN	0,13/0,20	neutral geometry, K-land R0,5									
SDCT080305FN-P	0,05/0,20	non-ferrous geometry, polished R0,5									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

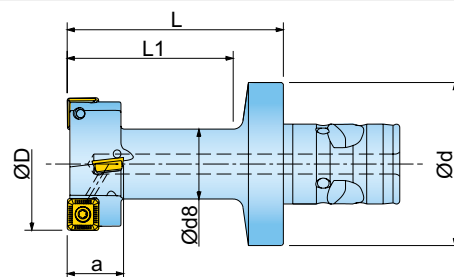


SM30-065-00 (2,0Nm) DS-T09S

① = Insert screw ② = Screw driver

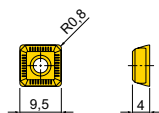
FORM CUTTERS

MODULAR MILLING ADAPTOR INNOFIT



Designation	D	d	d8	L	L1	a	MOD	Z	Zeff		
TS.032.003	32	49	17	55	39	14	40	2	1	✓	0,37
TS.040.003	40	49	21	65	50	17	40	4	2	✓	0,43

SHLT090308N-HR



Designation	fz(min/max)	Design	Grade	IN1030	IN2005						
SHLT090308N-HR	0,12/0,20	positive geometry									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



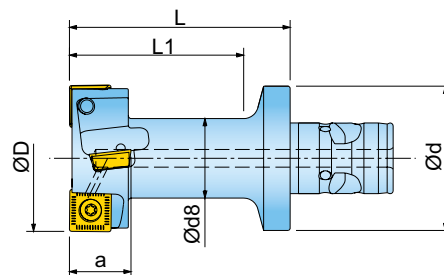
SM30-065-00 (2,0Nm) DS-T09S

① = Insert screw ② = Screw driver

HIPOS QUAD TS09M01

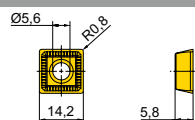
FORM CUTTERS

MODULAR MILLING ADAPTOR INNOFIT



Designation	D	d	d8	L	L1	a	MOD	Z	Z _{eff}	IK	kg
TS.050.003	50	49	27	75	60	21	40	4	2	✓	0,56
TS.050.004	50	78	27	81	58	21	50	4	2	✓	1,20
TS.058.001	58	78	33	95	75	26,5	50	4	2	✓	1,49

SHLT140508TN-HR



Designation	fz(min/max)	Design	Grade	IN2005	IN2030	IN2040					
SHLT140508TN-HR	0,15/0,30	positive geometry R0,8		●	●	●					

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



SM50-108-20 (6,0Nm) DS-T20S

① = Insert screw ② = Screw driver

HIPOS QUAD TS14M01

FORM CUTTERS

A large grid of small squares, intended for use as a form cutter. The grid consists of 20 columns and 30 rows of squares, totaling 600 squares. The squares are arranged in a uniform pattern across the page.

NOTES

MOLD AND DIE

	D	a	Description	Code	Page
	12 - 25	3	MOULDMAKER PR06E01N	PR06E01N	138
	16 - 30	4	MOULDMAKER PR08E01N	PR08E01N	139
	20 - 42	5	MOULDMAKER PR10E01N	PR10E01N	140
	24 - 42	6	MOULDMAKER PR12E01N	PR12E01N	141
	32	8	MOULDMAKER PR16E01N	PR16E01N	142
	52 - 66	5	MOULDMAKER PR10D10N	PR10D10N	143
	52 - 80	6	MOULDMAKER PR12D10N	PR12D10N	144
	52 - 160	8	MOULDMAKER PR16D10N	PR16D10N	145
	16	4	MOULDMAKER PLUS PR08E01P	PR08E01P	146
	20 - 42	5	MOULDMAKER PLUS PR10E01P	PR10E01P	147
	24 - 42	6	MOULDMAKER PLUS PR12E01P	PR12E01P	148
	32 - 42	8	MOULDMAKER PLUS PR16E01P	PR16E01P	149
	52	5	MOULDMAKER PLUS Copy Face Mill PR10D10P	PR10D10P	150
	52 - 80	6	MOULDMAKER PLUS PR12D10P	PR12D10P	151

Subject to printing error or technical changes.

MOLD AND DIE

	D	a	Description	Code	Page
	52 - 160	8	MOULDMAKER PLUS PR16D10P	PR16D10P	152
	66 - 160	10	MOULDMAKER PLUS PR20D10P	PR20D10P	153
	20 - 35	2,5	BLADEMAKER PR10E01BM	PR10E01BM	154
	24 - 42	3	BLADEMAKER PR12E01BM	PR12E01BM	155
	40 - 52	2,5	BLADEMAKER PR10D10BM	PR10D10BM	156
	50 - 80	3	BLADEMAKER PR12D10BM	PR12D10BM	157
	24 - 42	6	MOULDMAKER PRO PR12E01CC	PR12E01CC	158
	32 - 42	8	MOULDMAKER PRO PR16E01CC	PR16E01CC	159
	50 - 80	6	MOULDMAKER PRO PR12D10CC	PR12D10CC	160
	50 - 160	8	MOULDMAKER PRO PR16D10CC	PR16D10CC	161
	16 - 42	1	MOULDMAKER V KC06E01	KC06E01	162
	52 - 85	1	MOULDMAKER V KC06D10 (adjustable)	KC06D10 (adjustable)	163
	25 - 42	2	MOULDMAKER V KC11E01	KC11E01	164
	52 - 100	2	MOULDMAKER V KC11D10	KC11D10	165

Subject to printing error or technical changes.

MOLD AND DIE

	D	a	Description	Code	Page
	16 - 42		PLUNGE MASTER BSE01C 90°	BSE01C 90°	166
	16 - 42		PLUNGE MASTER BSE01B 93,2°	BSE01B 93,2°	167
	25 - 42		PLUNGE MASTER BCE01A	BCE01A	168
	52 - 100		PLUNGE MASTER BDD10A	BDD10A	169
	50 - 160		L-PRO BL13D10	BL13D10	170
	0,4 - 2	0,8 - 6	SOLID CARBIDE Mini ball nose cutters 45B...T/45B...U	Mini ball nose cutters 45B...T/45B...U	171
	6 - 20	16 - 38	SOLID CARBIDE 3-4 Flute Ball Nose 30° Helix - Rougher	3-4 Flute Ball Nose 30° Helix - Rougher	172
	2 - 20	4 - 20	SOLID CARBIDE 2 Flute Ball Nose 30° Helix - Short Length	2 Flute Ball Nose 30° Helix - Short Length	173
	2 - 10	3 - 8	SOLID CARBIDE 2 Flute Ball Nose 30° Helix - Long Length	2 Flute Ball Nose 30° Helix - Long Length	174
	3 - 25	8 - 55	SOLID CARBIDE 2 Flute Ball Nose for Hard Milling	2 Flute Ball Nose for Hard Milling	175
	2 - 20	6 - 38	SOLID CARBIDE 2 Flute Ball Nose for Hard Milling - Long Length	2 Flute Ball Nose for Hard Milling - Long Length	176
	2 - 20	3 - 20	SOLID CARBIDE 4 Flute Ball Nose 30° Helix - Short Length	4 Flute Ball Nose 30° Helix - Short Length	177
	3 - 20	8 - 38	SOLID CARBIDE 4 Flute Ball Nose 30° Helix - Medium Length	4 Flute Ball Nose 30° Helix - Medium Length	178
	4 - 16	12 - 32	SOLID CARBIDE 4 Flute Ball Nose 30° Helix - Long Length	4 Flute Ball Nose 30° Helix - Long Length	179

Subject to printing error or technical changes.

MOLD AND DIE

	D	a	Description	Code	Page
	6 - 20	0,3 - 1	SOLID CARBIDE Speed Cutter	Speed Cutter	180
	2 - 10	2 - 6	SOLID CARBIDE 2 Flute toric cutter with corner radius	2 Flute toric cutter with corner radius	181
	3 - 20	8 - 50	SOLID CARBIDE HPC rougher & finisher unequally spaced	HPC rougher & finisher unequally spaced	182
	5 - 20	5 - 20	SOLID CARBIDE 4-7 Flute Roughers - 45° Helix - 1xD	4-7 Flute Roughers 45° Helix - 1xD	183
	5 - 20	10 - 40	SOLID CARBIDE 4-7 Flute Roughers - 45° Helix - 2xD	4-7 Flute Roughers 45° Helix - 2xD	184
	6 - 20	12 - 40	SOLID CARBIDE 4-7 Flute Roughers - 45° Helix - 3xD	4-7 Flute Roughers 45° Helix - 3xD	185
	8 - 16	12 - 24	SOLID CARBIDE 4-5 Flute Roughers - 45° Helix - 4xD	4-5 Flute Roughers 45° Helix - 4xD	186
	6 - 25	14 - 52	SOLID CARBIDE 4-6 Flute Roughers - 45° Helix for titanium	4-6 Flute Roughers 45° Helix for titanium	187
	6 - 25	14 - 52	SOLID CARBIDE 4 Flute roughing and finishing - 45 Helix	4 Flute roughing and finishing - 45 Helix	188
	2,8 - 19,7	4 - 20	SOLID CARBIDE 3 Flute Slot Drill (Undersize) 38° Helix - Short Length	3 Flute Slot Drill (Undersize) 38° Helix - Short Length	189
	2 - 20	7 - 38	SOLID CARBIDE 3 Flute Slot Drill 45° Helix - DIN 6535HA	3 Flute Slot Drill 45° Helix - DIN 6535HA	190
	6 - 20	16 - 38	SOLID CARBIDE 3 Flute Slot Drill 45° Helix - DIN 6535HB	3 Flute Slot Drill 45° Helix - DIN 6535HB	191
	6 - 16	13 - 32	SOLID CARBIDE 3 Flute End Mill with Corner radius - 45° Helix	3 Flute End Mill with Corner radius - 45° Helix	192
	2 - 20	7 - 38	SOLID CARBIDE 4 Flute End Mill 45° Helix - DIN 6535HA	4 Flute End Mill 45° Helix - DIN 6535HA	193

Subject to printing error or technical changes.

MOLD AND DIE

	D	a	Description	Code	Page
	8 - 20	20 - 38	SOLID CARBIDE 4 Flute End Mill 45° Helix - DIN 6535HB	4 Flute End Mill 45° Helix - DIN 6535HB	194
	6 - 20	16 - 38	SOLID CARBIDE 4 Flute End Mill with Corner radius - 45° Helix	4 Flute End Mill with Corner radius - 45° Helix	195
	6 - 20	24 - 60	SOLID CARBIDE 4-6 Flute End Mill 45° Helix - Long Length	4-6 Flute End Mill 45° Helix - Long Length	196
	10 - 20	60 - 80	SOLID CARBIDE 4-6 Flute End Mill 45° Helix - Extra Long Length	4-6 Flute End Mill 45° Helix - Extra Long Length	197
	6 - 20	16 - 38	SOLID CARBIDE 6 Flute End Mill - 45° Helix - Medium Length (finishing)	6 Flute End Mill - 45° Helix Medium Length (finishing)	198
	6 - 25	26 - 92	SOLID CARBIDE 6 Flute End Mill - 45° Helix - Long Length (finishing)	6 Flute End Mill - 45° Helix Long Length (finishing)	199
	3 - 12	30 - 75	SOLID CARBIDE 2 Flute Ball Nose 30° Helix - Extra Long Length	2 Flute Ball Nose - 30° Helix Extra Long Length	200
	6 - 20	9 - 17	SOLID CARBIDE 3 Flute End Mill 45° Helix short length (roughing)	3 Flute End Mill 45° Helix short length (roughing)	201
	6 - 20	9 - 22	SOLID CARBIDE 3 Flute End Mill 45° Helix long length (roughing)	3 Flute End Mill 45° Helix long length (roughing)	202
	4 - 20	12 - 38	SOLID CARBIDE 2 Flute Aluminium Slot Drill - 45° Helix Medium Length	2 Flute Aluminium Slot Drill 45° Helix Medium Length	203
	3 - 12	30 - 75	SOLID CARBIDE 2 Flute Aluminium Slot Drill - 30° Helix Extra Long Length	2 Flute Aluminium Slot Drill 30° Helix Extra Long Length	204
	3 - 12	8 - 26	SOLID CARBIDE 3 Flute End Mill 45° Helix	3 Flute End Mill 45° Helix	205
	5 - 20	14 - 38	SOLID CARBIDE 3 Flute End Mill 45° Helix with corner radius	3 Flute End Mill 45° Helix with corner radius	206
	3 - 12	30 - 75	SOLID CARBIDE 4 Flute End Mill - 30° Helix - Extra Long Length	H4 Flute End Mill 30° Helix Extra Long Length	207

Subject to printing error or technical changes.

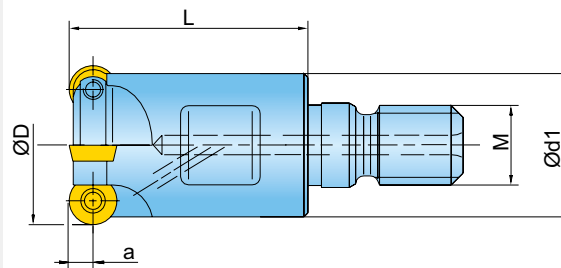
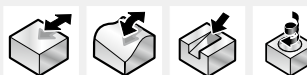
MOLD AND DIE

Subject to printing error or technical changes.



MOLD AND DIE

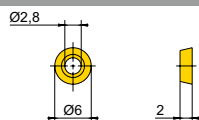
SCREW-IN TYPE ADAPTION



Designation	D	d1	L	a	M	Z	Insert Ø	Insert angle	IK	kg
PR.012.001	12	11,8	28	3	6	2	6	10°	✓	0,02
PR.012.002	12	13	28	3	8	2	6	10°	✓	0,02
PR.016.001	16	13	23	3	8	3	6	8°	✓	0,02
PR.020.001	20	18	30	3	10	4	6	8°	✓	0,06
PR.025.001	25	21	35	3	12	5	6	5°	✓	0,10

Neutral design

RHHW0602M0TN



Designation	fz(min/max)	Design	Grade	IN2004	IN2005	IN2006					
RHHW0602M0TN	0,20/0,30	neutral geometry, K-land									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



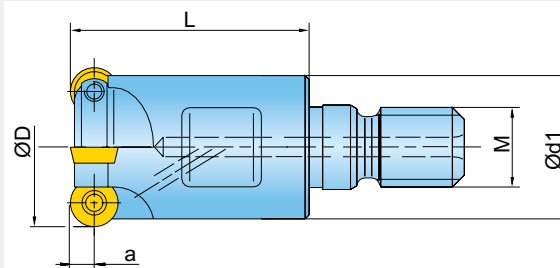
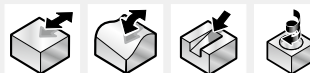
SM25-049-00 (1,1Nm) DS-T08S

① = Insert screw ② = Screw driver

MOULDMAKER PR06E01N

MOLD AND DIE

SCREW-IN TYPE ADAPTION



Designation	D	d1	L	a	M	Z	Insert Ø		IK	kg
PR.016.002	16	13	23	4	8	2	8	2°	✓	0,02
PR.030.001	30	29	43	4	16	5	8	7°	✓	0,19
Neutral design										

RHHW0802M0TN		RHHT0802M0TN		RHHT0802M0TN-P	
RHHT0802M0FN-P					

Designation	fz(min/max)	Design	Grade	IN05S	IN2004	IN2005	IN2006	IN2035			
RHHW0802M0TN	0,20/0,40	neutral geometry, K-land									
RHHT0802M0TN	0,10/0,20	positive geometry, K-land									
RHHT0802M0TN-P	0,10/0,20	titanium geometry, polished									
RHHT0802M0FN-P	0,10/0,30	non-ferrous geometry, polished									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



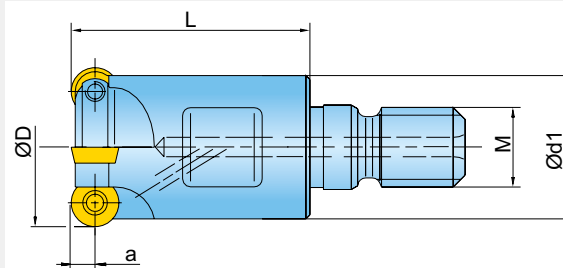
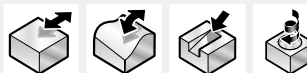
SM30-053-00 (2,0Nm) DS-T09S

① = Insert screw ② = Screw driver

MOULDMAKER PR08E01N

MOLD AND DIE

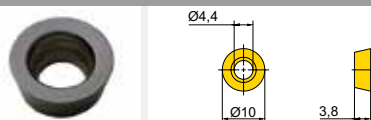
SCREW-IN TYPE ADAPTION



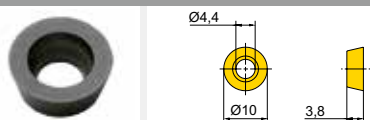
Designation	D	d1	L	a	M	Z	Insert Ø		IK	kg
PR.020.002 ¹⁾	20	18	30	5	10	2	10	3,5°	✓	0,05
PR.025.002	25	21	35	5	12	2	10	2°	✓	0,09
PR.025.003 ²⁾	25	21	35	5	12	3	10	2°	✓	0,09
PR.030.002 ¹⁾	30	29	43	5	16	4	10	10°	✓	0,19
PR.035.002	35	29	43	5	16	4	10	7,5°	✓	0,21
PR.042.002 ¹⁾	42	29	43	5	16	5	10	5,5°	✓	0,23
Neutral design										

¹⁾ Insert screw SM40-070-00; ²⁾ Only for finishing

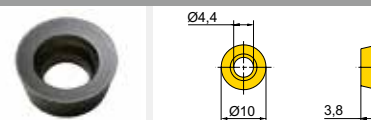
RHKW1003M0TN



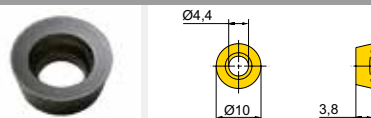
RHHW1003M0TN



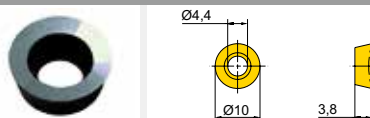
RHHT1003M0TN



RHHT1003M0TN-P



RHHT1003M0FN-P



Designation	fz(min/max)	Design	Grade	IN05S	IN2004	IN2005	IN2006	IN2035	IN4015	IN7035
RHKW1003M0TN	0,25/0,60	neutral roughing geometry								
RHHW1003M0TN	0,25/0,50	neutral geometry, K-land								
RHHT1003M0TN	0,15/0,40	positive geometry, K-land								
RHHT1003M0TN-P	0,10/0,20	titanium geometry, polished								
RHHT1003M0FN-P	0,15/0,30	non-ferrous geometry, polished								

● = P ● = M ● = K ● = N ● = S ○ = H

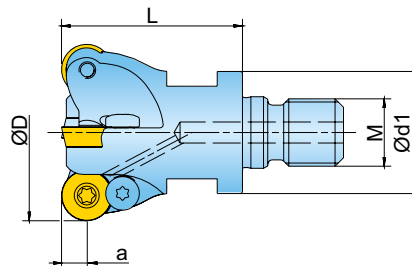
SPARE PARTS



SM40-080-10 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

SCREW-IN TYPE ADAPTION



Designation	D	d1	L	a	M	Z	Insert Ø		IK	kg
PR.024.001	24	21	35	6	12	2	12	3,5°	✓	0,08
PR.032.001	32	29	43	6	16	3	12	2°	✓	0,18
PR.035.001	35	29	43	6	16	3	12	2°	✓	0,19
PR.042.001	42	29	43	6	16	4	12	2°	✓	0,25
Neutral design										

RHKW1204M0TN	RHHW1204M0TN	RHHT1204M0TN
RHHT1204M0TN-P	RHHT1204M0FN-P	

Designation	fz(min/max)	Design	Grade	IN05S	IN2004	IN2005	IN2006	IN2035	IN4015	IN4040	IN7035
RHKW1204M0TN	0,25/0,80	neutral roughing geometry									
RHHW1204M0TN	0,25/0,60	neutral geometry, K-land									
RHHT1204M0TN	0,25/0,50	positive geometry, K-land									
RHHT1204M0TN-P	0,10/0,25	titanium geometry, polished									
RHHT1204M0FN-P	0,15/0,30	non-ferrous geometry, polished									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



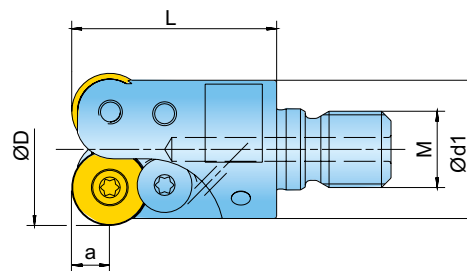
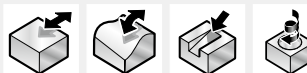
SM40-080-10 (4,5Nm) DS-T15S

SF035-01 (2,0Nm)

① = Insert screw ② = Screw driver ③ = Clamping screw

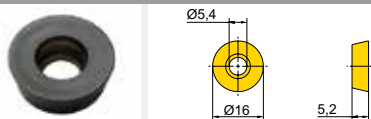
MOLD AND DIE

SCREW-IN TYPE ADAPTION

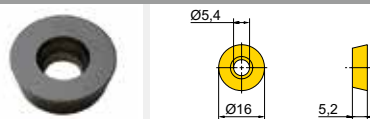


Designation	D	d1	L	a	M	Z	Insert Ø		IK	kg
PR.032.002	32	29	43	8	16	2	16	2°	✓	0,16
Neutral design										

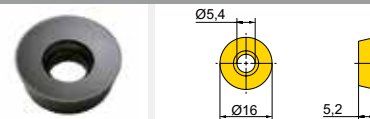
RHKW1605M0TN



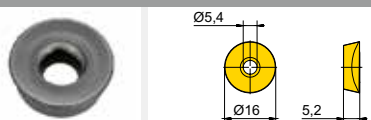
RHHW1605M0TN



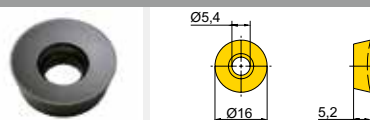
RHHT1605M0TN



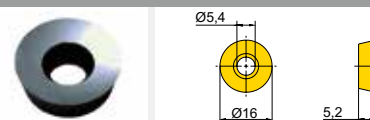
RHKT1605M0TN-PH2



RHHT1605M0TN-P



RHHT1605M0FN-P



Designation	fz(min/max)	Design	Grade	IN05S	IN2004	IN2005	IN2035	IN4015	IN4030	IN4040	IN7035
RHKW1605M0TN	0,30/1,00	neutral roughing geometry									
RHHW1605M0TN	0,30/0,80	neutral geometry, K-land									
RHHT1605M0TN	0,25/0,50	positive geometry, K-land									
RHKT1605M0TN-PH2	0,50/1,50	positive roughing geometry, neg. K-land									
RHHT1605M0TN-P	0,10/0,25	titanium geometry, polished									
RHHT1605M0FN-P	0,15/0,30	non-ferrous geometry, polished									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



SM50-100-10 (6,0Nm) DS-T20T

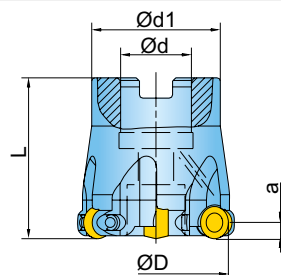
CL-5000

① = Insert screw ② = Screw driver ③ = Clamping disk

MOULDMAKER PR16E01N

MOLD AND DIE

ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	L	a	Z	Insert Ø		IK	kg
PR.052.002	52	22	40	50	5	6	10	4°	✓	0,36
PR.066.001	66	27	48	50	5	7	10	3°	✓	0,60
Neutral design										

RHKW1003M0TN 			RHHW1003M0TN 			RHHT1003M0TN 		
RHHT1003M0TN-P 			RHHT1003M0FN-P 					

Designation	fz(min/max)	Design	Grade	IN05S	IN2004	IN2005	IN2006	IN2035	IN4015	IN7035
RHKW1003M0TN	0,25/0,60	neutral roughing geometry								
RHHW1003M0TN	0,25/0,50	neutral geometry, K-land								
RHHT1003M0TN	0,15/0,40	positive geometry, K-land								
RHHT1003M0TN-P	0,10/0,20	titanium geometry, polished								
RHHT1003M0FN-P	0,15/0,30	non-ferrous geometry, polished								

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

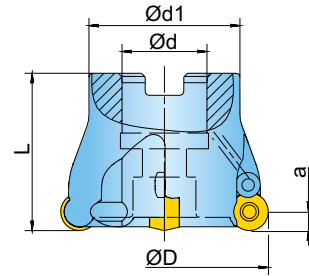


SM40-080-10 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

MOLD AND DIE

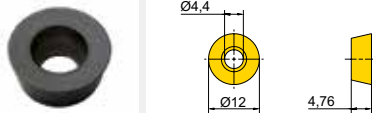
ADAPTION ACC. TO DIN 8030



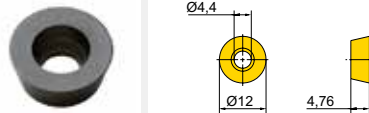
Designation	D	d	d1	L	a	Z	Insert Ø		IK	kg
PR.052.003	52	22	40	50	6	5	12	4°	✓	0,32
PR.066.002	66	27	48	50	6	6	12	3°	✓	0,56
PR.080.002	80	27	60	50	6	7	12	2°	✓	0,98

Neutral design

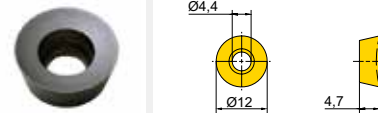
RHKW1204M0TN



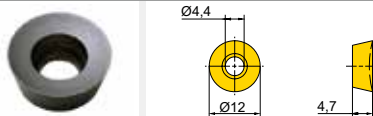
RHHW1204M0TN



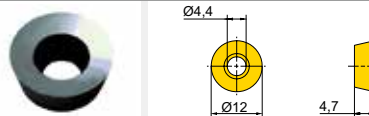
RHHT1204M0TN



RHHT1204M0TN-P



RHHT1204M0FN-P



Designation	fz(min/max)	Design	Grade	IN05S	IN2004	IN2005	IN2006	IN2035	IN4015	IN4040	IN7035
RHKW1204M0TN	0,25/0,80	neutral roughing geometry									
RHHW1204M0TN	0,25/0,60	neutral geometry, K-land									
RHHT1204M0TN	0,25/0,50	positive geometry, K-land									
RHHT1204M0TN-P	0,10/0,25	titanium geometry, polished									
RHHT1204M0FN-P	0,15/0,30	non-ferrous geometry, polished									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



SM40-080-10 (4,5Nm) DS-T15S

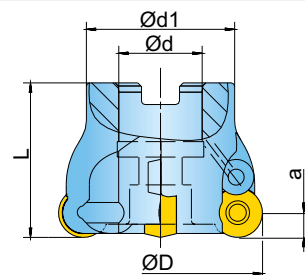
SF035-01 (2,0Nm)

① = Insert screw ② = Screw driver ③ = Clamping screw

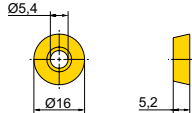
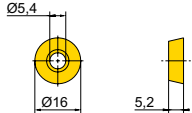
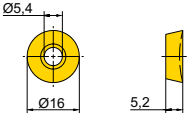
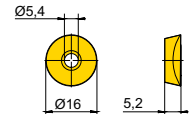
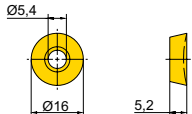
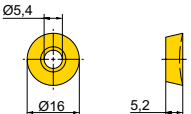
MOULDMAKER PR12D10N

MOLD AND DIE

ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	L	a	Z	Insert Ø		IK	kg
PR.052.004	52	22	40	50	8	4	16	2,5°	✓	0,30
PR.066.003	66	27	48	50	8	5	16	3,5°	✓	0,50
PR.080.003	80	27	60	50	8	6	16	2,5°	✓	0,86
PR.100.002	100	32	70	55	8	7	16	2°	✓	1,38
PR.125.002	125	40	90	55	8	8	16	1,5°		2,44
PR.160.001	160	40	120	55	8	9	16	1°		4,84
Neutral design										

RHKW1605M0TN  			RHHW1605M0TN  			RHHT1605M0TN  		
RHKT1605M0TN-PH2  			RHHT1605M0TN-P  			RHHT1605M0FN-P  		

Designation	fz(min/max)	Design	Grade	IN05S	IN2004	IN2005	IN2035	IN4015	IN4030	IN4040	IN7035
RHKW1605M0TN	0,30/1,00	neutral roughing geometry									
RHHW1605M0TN	0,30/0,80	neutral geometry, K-land									
RHHT1605M0TN	0,25/0,50	positive geometry, K-land									
RHKT1605M0TN-PH2	0,50/1,50	positive roughing geometry, neg. K-land									
RHHT1605M0TN-P	0,10/0,25	titanium geometry, polished									
RHHT1605M0FN-P	0,15/0,30	non-ferrous geometry, polished									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



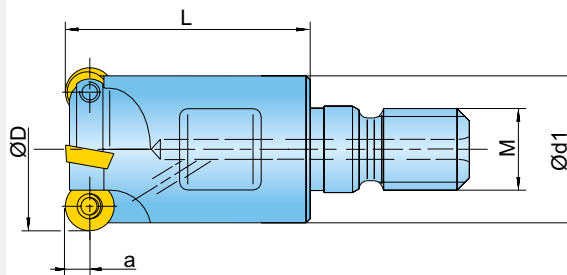
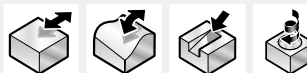
SM50-100-10 (6,0Nm) DS-T20T

CL-5000

① = Insert screw ② = Screw driver ③ = Clamping disk

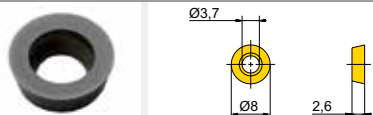
MOLD AND DIE

SCREW-IN TYPE ADAPTION

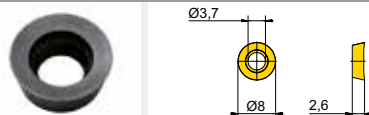


Designation	D	d1	L	a	M	Z	Insert Ø		IK	kg
PR.016.008	16	13	23	4	8	2	8	2°	✓	0,02
Positive design										

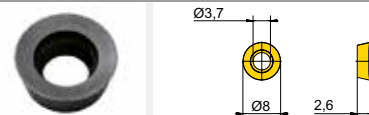
RHHW0802M0TN



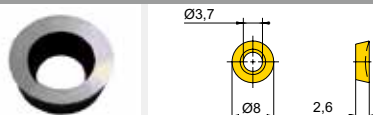
RHHT0802M0TN



RHHT0802M0TN-P



RHHT0802M0FN-P



Designation	fz(min/max)	Design	Grade	IN05S	IN2004	IN2005	IN2006	IN2035			
RHHW0802M0TN	0,20/0,40	neutral geometry, K-land									
RHHT0802M0TN	0,10/0,20	positive geometry, K-land									
RHHT0802M0TN-P	0,10/0,20	titanium geometry, polished									
RHHT0802M0FN-P	0,10/0,30	non-ferrous geometry, polished									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

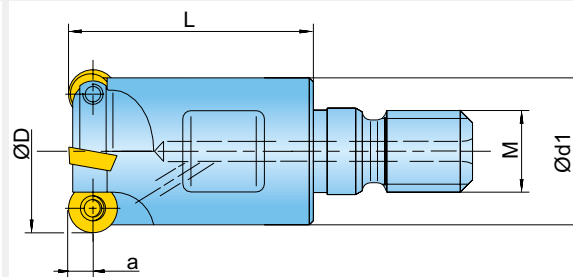


SM30-053-00 (2,0Nm) DS-T09S

① = Insert screw ② = Screw driver

MOULDMAKER PLUS PR08E01P

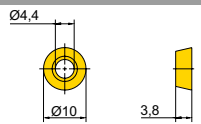
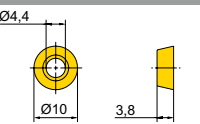
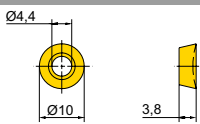
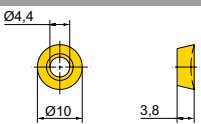
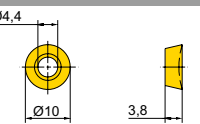
SCREW-IN TYPE ADAPTION



Designation	D	d1	L	a	M	Z	Insert Ø	Insert	IK	kg
PR.020.008 ¹⁾	20	18	30	5	10	2	10	3,5°	✓	0,05
PR.025.007	25	21	35	5	12	3	10	2°	✓	0,09
PR.030.003	30	29	43	5	16	3	10	10°	✓	0,19
PR.035.003	35	29	43	5	16	4	10	7,5°	✓	0,21
PR.042.003	42	29	43	5	16	5	10	5,5°	✓	0,23

Positive design

¹⁾ Insert screw SM40-070-00

RHKW1003M0TN	RHHW1003M0TN	RHHT1003M0TN
		
		
RHHT1003M0TN-P	RHHT1003M0FN-P	
		
		

Designation	fz(min/max)	Design	Grade	IN05S	IN2004	IN2005	IN2006	IN2035	IN4015	IN7035
RHKW1003M0TN	0,25/0,60	neutral roughing geometry								
RHHW1003M0TN	0,25/0,50	neutral geometry, K-land								
RHHT1003M0TN	0,15/0,40	positive geometry, K-land								
RHHT1003M0TN-P	0,10/0,20	titanium geometry, polished								
RHHT1003M0FN-P	0,15/0,30	non-ferrous geometry, polished								

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

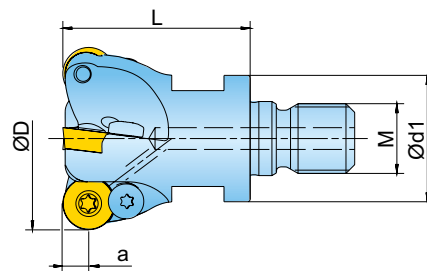


SM40-080-10 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

MOLD AND DIE

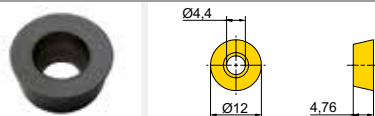
SCREW-IN TYPE ADAPTION



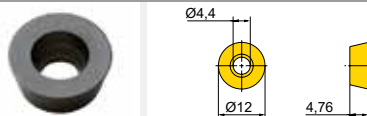
Designation	D	d1	L	a	M	Z	Insert Ø		IK	kg
PR.024.002	24	21	35	6	12	2	12	3,5°	✓	0,08
PR.032.003	32	29	43	6	16	3	12	2°	✓	0,18
PR.035.004	35	29	43	6	16	3	12	2°	✓	0,19
PR.040.004	40	29	43	6	16	4	12	2,5°	✓	0,25
PR.042.004	42	29	43	6	16	4	12	2°	✓	0,25

Positive design

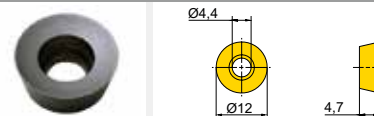
RHKW1204M0TN



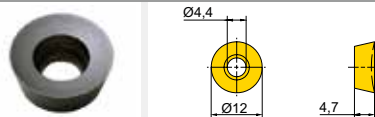
RHHW1204M0TN



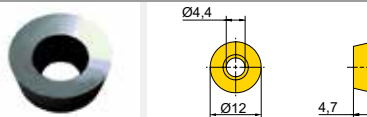
RHHT1204M0TN



RHHT1204M0TN-P



RHHT1204M0FN-P



Designation	fz(min/max)	Design	Grade	IN05S	IN2004	IN2005	IN2006	IN2035	IN4015	IN4040	IN7035
RHKW1204M0TN	0,25/0,80	neutral roughing geometry									
RHHW1204M0TN	0,25/0,60	neutral geometry, K-land									
RHHT1204M0TN	0,25/0,50	positive geometry, K-land									
RHHT1204M0TN-P	0,10/0,25	titanium geometry, polished									
RHHT1204M0FN-P	0,15/0,30	non-ferrous geometry, polished									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



SM40-080-10 (4,5Nm) DS-T15S

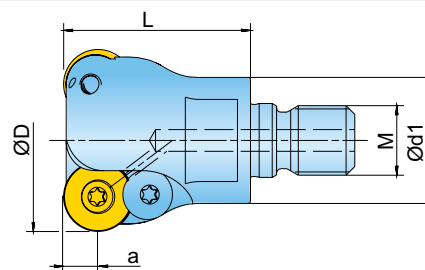
SF035-01 (2,0Nm)

① = Insert screw ② = Screw driver ③ = Clamping screw

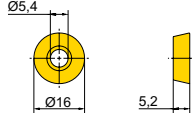
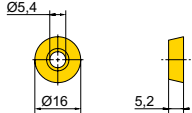
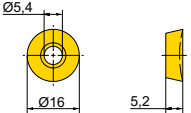
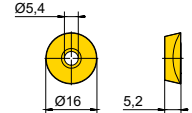
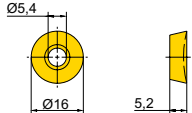
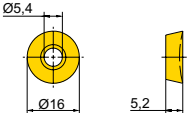
MOULDMAKER PLUS PR12E01P

MOLD AND DIE

SCREW-IN TYPE ADAPTION



Designation	D	d1	L	a	M	Z	Insert Ø	Insert angle	IK	kg
PR.032.004	32	29	43	8	16	2	16	2°	✓	0,16
PR.042.005	42	29	43	8	16	3	16	2°	✓	0,25
Positive design										

RHKW1605M0TN  			RHHW1605M0TN  			RHHT1605M0TN  		
RHKT1605M0TN-PH2  			RHHT1605M0TN-P  			RHHT1605M0FN-P  		

Designation	fz(min/max)	Design	Grade	IN05S	IN2004	IN2005	IN2035	IN4015	IN4030	IN4040	IN7035
RHKW1605M0TN	0,30/1,00	neutral roughing geometry									
RHHW1605M0TN	0,30/0,80	neutral geometry, K-land									
RHHT1605M0TN	0,25/0,50	positive geometry, K-land									
RHKT1605M0TN-PH2	0,50/1,50	positive roughing geometry, neg. K-land									
RHHT1605M0TN-P	0,10/0,25	titanium geometry, polished									
RHHT1605M0FN-P	0,15/0,30	non-ferrous geometry, polished									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



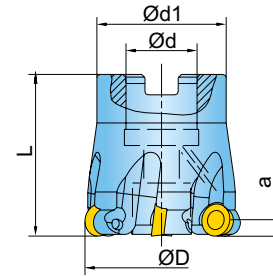
SM50-100-10 (6,0Nm) DS-T20T

CL-5000

① = Insert screw ② = Screw driver ③ = Clamping disk

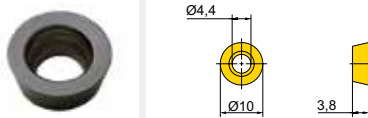
MOLD AND DIE

ADAPTION ACC. TO DIN 8030

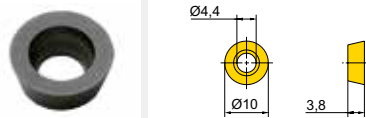


Designation	D	d	d1	L	a	Z	Insert Ø		IK	kg
PR.052.005	52	22	40	50	5	6	10	4°	✓	0,36
Positive design										

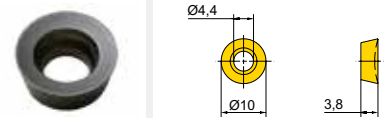
RHKW1003M0TN



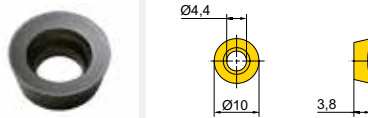
RHHW1003M0TN



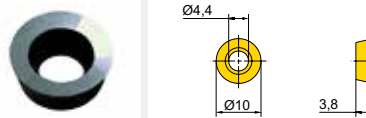
RHHT1003M0TN



RHHT1003M0TN-P



RHHT1003M0FN-P



Designation	fz(min/max)	Design	Grade	IN05S	IN2004	IN2005	IN2006	IN2035	IN4015	IN7035
RHKW1003M0TN	0,25/0,60	neutral roughing geometry								
RHHW1003M0TN	0,25/0,50	neutral geometry, K-land								
RHHT1003M0TN	0,15/0,40	positive geometry, K-land								
RHHT1003M0TN-P	0,10/0,20	titanium geometry, polished								
RHHT1003M0FN-P	0,15/0,30	non-ferrous geometry, polished								

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



SM40-080-10 (4,5Nm) DS-T15S

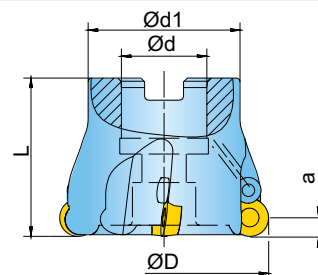
① = Insert screw ② = Screw driver

COPY FACE MILL PR10D10P

MOULDMAKER PLUS

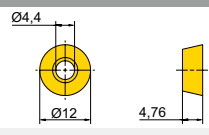
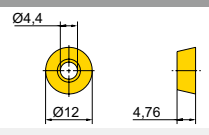
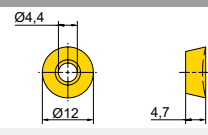
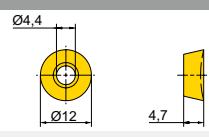
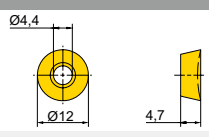
MOLD AND DIE

ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	L	a	Z	Insert Ø		IK	kg
PR.052.001	52	22	40	50	6	5	12	4°	✓	0,33
PR.066.004	66	27	48	50	6	6	12	3°	✓	0,56
PR.080.004	80	27	60	50	6	7	12	2°	✓	1,00

Positive design

RHKW1204M0TN	RHHW1204M0TN	RHHT1204M0TN
		
		
RHHT1204M0TN-P	RHHT1204M0FN-P	
		
		

Designation	fz(min/max)	Design	Grade	IN05S	IN2004	IN2005	IN2006	IN2035	IN4015	IN4040	IN7035
RHKW1204M0TN	0,25/0,80	neutral roughing geometry									
RHHW1204M0TN	0,25/0,60	neutral geometry, K-land									
RHHT1204M0TN	0,25/0,50	positive geometry, K-land									
RHHT1204M0TN-P	0,10/0,25	titanium geometry, polished									
RHHT1204M0FN-P	0,15/0,30	non-ferrous geometry, polished									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



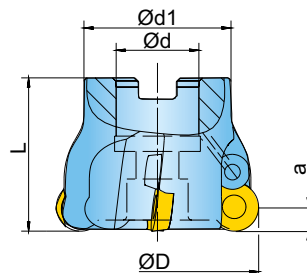
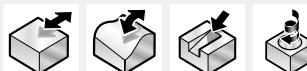
SM40-080-10 (4,5Nm) DS-T15S

SF035-01 (2,0Nm)

① = Insert screw ② = Screw driver ③ = Clamping screw

MOLD AND DIE

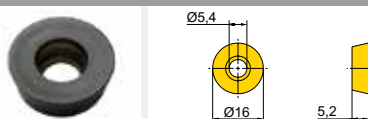
ADAPTION ACC. TO DIN 8030



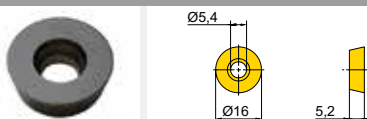
Designation	D	d	d1	L	a	Z	Insert Ø		IK	kg
PR.052.006	52	22	40	50	8	4	16	2,5°	✓	0,30
PR.066.005	66	27	48	50	8	5	16	3,5°	✓	0,51
PR.080.005	80	27	60	50	8	6	16	2,5°	✓	1,00
PR.100.003	100	32	70	55	8	7	16	2°	✓	1,45
PR.125.003	125	40	90	55	8	8	16	1,5°		2,45
PR.160.002	160	40	120	55	8	9	16	1°		4,53

Positive design

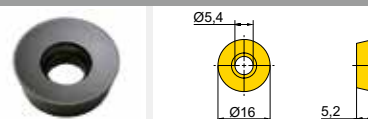
RHKW1605M0TN



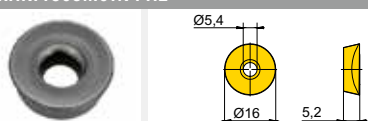
RHHW1605M0TN



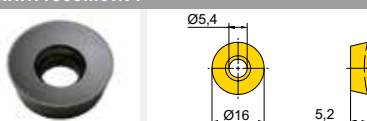
RHHT1605M0TN



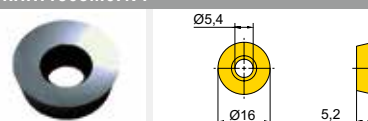
RHKT1605M0TN-PH2



RHHT1605M0TN-P



RHHT1605M0FN-P



Designation	fz(min/max)	Design	Grade	IN05S	IN2004	IN2005	IN2035	IN4015	IN4030	IN4040	IN7035
RHKW1605M0TN	0,30/1,00	neutral roughing geometry									
RHHW1605M0TN	0,30/0,80	neutral geometry, K-land									
RHHT1605M0TN	0,25/0,50	positive geometry, K-land									
RHKT1605M0TN-PH2	0,50/1,50	positive roughing geometry, neg. K-land									
RHHT1605M0TN-P	0,10/0,25	titanium geometry, polished									
RHHT1605M0FN-P	0,15/0,30	non-ferrous geometry, polished									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



SM50-100-10 (6,0Nm) DS-T20T

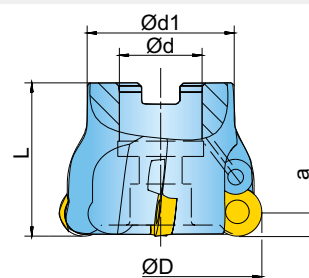
CL-5000

① = Insert screw ② = Screw driver ③ = Clamping disk

MOULDMAKER PLUS PR16D10P

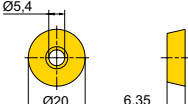
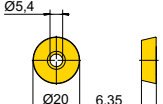
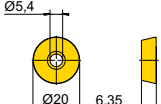
MOLD AND DIE

ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	L	a	Z	Insert Ø		IK	kg
PR.066.006	66	27	48	50	10	5	20	2,5°	✓	0,51
PR.080.006	80	27	60	50	10	6	20	5°	✓	1,00
PR.100.004	100	32	70	55	10	7	20	3,5°	✓	1,24
PR.125.004	125	40	90	55	10	8	20	2,5°		2,00
PR.160.003	160	40	120	55	10	9	20	2°		4,80

Positive design

RHKW2006MOTN		RHKT2006MOTN-PH2		RHKT2006MOTN-PH							
											
Designation	fz(min/max)	Design	Grade	IN2005	IN4015	IN4030	IN4040				
RHKW2006MOTN	0,40/1,00	neutral roughing geometry									
RHKT2006MOTN-PH2	0,50/1,50	positive roughing geometry, neg. K-land									
RHKT2006MOTN-PH	0,25/0,50	positive roughing geometry, K-land									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



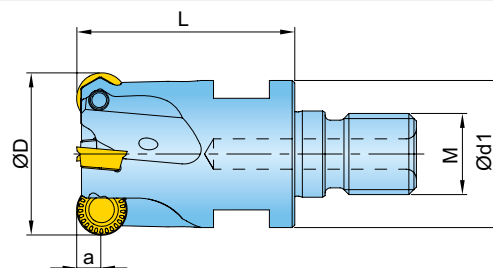
SM50-100-10 (6,0Nm) DS-T20T

CL-5000

① = Insert screw ② = Screw driver ③ = Clamping disk

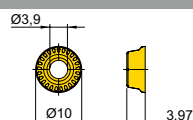
MOLD AND DIE

SCREW-IN TYPE ADAPTION

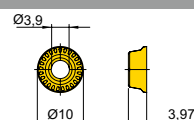


Designation	D	d1	L	a	M	Z	Insert Ø		IK	kg
PR.020.009	20	18	30	2,5	10	2	10	3,2°	✓	0,05
PR.025.008	25	21	35	2,5	12	2	10	18,2°	✓	0,09
PR.025.009	25	21	35	2,5	12	3	10	18,2°	✓	0,08
PR.030.004	30	29	43	2,5	16	3	10	6,9°	✓	0,17
PR.032.007	32	29	43	2,5	16	4	10	10,6°	✓	0,18
PR.035.006	35	29	43	2,5	16	4	10	9°	✓	0,19
PR.035.007	35	29	43	2,5	16	5	10	9°	✓	0,19

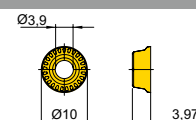
RPLT10T3MOTN-HR1



RPLT10T3MOTN-HR2



RPLT10T3MOTN-HR3



Designation	fz(min/max)	Design	Grade	IN4035	IN7035						
RPLT10T3MOTN-HR1	0,15/0,60	positive geometry, K-land									
RPLT10T3MOTN-HR2	0,20/0,70	positive geometry, neg. K-land									
RPLT10T3MOTN-HR3	0,15/0,40	high positive geometry, K-land									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

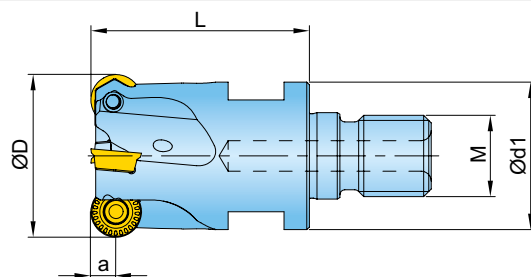
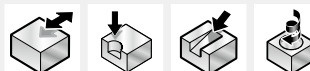


SM35-076-10 (3,0Nm) DS-T15S

① = Insert screw ② = Screw driver

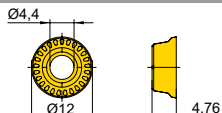
BLADEMAKER PR10E01BM

SCREW-IN TYPE ADAPTION

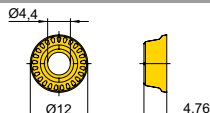


Designation	D	d1	L	a	M	Z	Insert Ø		IK	kg
PR.024.004	24	21	35	3	12	2	12	3,4°	✓	0,08
PR.032.008	32	29	43	3	16	3	12	5°	✓	0,16
PR.035.008	35	29	43	3	16	3	12	10,6°	✓	0,18
PR.040.007	40	29	43	3	16	4	12	8,2°	✓	0,20
PR.042.010	42	29	43	3	16	4	12	7,5°	✓	0,21

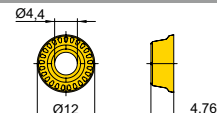
RPLT1204MOTN-HR1



RPLT1204MOTN-HR2



RPLT1204MOTN-HR3



Designation	fz(min/max)	Design	Grade	IN4035	IN7035						
RPLT1204MOTN-HR1	0,15/0,70	positive geometry, K-land									
RPLT1204MOTN-HR2	0,20/0,80	positive geometry, neg. K-land									
RPLT1204MOTN-HR3	0,15/0,50	high positive geometry, K-land									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

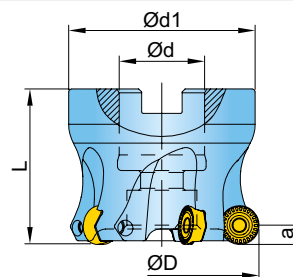
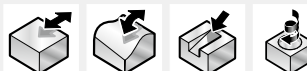


SM35-090-00 (3,0Nm) DS-T15S

① = Insert screw ② = Screw driver

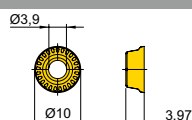
MOLD AND DIE

ADAPTION ACC. TO DIN 8030

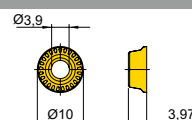


Designation	D	d	d1	L	a	Z	Insert Ø			
PR.040.005	40	16	38	40	2,5	4	10	7,2°	✓	0,18
PR.040.006	40	16	38	40	2,5	5	10	7,2°	✓	0,18
PR.042.008	42	16	38	40	2,5	4	10	6,7°	✓	0,19
PR.042.009	42	16	38	40	2,5	5	10	6,7°	✓	0,19
PR.050.004	50	22	48	40	2,5	5	10	5,1°	✓	0,29
PR.050.005	50	22	48	40	2,5	6	10	5,1°	✓	0,30
PR.052.009	52	22	48	40	2,5	6	10	4,9°	✓	0,32

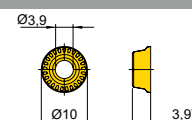
RPLT10T3MOTN-HR1



RPLT10T3MOTN-HR2



RPLT10T3MOTN-HR3



Designation	fz(min/max)	Design	Grade	IN4035	IN7035						
RPLT10T3MOTN-HR1	0,15/0,60	positive geometry, K-land									
RPLT10T3MOTN-HR2	0,20/0,70	positive geometry, neg. K-land									
RPLT10T3MOTN-HR3	0,15/0,40	high positive geometry, K-land									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



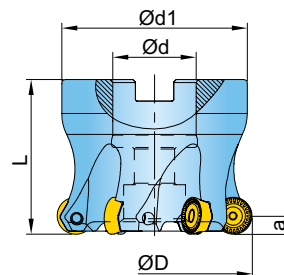
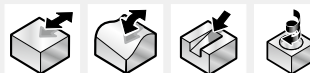
SM35-076-10 (3,0Nm) DS-T15S

① = Insert screw ② = Screw driver

BLADEMAKER PR10D10BM

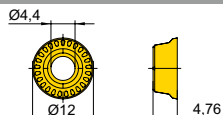
MOLD AND DIE

ADAPTION ACC. TO DIN 8030

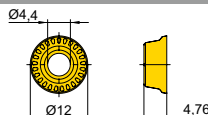


Designation	D	d	d1	L	a	Z	Insert Ø		IK	kg
PR.050.006	50	22	48	50	3	5	12	5,7°	✓	0,36
PR.052.010	52	22	48	50	3	5	12	5,3°	✓	0,38
PR.063.004	63	27	60	50	3	6	12	4°	✓	0,64
PR.063.005	63	27	60	50	3	7	12	4°	✓	0,65
PR.066.009	66	27	60	50	3	6	12	3,8°	✓	0,69
PR.080.009	80	27	78	50	3	7	12	2,9°	✓	1,30

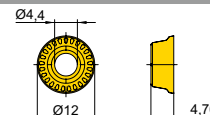
RPLT1204MOTN-HR1



RPLT1204MOTN-HR2



RPLT1204MOTN-HR3



Designation	fz(min/max)	Design	Grade	IN4035	IN7035						
RPLT1204MOTN-HR1	0,15/0,70	positive geometry, K-land									
RPLT1204MOTN-HR2	0,20/0,80	positive geometry, neg. K-land									
RPLT1204MOTN-HR3	0,15/0,50	high positive geometry, K-land									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

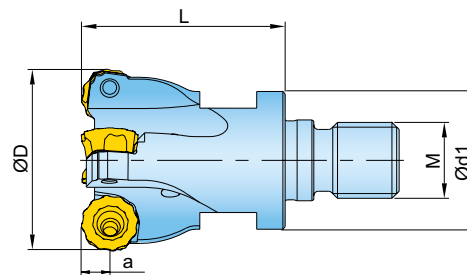
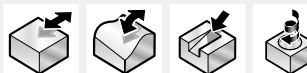


SM35-090-00 (3,0Nm) DS-T15S

① = Insert screw ② = Screw driver

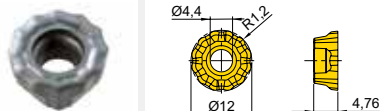
MOLD AND DIE

SCREW-IN TYPE ADAPTION

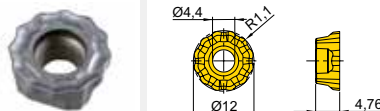


Designation	D	d1	L	a	M	Z			
PR.024.003	24	21	35	6	12	2	1,4°	✓	0,08
PR.032.006	32	29	43	6	16	3	2,6°	✓	0,18
PR.035.005	35	29	43	6	16	3	2,9°	✓	0,19
PR.040.003	40	29	43	6	16	4	5,1°	✓	0,24
PR.042.007	42	29	43	6	16	4	4,7°	✓	0,25

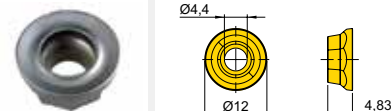
RCLT1204M0N-CC1



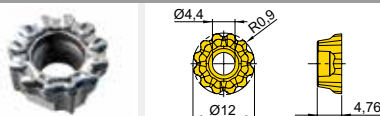
RCLT1204M0N-CC2



RCLT1204M0TN-PH2



RCLT1204M0N-CP



Designation	fz(min/max)	Design	Grade	IN05S	IN2005	IN2035	IN4015	IN4030	IN4040		
RCLT1204M0N-CC1	0,10/0,25	positive geometry R1,2									
RCLT1204M0N-CC2	0,15/0,30	positive geometry R1,1 K-land									
RCLT1204M0TN-PH2	0,20/0,70	positive geometry, K-land									
RCLT1204M0N-CP	0,10/0,25	non-ferrous geometry R0,9									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

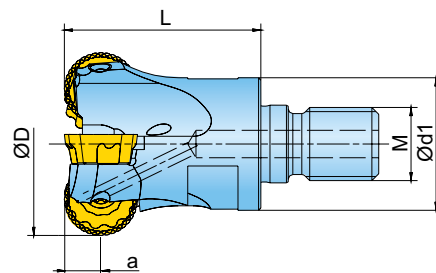


SM40-090-00 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

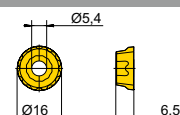
MOLD AND DIE

SCREW-IN TYPE ADAPTION

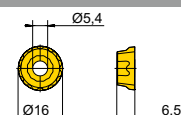


Designation	D	d1	L	a	M	Z		IK	kg
PR.032.005	32	29	43	8	16	2	1,5°	✓	0,16
PR.040.002	40	29	43	8	16	3	2,8°	✓	0,23
PR.042.006	42	29	43	8	16	3	3,6°	✓	0,25

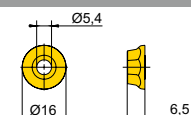
RCLT1606M0N-CC



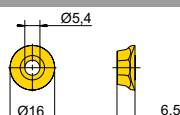
RCLT1606M0N-CC1



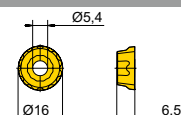
RCLT1606M0TN-PH



RCLT1606M0TN-PH2



RCLT1606M0N-CP



Designation	fz(min/max)	Design	Grade	IN05S	IN2005	IN4015	IN4030	IN4040			
RCLT1606M0N-CC	0,10/0,25	positive steel geometry R1,2									
RCLT1606M0N-CC1	0,10/0,30	positive steel geometry R1,6									
RCLT1606M0TN-PH	0,10/0,50	positive steel geometry									
RCLT1606M0TN-PH2	0,20/0,80	positive geometry, neg. K-land									
RCLT1606M0N-CP	0,10/0,25	positive non-ferrous geometry									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

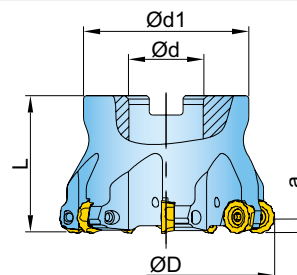
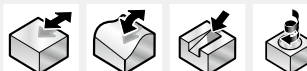


SM50-105-10 (6,0Nm) DS-T20T

① = Insert screw ② = Screw driver

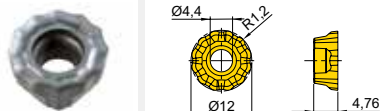
MOLD AND DIE

ADAPTION ACC. TO DIN 8030

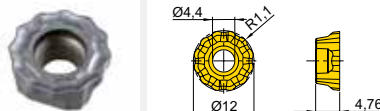


Designation	D	d	d1	L	a	Z			
PR.050.003	50	22	40	50	6	5	3,6°	✓	0,31
PR.052.008	52	22	40	50	6	5	4°	✓	0,32
PR.063.003	63	27	48	50	6	6	2,6°	✓	0,55
PR.066.008	66	27	48	50	6	6	2,4°	✓	0,56
PR.080.008	80	27	60	50	6	7	1,9°	✓	0,98

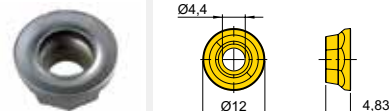
RCLT1204M0N-CC1



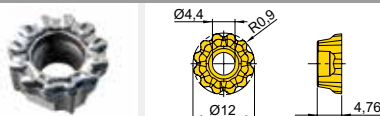
RCLT1204M0N-CC2



RCLT1204M0TN-PH2



RCLT1204M0N-CP



Designation	fz(min/max)	Design	Grade	IN05S	IN2005	IN2035	IN4015	IN4030	IN4040		
RCLT1204M0N-CC1	0,10/0,25	positive geometry R1,2									
RCLT1204M0N-CC2	0,15/0,30	positive geometry R1,1 K-land									
RCLT1204M0TN-PH2	0,20/0,70	positive geometry, K-land									
RCLT1204M0N-CP	0,10/0,25	non-ferrous geometry R0,9									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



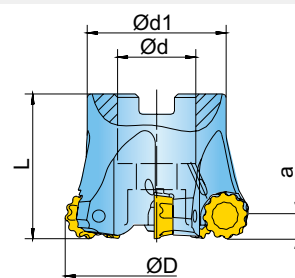
SM40-090-00 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

MOULDMAKER PRO PR12D10CC

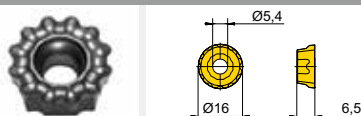
MOLD AND DIE

ADAPTION ACC. TO DIN 8030

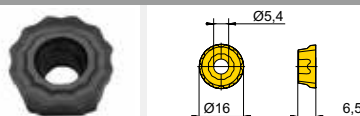


Designation	D	d	d1	L	a	Z			
PR.050.002	50	22	40	50	8	4	8°	✓	0,36
PR.052.007	52	22	40	50	8	4	7,5°	✓	0,36
PR.063.002	63	27	48	50	8	5	5,4°	✓	0,56
PR.066.007	66	27	48	50	8	5	5°	✓	0,56
PR.080.007	80	27	60	50	8	6	3,8°	✓	1,00
PR.100.005	100	32	70	55	8	7	2,8°		1,38
PR.125.005	125	40	90	55	8	8	2,3°		2,44
PR.160.004	160	40	120	55	8	9	1,8°		4,67

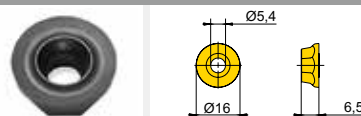
RCLT1606M0N-CC



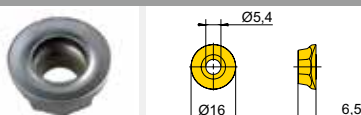
RCLT1606M0N-CC1



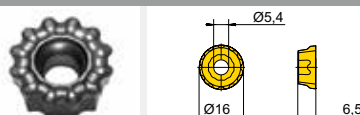
RCLT1606M0TN-PH



RCLT1606M0TN-PH2



RCLT1606M0N-CP



Designation	fz(min/max)	Design	Grade	IN05S	IN2005	IN4015	IN4030	IN4040			
RCLT1606M0N-CC	0,10/0,25	positive steel geometry R1,2									
RCLT1606M0N-CC1	0,10/0,30	positive steel geometry R1,6									
RCLT1606M0TN-PH	0,10/0,50	positive steel geometry									
RCLT1606M0TN-PH2	0,20/0,80	positive geometry, neg. K-land									
RCLT1606M0N-CP	0,10/0,25	positive non-ferrous geometry									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

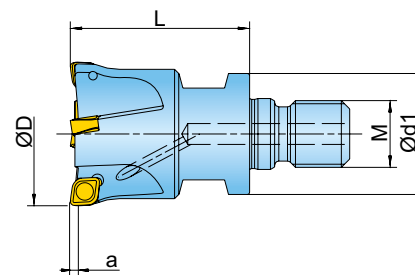


SM50-120-10 (6,0Nm) DS-T20T

① = Insert screw ② = Screw driver

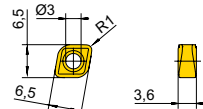
MOLD AND DIE

SCREW-IN TYPE ADAPTION

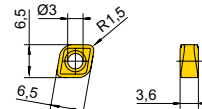


Designation	D	d1	L	a	M	Z			
KC.016.001	16	13	23	1	8	2	5°	✓	0,02
KC.020.001	20	18	30	1	10	3	4°	✓	0,05
KC.025.001	25	21	35	1	12	3	2°	✓	0,10
KC.035.001	35	29	43	1	16	4	1,5°	✓	0,21
KC.042.001	42	29	43	1	16	5	1°	✓	0,23

CNHU060310N



CNHU060315N



Designation	fz(min/max)	Design	Grade	IN05S	IN2005	IN2006	IN2505				
CNHU060310N ¹⁾	0,10/0,30	positive geometry R1,0									
CNHU060315N	0,10/0,30	positive geometry R1,5									

¹⁾ on request in IN3005 (diamond coating)

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

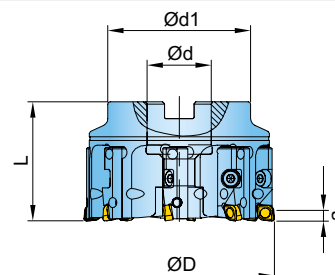
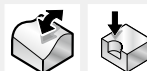


SM25-075-20 (1,1Nm) DS-T08S

① = Insert screw ② = Screw driver

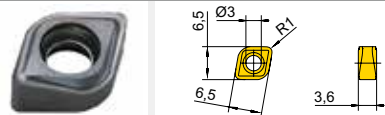
MOLD AND DIE

ADAPTION ACC. TO DIN 8030

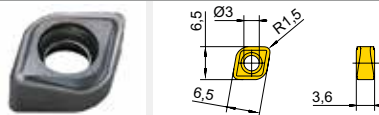


Designation	D	d	d1	L	a	Z	kg
KC.052.002	52	22	40	50	1	5	0,33
KC.066.002	66	27	48	50	1	6	0,33
KC.080.002	80	27	60	50	1	8	1,00
KC.085.002	85	27	60	50	1	8	1,20

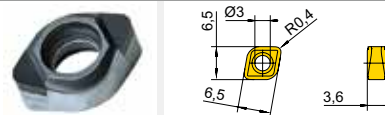
CNHU060310N



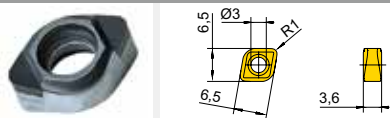
CNHU060315N



CNHU060304N-001



CNHU060310N-001



Designation	fz(min/max)	Design	Grade	IN05S	IN2005	IN2006	IN2505	IN80B			
CNHU060310N ¹⁾	0,10/0,30	positive geometry R1,0		●	●	●	●				
CNHU060315N	0,10/0,30	positive geometry R1,5			●						
CNHU060304N-001	0,05/0,10	CBN insert R0,4						●			
CNHU060310N-001	0,05/0,12	CBN insert R1,0						●			

¹⁾ on request in IN3005 (diamond coating)

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



SM25-075-20 (1,1Nm) DS-T08S

65D133R00

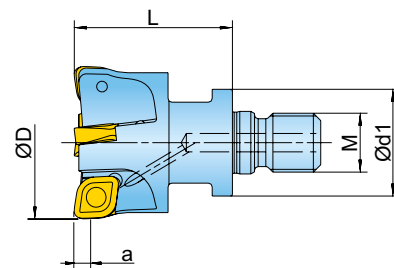
DIN 912 M4X12-12.9 (4,5Nm)

① = Insert screw ② = Screw driver ③ = Cartridge ④ = Cartridge screw

MOULDMAKER V KC06D10 (ADJUSTABLE)

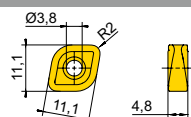
MOLD AND DIE

SCREW-IN TYPE ADAPTION



Designation	D	d1	L	a	M	Z			
KC.025.002	25	21	35	2	12	2	3°	✓	0,10
KC.035.002	35	29	43	2	16	3	2°	✓	0,21
KC.042.002	42	29	43	2	16	4	1,5°	✓	0,23

CNHU110420N



Designation	fz(min/max)	Design	Grade	IN05S	IN2005	IN2006	IN2505				
CNHU110420N	0,10/0,40	positive geometry R2,0									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

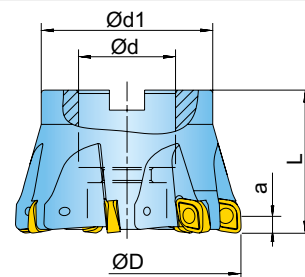


SM35-088-10 (3,0Nm) DS-T10S

① = Insert screw ② = Screw driver

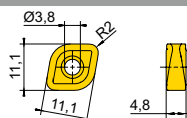
MOLD AND DIE

ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	L	a	Z		kg
KC.052.001	52	22	40	50	2	5	1°	0,36
KC.066.001	66	27	48	50	2	6	0,8°	0,60
KC.080.001	80	27	60	50	2	7	0,6°	1,00
KC.085.001	85	27	60	50	2	7	0,6°	1,20
KC.100.001	100	32	70	55	2	8	0,5°	1,38

CNHU110420N



Designation	fz(min/max)	Design	Grade	IN05S	IN2005	IN2006	IN2505				
CNHU110420N	0,10/0,40	positive geometry R2,0									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



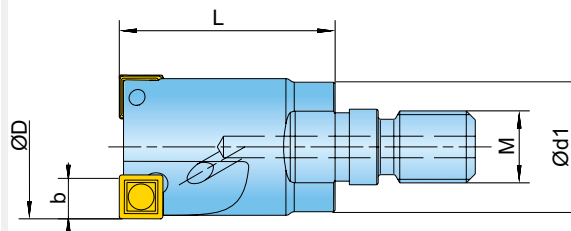
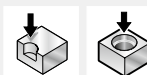
SM35-088-10 (3,0Nm) DS-T10S

① = Insert screw ② = Screw driver

MOULDMAKER V KC11D10

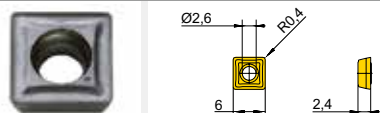
MOLD AND DIE

SCREW-IN TYPE ADAPTION

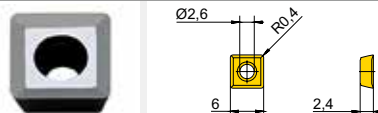


Designation	D	d1	L	b	M	Z	IK	kg	Related Insert
BS.016.013	16	13	23	5	8	2	✓	0,02	A B C
BS.020.015	20	18	30	7	10	2	✓	0,05	D E F
BS.025.017	25	21	35	8	12	2	✓	0,11	G H I
BS.032.013	32	29	43	8	16	3	✓	0,21	G H I
BS.042.011	42	29	43	8	16	4	✓	0,23	G H I

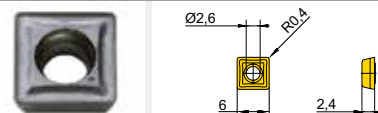
A SHLT060204N-PH



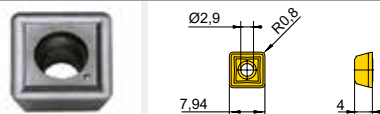
B SHGT060204-HP



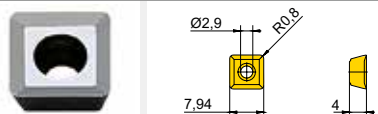
C SHLT060204N



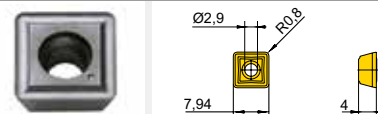
D SPLT07T308N-PH



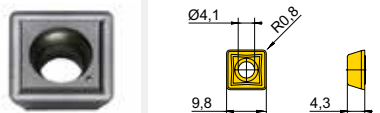
E SDGT07T308-HP



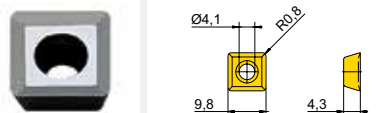
F SPLT07T308N



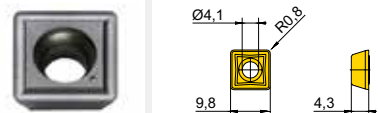
G SHLT090408N-PH1



H SHGT090408-HP



I SHLT090408N



Designation	fz(min/max)	Design	Grade	IN10K	IN2005	IN2010	IN2530				
SHLT060204N-PH	0,06/0,20	positive geometry R0,4									
SHGT060204-HP	0,08/0,15	non-ferrous geometry, polished R0,4									
SHLT060204N	0,08/0,25	cast iron geometry R0,4									
SPLT07T308N-PH	0,06/0,20	positive geometry R0,8									
SDGT07T308-HP	0,08/0,15	non-ferrous geometry, polished R0,8									
SPLT07T308N	0,10/0,25	cast iron geometry R0,8									
SHLT090408N-PH1	0,07/0,22	positive geometry R0,8									
SHGT090408-HP	0,10/0,20	non-ferrous geometry, polished R0,8									
SHLT090408N	0,12/0,25	cast iron geometry R0,8									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

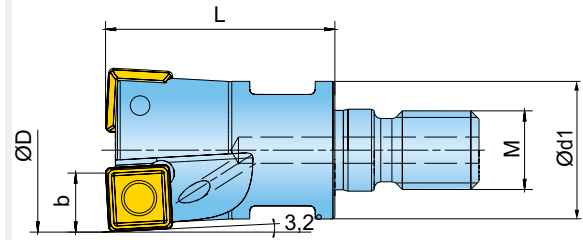
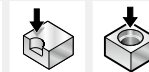


Diameter Range

16	SM22-052-00 (0,8Nm) DS-T07S
20	SM25-064-00 (1,1Nm) DS-T08S
25 - 42	SM35-088-60 (3,0Nm) DS-T10S

① = Insert screw ② = Screw driver

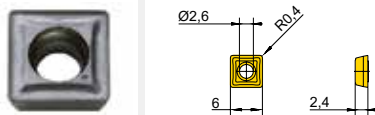
SCREW-IN TYPE ADAPTION



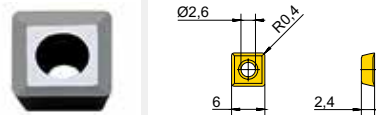
Designation	D	d1	L	b	M	Z	IK	kg	Related Insert
BS.016.012	16	13	23	5	8	2	✓	0,02	A B C
BS.020.014	20	18	30	7	10	2	✓	0,05	D E F
BS.025.016	25	21	35	8	12	2	✓	0,11	G H I
BS.032.012	32	29	43	8	16	3	✓	0,21	G H I
BS.042.010	42	29	43	8	16	4	✓	0,23	G H I

Backdraft 3,2°

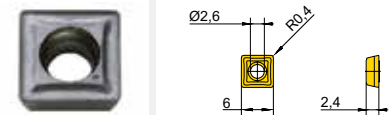
A SHLT060204N-PH



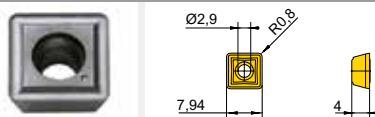
B SHGT060204-HP



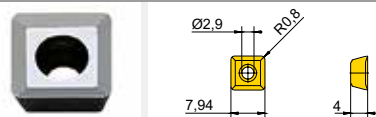
C SHLT060204N



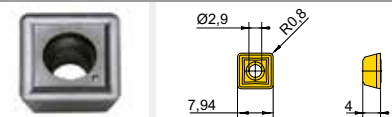
D SPLT07T308N-PH



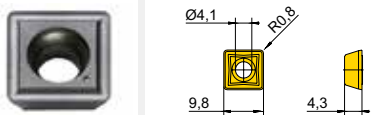
E SDGT07T308-HP



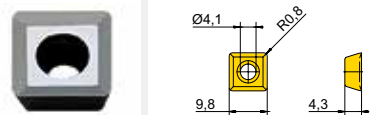
F SPLT07T308N



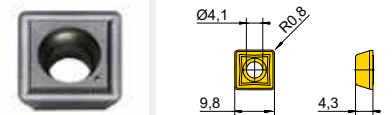
G SHLT090408N-PH1



H SHGT090408-HP



I SHLT090408N



Designation	fz(min/max)	Design	Grade	IN10K	IN2005	IN2010	IN2530				
SHLT060204N-PH	0,06/0,20	positive geometry R0,4									
SHGT060204-HP	0,08/0,15	non-ferrous geometry, polished R0,4									
SHLT060204N	0,08/0,25	cast iron geometry R0,4									
SPLT07T308N-PH	0,06/0,20	positive geometry R0,8									
SDGT07T308-HP	0,08/0,15	non-ferrous geometry, polished R0,8									
SPLT07T308N	0,10/0,25	cast iron geometry R0,8									
SHLT090408N-PH1	0,07/0,22	positive geometry R0,8									
SHGT090408-HP	0,10/0,20	non-ferrous geometry, polished R0,8									
SHLT090408N	0,12/0,25	cast iron geometry R0,8									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



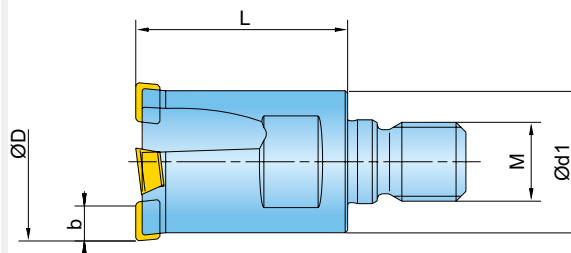
Diameter Range

16	SM22-052-00 (0,8Nm) DS-T07S
20	SM25-064-00 (1,1Nm) DS-T08S
25 - 42	SM35-088-60 (3,0Nm) DS-T10S

① = Insert screw ② = Screw driver

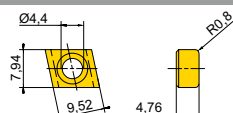
MOLD AND DIE

SCREW-IN TYPE ADAPTION

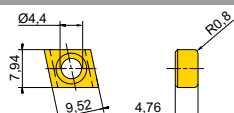


Designation	D	d1	L	b	M	Z	IK	kg
BC.025.001	25	21,0	35	7	12	2		0,10
BC.025.002	25	21,0	35	7	12	2	✓	0,10
BC.030.001	30	29,4	43	7	16	3	✓	0,20
BC.032.001	32	28,8	43	7	16	3		0,20
BC.032.002	32	28,8	43	7	16	3	✓	0,20
BC.040.001	40	29,4	43	7	16	4		0,30
BC.042.001	42	29,0	43	7	16	4		0,30
BC.042.002	42	29,0	43	7	16	4	✓	0,30

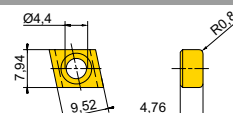
CDE313L021



CDE313L021 - J



CDE313L021T00



Designation	fz(min/max)	Design	Grade	IN05S	IN2005	IN4015					
CDE313L021	0,10/0,25	positive geometry R0,8		●							
CDE313L021 - J	0,10/0,25	positive steel geometry R0,8				●					
CDE313L021T00	0,10/0,20	positive geometry R0,8			●						

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

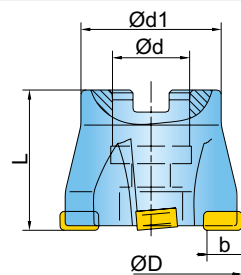


SM40-090-00 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

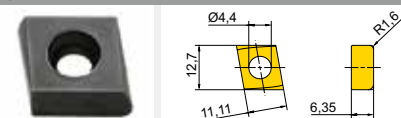
MOLD AND DIE

ADAPTION ACC. TO DIN 8030

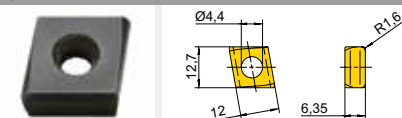


Designation	D	d	d1	L	b	Z	IK	kg	Related Insert
BD.052.001	52	22	40	40	11	4		0,30	A B
BD.052.002	52	22	40	40	11	4	✓	0,30	A B
BD.066.003	66	27	48	50	14	5		0,60	C D
BD.066.004	66	27	48	50	14	5	✓	0,60	C D
BD.080.003	80	27	60	50	14	6		1,00	C D
BD.080.004	80	27	60	50	14	6	✓	1,00	C D
BD.100.003	100	32	70	50	14	7		1,50	C D
BD.100.004	100	32	70	50	14	7	✓	1,50	C D

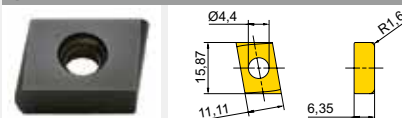
A DND324L104T34



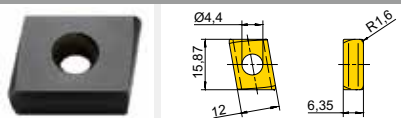
B DPD324L124



C DND324L103



D DPD324L123



Designation	fz(min/max)	Design	Grade	IN2015	IN2040						
DND324L104T34	0,10/0,30	neutral geometry R1,6			●						
DPD324L124	0,10/0,25	positive steel geometry R1,6		●							
DND324L103	0,10/0,30	neutral geometry R1,6			●						
DPD324L123	0,10/0,25	positive steel geometry R1,6		●							

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

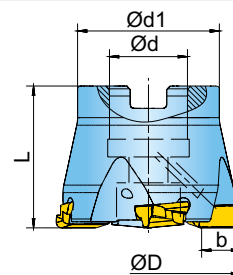


SM40-110-00 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

MOLD AND DIE

ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	LK	L	b	Z	IK	kg
BL.050.001	50	22	40	-	40	10	4	✓	0,30
BL.052.001	52	22	40	-	40	10	4	✓	0,30
BL.066.001	66	27	48	-	50	10	5	✓	0,60
BL.080.001	80	27	60	-	50	10	6	✓	1,00
BL.085.001	85	27	60	-	50	10	6	✓	1,15
BL.100.001	100	32	70	-	50	10	8	✓	1,50
BL.125.001	125	40	90	-	63	10	9		2,40
BL.160.001	160	40	120	66,7	63	10	12		4,60

LNGQ130616L			LNGQ130616L			LNGQ130616L		
LNGQ130616FL-P								
Designation	fz(min/max)	Design	Grade	IN05S	IN2005	IN2035	IN4030	IN4040
LNGQ130608L	0,10/0,20	positive geometry R0,8						
LNGQ130616L	0,12/0,25	positive geometry R1,6						
LNGQ130616LT	0,15/0,25	positive geometry, K-land R1,6						
LNGQ130616FL-P	0,10/0,25	non-ferrous geometry, polished R1,6						

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



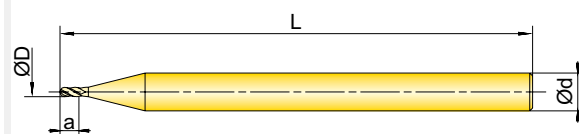
SM40-120-20 (4,5Nm) DS-T15S

① = Insert screw ② = Screw driver

L-PRO BL13D10

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P M K N_(K) S_(M) H_(PK)
+ + + + + ○

+ Preferred choice ○ Second choice



h8

h6



Designation

D

d

L

a

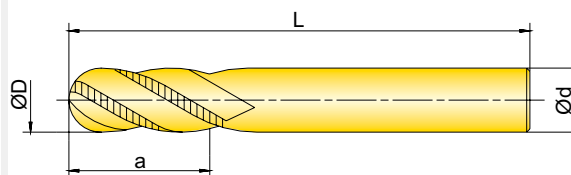
Z

45B00401T9RB380	0,4	3	38	0,8	2
45B00501T9RB380	0,5	3	38	1	2
45B00601T9RB380	0,6	3	38	1,2	2
45B00701T9RB380	0,7	3	38	1,4	2
45B00802T9RB380	0,8	3	38	1,6	2
45B01003U0RB500	1	4	50	2,5	2
45B01103U0RB500	1,1	4	50	2,5	2
45B01203U0RB500	1,2	4	50	3	2
45B01604U0RB500	1,6	4	50	4	2
45B02006U0RB500	2	4	50	6	2

SOLID CARBIDE MINI BALL NOSE CUTTERS 45B...T/ 45B...U

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2006

P

M

K

N_(K)

S_(M)

H_(PK)

+

+

+

+

○

+ Preferred choice ○ Second choice



h10

h6



Designation

D

d

L

a

Z

46B06016T7RA570

6

6

57

16

3

46B08016T0RA630

8

8

63

16

3

47B10022T1RA720

10

10

72

22

4

47B12026T2RA830

12

12

83

26

4

47B14026U8RA830

14

14

83

26

4

47B16032T3RA920

16

16

92

32

4

47B18032U2RA920

18

18

92

32

4

47B20038T4RA100

20

20

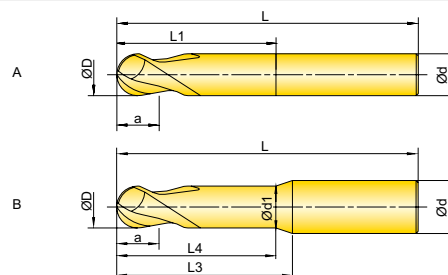
104

38

4

SOLID CARBIDE 3-4 FLUTE BALL NOSE 30° HELIX - ROUGHER

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P M K N_(K) S_(M) H_(PK)
+ + + + ○



e8

h6



+ Preferred choice ○ Second choice

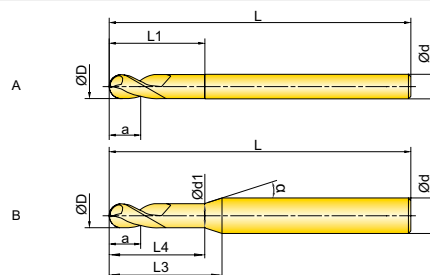
Designation	D	d	d1	L	L1	L3	L4	a	Typ	Z
45B02004T9RB380 ¹⁾	2	3	-	38	-	10	6	4	B	2
45B02003T7RB570 ¹⁾	2	6	1,8	57	-	20	8	3	B	2
45B03005T9RB380	3	3	-	38	-	-	-	5	A	2
45B03004T7RB570 ¹⁾	3	6	2,8	57	-	20	10	3,5	B	2
45B04007U0RB500	4	4	-	50	-	-	-	7	A	2
45B04004T7RB570 ¹⁾	4	6	3,8	57	-	20	12	4	B	2
45B04007T7RB570 ¹⁾	4	6	-	57	-	13	10	7	B	2
45B05008U1RB500	5	5	-	50	-	-	-	8	A	2
45B05005T7RB570 ¹⁾	5	6	4,7	57	-	20	14	5	B	2
45B05008T7RB570 ¹⁾	5	6	-	57	-	12	10	8	B	2
45B06006T7RB570	6	6	5,6	57	20	-	-	6	A	2
45B06008T7RB570	6	6	-	57	-	-	-	8	A	2
45B08007T0RB630	8	8	7,6	63	25	-	-	7	A	2
45B08011T0RB630	8	8	-	63	-	-	-	11	A	2
45B10008T1RB720	10	10	9,6	72	30	-	-	8	A	2
45B10013T1RB720	10	10	-	72	-	-	-	13	A	2
45B12014T2RB830	12	12	-	83	-	-	-	14	A	2
45B16016T3RB930	16	16	-	93	-	-	-	16	A	2
45B20020T4RB100	20	20	-	104	-	-	-	20	A	2

¹⁾ Conical type

SOLID CARBIDE 2 FLUTE BALL NOSE 30° HELIX - SHORT LENGTH

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA



Grade	P	M	K	N _(K)	S _(M)	H _(PK)
IN2005	+	+	+		+	○

+ Preferred choice ○ Second choice



e8

h6



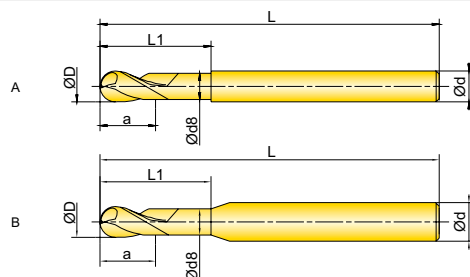
Designation	D	d	d1	L	L1	L3	L4	α	a	Typ	Z
45B02003T7RB800 ¹⁾	2	6	1,8	80	-	40	8	4°	3	B	2
45B03004T7RB800 ¹⁾	3	6	2,8	80	-	40	12	3,5°	3,5	B	2
45B04004T7RB800 ¹⁾	4	6	3,8	80	-	40	20	4°	4	B	2
45B06006T7RB800	6	6	5,6	80	40	-	-	-	6	A	2
45B06006T0RB100 ¹⁾	6	8	5,6	100	-	60	25	2°	6	B	2
45B08007T0RB100	8	8	7,6	100	60	-	-	-	7	A	2
45B08007T1RB120 ¹⁾	8	10	7,6	120	-	60	32	2,5°	7	B	2
45B10008T1RB120	10	10	9,6	120	75	-	-	-	8	A	2
45B10008T2RB160 ¹⁾	10	12	9,6	160	-	110	40	1°	8	B	2

¹⁾ Conical type

SOLID CARBIDE 2 FLUTE BALL NOSE 30° HELIX - LONG LENGTH

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2006

P M K N_(K) S_(M) H_(PK)
+ + + + +



e8

h6



+ Preferred choice ○ Second choice

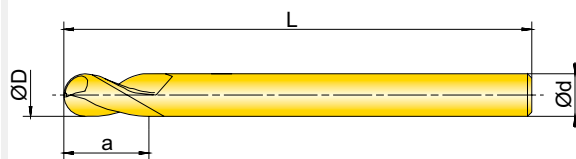
Designation	D	d	d8	L	L1	a	Typ	Z
45B03008T7RB700 ¹⁾	3	6	-	70	-	8	B	2
45B04008T7RB700 ¹⁾	4	6	-	70	-	8	B	2
45B05012T7RB800 ¹⁾	5	6	-	80	-	12	B	2
45B06012T7RB800	6	6	5,8	80	22	12	A	2
45B07014T0RB900 ¹⁾	7	8	-	90	-	14	B	2
45B08014T0RB900	8	8	7,8	90	27	14	A	2
45B10018T1RB100	10	10	9,8	100	31	18	A	2
45B12022T2RB110	12	12	11,8	110	35	22	A	2
45B14026T2RB120	14	12	-	120	-	26	B	2
45B16030T3RB140	16	16	15,8	140	50	30	A	2
45B18034T3RB140	18	16	-	140	-	34	B	2
45B20038T4RB160	20	20	19,8	160	58	38	A	2
45B25055T5RB180	25	25	24,8	180	75	55	A	2

¹⁾ Conical type

SOLID CARBIDE 2 FLUTE BALL NOSE FOR HARD MILLING

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA



Grade
IN2006

P	M	K	N _(K)	S _(M)	H _(PK)
+	+	+		+	+

+ Preferred choice ○ Second choice



e8
h6

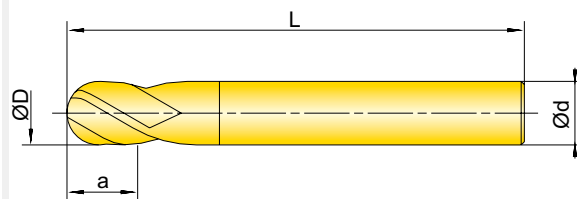


Designation	D	d	L	a	Z
45B02006T9RB800 ¹⁾	2	3	80	6	2
45B03008T9RB100	3	3	100	8	2
45B04008U0RB100	4	4	100	8	2
45B05010T7RB120 ¹⁾	5	6	120	10	2
45B06010T7RB120	6	6	120	10	2
45B08014T0RB140	8	8	140	14	2
45B10018T1RB180	10	10	180	18	2
45B12022T2RB200	12	12	200	22	2
45B16030T3RB250	16	16	250	30	2
45B20038T4RB250	20	20	250	38	2

¹⁾ Conical type

SOLID CARBIDE 2 FLUTE BALL NOSE FOR HARD MILLING - LONG LENGTH

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P M K N_(K) S_(M) H_(PK)

+ Preferred choice ○ Second choice



e8
h6



Designation

D d L a Z

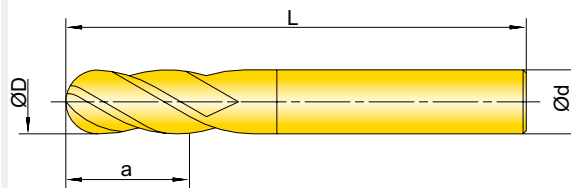
47B02003T9RB380 ¹⁾	2	3	38	3	4
47B03005T7RB570 ¹⁾	3	6	57	5	4
47B03005T9RB380	3	3	38	5	4
47B04007T7RB570 ¹⁾	4	6	57	7	4
47B04007U0RB500	4	4	50	7	4
47B05008T7RB570 ¹⁾	5	6	57	8	4
47B05008U1RB500	5	5	50	8	4
47B06008T7RB570	6	6	57	8	4
47B08011T0RB630	8	8	63	11	4
47B10013T1RB720	10	10	72	13	4
47B12014T2RB830	12	12	83	14	4
47B16016T3RB920	16	16	92	16	4
47B20020T4RB100	20	20	104	20	4

¹⁾ Conical type

SOLID CARBIDE 4 FLUTE BALL NOSE 30° HELIX - SHORT LENGTH

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P

M

K

N_(K)

S_(M)

H_(PK)

+

+

+

+

○

+ Preferred choice ○ Second choice



e8

h6



Designation

D

d

L

a

Z

47B03008U0RB500¹⁾

3

4

50

8

4

47B04012U0RB500

4

4

50

12

4

47B05014U1RB500

5

5

50

14

4

47B06016T7RB570

6

6

57

16

4

47B08020T0RB630

8

8

63

20

4

47B10022T1RB720

10

10

72

22

4

47B12025T2RB830

12

12

83

25

4

47B16032T3RB920

16

16

92

32

4

47B20038T4RB100

20

20

104

38

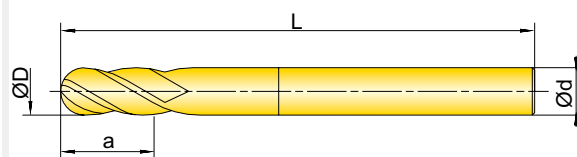
4

¹⁾ Conical type

SOLID CARBIDE 4 FLUTE BALL NOSE 30° HELIX - MEDIUM LENGTH

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P M K N_(K) S_(M) H_(PK)

+ Preferred choice ○ Second choice



e8
h6



Designation

D

d

L

a

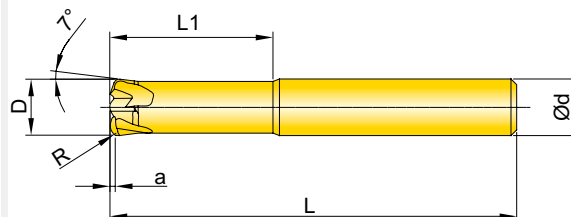
Z

47B04012U0RB800	4	4	80	12	4
47B06016T7RB100	6	6	100	16	4
47B07016UARB100	7	7	100	16	4
47B08020T0RB100	8	8	100	20	4
47B09020U9RB100	9	9	100	20	4
47B10022T1RB100	10	10	100	22	4
47B12025T2RB100	12	12	100	25	4
47B16032T3RB130	16	16	125	32	4

SOLID CARBIDE 4 FLUTE BALL NOSE 30° HELIX - LONG LENGTH

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2006

P

M

K

N_(K)

S_(M)

H_(PK)

+

+

+

+

○

+ Preferred choice ○ Second choice



e8

h6



Designation

D

d

L

L1

a

R

Z

47A06003T7RA010

6

6

57

20

0,3

1

4

47A08004T0RA013

8

8

63

26

0,4

1,3

4

47A10005T1RA016

10

10

72

30

0,5

1,6

4

47A12006T2RA020

12

12

83

34

0,6

2

4

47A16008T3RA026

16

16

92

42

0,8

2,6

4

47A20010T4RA032

20

20

104

46

1

3,2

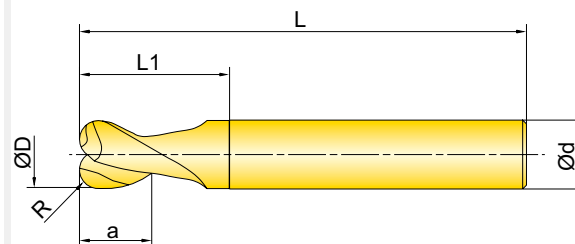
4

R (Programming radius)

SOLID CARBIDE SPEED CUTTER

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P M K N_(K) S_(M) H_(PK)
+ + + + ○



e8

h6



+ Preferred choice ○ Second choice

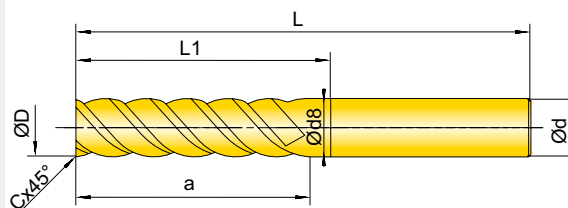
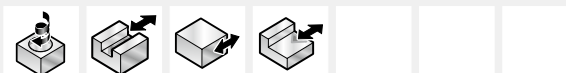
Designation	D	d	L	L1	a	R	Z
45U02002T7RB050 ¹⁾	2	6	80	8	2	0,5	2
45U03002T7RB050 ¹⁾	3	6	80	12	2	0,5	2
45U04003T7RB100 ¹⁾	4	6	80	16	3	1	2
45U06004T7RB200	6	6	80	25	4	2	2
45U06004T0RB200 ¹⁾	6	8	100	25	4	2	2
45U08004T0RB200	8	8	100	32	4	2	2
45U08004T1RB200 ¹⁾	8	10	120	32	4	2	2
45U10006T1RB300	10	10	120	40	6	3	2
45U10006T2RB300 ¹⁾	10	12	160	40	6	3	2

¹⁾ Conical type

SOLID CARBIDE 2 FLUTE TORIC CUTTER WITH CORNER RADIUS

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA / 6535 HB



Grade	P	M	K	N _(S)	S _(M)	H _(PK)
IN2005	+	+	+		+	○

+ Preferred choice ○ Second choice



e8

h6



Designation	D	d	d8	L	L1	a	C	Z
47C03008T7RQ010 ¹⁾	3	6	2,8	57	11	8	0,1	4
47C04010T7RQ010 ¹⁾	4	6	3,8	57	14	10	0,15	4
47C05012T7RQ010 ¹⁾	5	6	4,8	57	17	12	0,18	4
47C06014T7RQ020 ¹⁾	6	6	5,8	57	20	14	0,25	4
47C06014WERQ020 ²⁾	6	6	5,8	57	20	14	0,25	4
47C08018T0RQ030 ¹⁾	8	8	7,8	63	26	18	0,3	4
47C08018W0RQ030 ²⁾	8	8	7,8	63	26	18	0,3	4
47C10022T1RQ040 ¹⁾	10	10	9,8	72	32	22	0,4	4
47C10022W1RQ040 ²⁾	10	10	9,8	72	32	22	0,4	4
47C12026T2RQ050 ¹⁾	12	12	11,7	83	38	26	0,5	4
47C12026W2RQ050 ²⁾	12	12	11,7	83	38	26	0,5	4
47C16034T3RQ060 ¹⁾	16	16	15,7	100	50	34	0,6	4
47C16034W3RQ060 ²⁾	16	16	15,7	100	50	34	0,6	4
47C20042T4RQ060 ¹⁾	20	20	19,7	110	60	42	0,6	4
47C20042W4RQ060 ²⁾	20	20	19,7	110	60	42	0,6	4
47C25052T5RQ060 ¹⁾	25	25	24,6	121	65	52	0,6	4
47C25052W5RQ060 ²⁾	25	25	24,6	121	65	52	0,6	4
47C06015T7RQ021 ¹⁾	6	6	-	57	-	15	0,2	5
47C06015WERQ021 ²⁾	6	6	-	57	-	15	0,2	5
47C08020T0RQ021 ¹⁾	8	8	-	63	-	20	0,25	5
47C08020W0RQ021 ²⁾	8	8	-	63	-	20	0,25	5
47C10025T1RQ031 ¹⁾	10	10	-	72	-	25	0,3	5
47C10025W1RQ031 ²⁾	10	10	-	72	-	25	0,3	5
47C12030T2RQ041 ¹⁾	12	12	-	83	-	30	0,4	5
47C12030W2RQ041 ²⁾	12	12	-	83	-	30	0,4	5
47C16040T3RQ051 ¹⁾	16	16	-	100	-	40	0,5	5
47C16040W3RQ051 ²⁾	16	16	-	100	-	40	0,5	5
47C20050T4RQ051 ¹⁾	20	20	-	125	-	50	0,5	5
47C20050W4RQ051 ²⁾	20	20	-	125	-	50	0,5	5

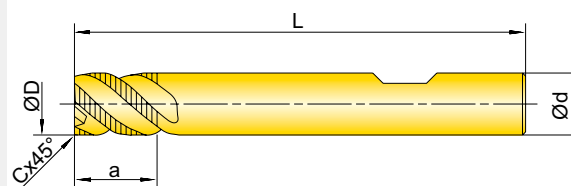
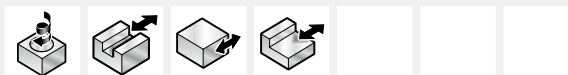
HPC rougher & finisher unequally spaced

¹⁾ DIN 6535 HA; ²⁾ DIN 6535 HB

SOLID CARBIDE HPC ROUGHER & FINISHER UNEQUALLY SPACED

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HB



Grade

IN2005

P M K N_(K) S_(M) H_(PK)

+ Preferred choice ○ Second choice



e9

h6



Designation

D

d

L

a

C

Z

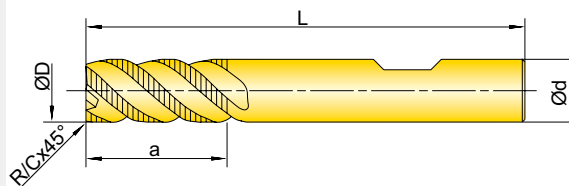
47C05005WERN020	5	6	57	5	0,2	4
47C06006WERN030	6	6	57	6	0,25	4
47C08008WORN030	8	8	63	8	0,3	4
47C10010W1RN030	10	10	72	10	0,35	4
47C12012W2RN030	12	12	83	12	0,35	4
47C16016W3RN030 ¹⁾	16	16	92	16	0,35	5
48C20020W4RN030 ¹⁾	20	20	104	20	0,35	7

¹⁾ 5 or 7 flutes no center milling

SOLID CARBIDE 4-7 FLUTE ROUGHERS - 45° HELIX - 1XD

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HB



Grade

IN2005

P

M

K

N_(K)

S_(M)

H_(PK)

+

+

+

+

○

+ Preferred choice ○ Second choice



e9

h6



Designation

D

d

L

a

R

C

Z

47C05010WERN020

5

6

57

10

-

0,2

4

47C06012WERN020

6

6

57

12

-

0,25

4

47C08016WORN030

8

8

63

16

-

0,3

4

47C10020W1RN030

10

10

72

20

-

0,35

4

47C12024W2RN030

12

12

83

24

-

0,35

4

47D12024W2RN120

12

12

83

24

1,2

-

4

47C16032W3RN030¹⁾

16

16

92

32

-

0,35

5

47D16032W3RN160¹⁾

16

16

92

32

1,6

-

5

48C20040W4RN030¹⁾

20

20

104

40

-

0,35

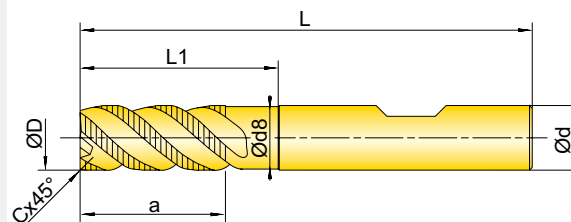
7

¹⁾ 5 or 7 flutes no center milling

SOLID CARBIDE 4-7 FLUTE ROUGHERS - 45° HELIX - 2XD

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HB



Grade

IN2005

P

M

K

N_(K)

S_(M)

H_(PK)

+

+

+

+

○

+ Preferred choice ○ Second choice



e9

h6



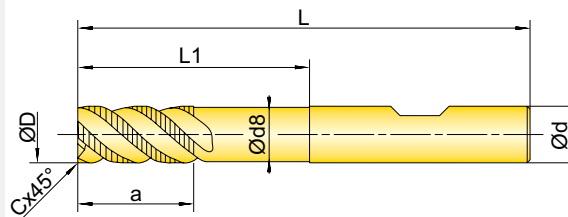
Designation	D	d	d8	L	L1	a	C	Z
47C06012WERN021	6	6	5,9	57	18	12	0,25	4
47C08016WORN031	8	8	7,8	63	24	16	0,3	4
47C10020W1RN031	10	10	9,8	72	30	20	0,35	4
47C12024W2RN031	12	12	11,7	83	36	24	0,35	4
47C16032W3RN031 ¹⁾	16	16	15,7	100	48	32	0,35	5
48C20040W4RN031 ¹⁾	20	20	19,7	110	60	40	0,35	7

¹⁾ 5 or 7 flutes no center milling

SOLID CARBIDE 4-7 FLUTE ROUGHERS - 45° HELIX - 3XD

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HB



Grade	P	M	K	N _(K)	S _(M)	H _(PK)
IN2005	+	+	+		+	○

+ Preferred choice ○ Second choice



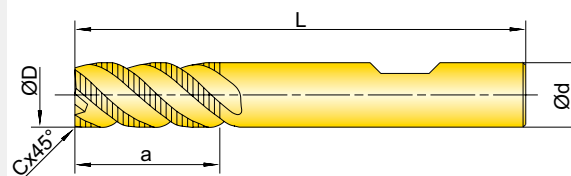
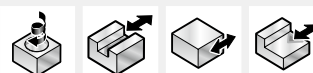
Designation	D	d	d8	L	L1	a	C	Z
47C08012W0RN030	8	8	7,8	68	32	12	0,3	4
47C10015W1RN030	10	10	9,8	80	40	15	0,35	4
47C12018W2RN030	12	12	11,7	100	48	18	0,35	4
47C16024W3RN030 ¹⁾	16	16	15,7	115	64	24	0,35	5

¹⁾ 5 flutes no center cutting

SOLID CARBIDE 4-5 FLUTE ROUGHERS - 45° HELIX - 4XD

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA / 6535 HB



Grade

IN2005

P M K N_(K) S_(M) H_(PK)

+ + ○ + +

+ Preferred choice ○ Second choice



e9

h6



Designation

D

d

L

a

C

Z

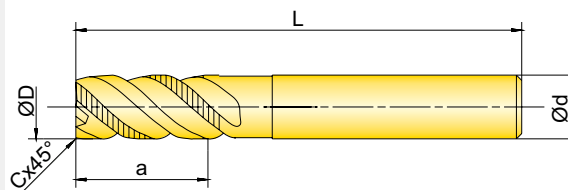
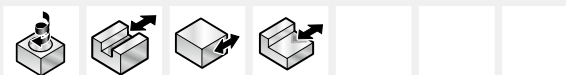
47C06014T7RN020 ¹⁾	6	6	57	14	0,25	4
47C06014WRRN020 ²⁾	6	6	57	14	0,25	4
47C08018TORN030 ¹⁾	8	8	63	18	0,3	4
47C08018WSRN030 ²⁾	8	8	63	18	0,3	4
47C10022T1RN030 ¹⁾	10	10	72	22	0,3	4
47C10022WTRN030 ²⁾	10	10	72	22	0,3	4
47C12026T2RN040 ¹⁾	12	12	83	26	0,4	4
47C12026WURN040 ²⁾	12	12	83	26	0,4	4
47C14030U8RN040 ¹⁾	14	14	83	30	0,4	4
47C14030WFRN040 ²⁾	14	14	83	30	0,4	4
48C16034T3RN050 ¹⁾	16	16	92	34	0,5	6
48C16034WVRN050 ²⁾	16	16	92	34	0,5	6
48C20042T4RN070 ¹⁾	20	20	104	42	0,7	6
48C20042WWRN070 ²⁾	20	20	104	42	0,7	6
48C25052T5RN090 ¹⁾	25	25	121	52	0,9	6
48C25052W5RN090 ²⁾	25	25	121	52	0,9	6

¹⁾ DIN 6535 HA; ²⁾ DIN 6535 HB

SOLID CARBIDE 4-6 FLUTE ROUGHERS - 45° HELIX FOR TITANIUM

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA / 6535 HB



Grade	P	M	K	N _(K)	S _(M)	H _(PK)
IN2005	+	+	+		+	○

+ Preferred choice ○ Second choice



e9
h6



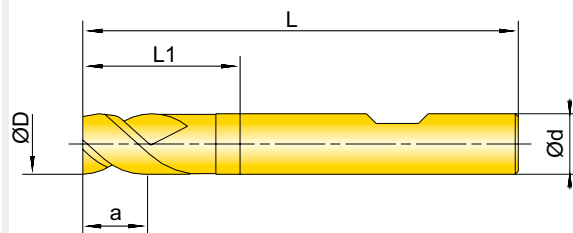
Designation	D	d	L	a	C	Z	Zs
47J06014T7RU570 ¹⁾	6	6	57	14	0,25	4	2
47J06014WERU570 ²⁾	6	6	57	14	0,25	4	2
47J08018T0RU630 ¹⁾	8	8	63	18	0,3	4	2
47J08018W0RU630 ²⁾	8	8	63	18	0,3	4	2
47J10022T1RU720 ¹⁾	10	10	72	22	0,3	4	2
47J10022W1RU720 ²⁾	10	10	72	22	0,3	4	2
47J12026T2RU830 ¹⁾	12	12	83	26	0,4	4	2
47J12026W2RU830 ²⁾	12	12	83	26	0,4	4	2
47J14030U8RU830 ¹⁾	14	14	83	30	0,4	4	2
47J14030WFRU830 ²⁾	14	14	83	30	0,4	4	2
47J16034T3RU920 ¹⁾	16	16	92	34	0,6	4	2
47J16034W3RU920 ²⁾	16	16	92	34	0,6	4	2
47J20042T4RU040 ¹⁾	20	20	104	42	0,6	4	2
47J20042W4RU040 ²⁾	20	20	104	42	0,6	4	2
47J25052T5RU210 ¹⁾	25	25	121	52	0,6	4	2
47J25052W5RU210 ²⁾	25	25	121	52	0,6	4	2

¹⁾ DIN 6535 HA; ²⁾ DIN 6535 HB

SOLID CARBIDE 4 FLUTE ROUGHING AND FINISHING - 45 HELIX

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HB



Grade

IN2005

P M K N_(K) S_(M) H_(PK)

+ Preferred choice ○ Second choice



e8

h6

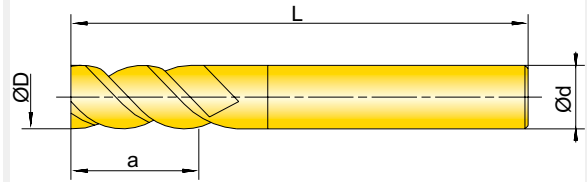
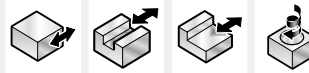


Designation	D	d	L	L1	a	Z
46J02804WERC570	2,8	6	57	6	4	3
46J03805WERC570	3,8	6	57	8	5	3
46J04806WERC570	4,8	6	57	9	6	3
46J05707WERC570	5,7	6	57	10	7	3
46J06708W0RC630	6,7	8	63	11	8	3
46J07709W0RC630	7,7	8	63	12	9	3
46J09711W1RC720	9,7	10	72	13	11	3
46J11712W2RC730	11,7	12	73	15	12	3
46J13714WFRC830	13,7	14	83	19	14	3
46J15716W3RC820	15,7	16	82	20	16	3
46J17718WGRC920	17,7	18	92	21	18	3
46J19720W4RC920	19,7	20	104	23	20	3

SOLID CARBIDE 3 FLUTE SLOT DRILL (UNDERSIZE) 38° HELIX - SHORT LENGTH

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA



Grade	P	M	K	N _(S)	S _(M)	H _(PK)
IN2005	+	+	+		+	○

+ Preferred choice ○ Second choice



e8
h6

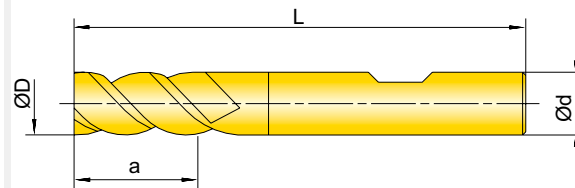
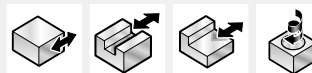


Designation	D	d	L	a	Z
46J02007T9RD380	2	3	38	7	3
46J02007T7RD500	2	6	57	7	3
46J03010T9RD380	3	3	38	10	3
46J03010T7RD500	3	6	57	10	3
46J04012U0RD500	4	4	50	12	3
46J04012T7RD500	4	6	57	12	3
46J05014U1RD500	5	5	50	14	3
46J05014T7RD500	5	6	57	14	3
46J06016T7RD500	6	6	57	16	3
46J07016UARD600	7	7	60	16	3
46J08020T0RD630	8	8	63	20	3
46J09020U9RD670	9	9	67	20	3
46J10022T1RD720	10	10	72	22	3
46J12025T2RD730	12	12	83	25	3
46J14025U8RD750	14	14	83	25	3
46J16032T3RD820	16	16	92	32	3
46J18032U2RD920	18	18	92	32	3
46J20038T4RD920	20	20	104	38	3

SOLID CARBIDE 3 FLUTE SLOT DRILL 45° HELIX - DIN 6535HA

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HB



Grade

IN2005

P M K N_(K) S_(M) H_(PK)

+ Preferred choice ○ Second choice



e8

h6



Designation

D

d

L

a

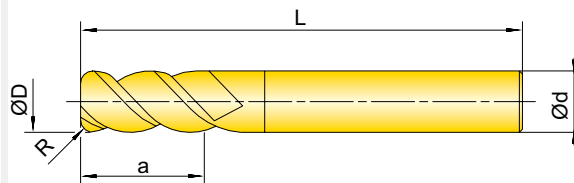
Z

46J06016W5RD500	6	6	57	16	3
46J08020W0RD630	8	8	63	20	3
46J10022W1RD720	10	10	72	22	3
46J12025W2RD830	12	12	83	25	3
46J16032W3RD920	16	16	92	32	3
46J20038W4RD100	20	20	104	38	3

SOLID CARBIDE 3 FLUTE SLOT DRILL 45° HELIX - DIN 6535HB

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P

M

K

N_(K)

S_(M)

H_(PK)

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+

+

+

○

+ Preferred choice ○ Second choice



e8

h6



Designation

D

d

L

a

R

Z

46D06013T7RD050

6

6

57

13

0,5

3

46D06013T7RD100

6

6

57

13

1

3

46D08020T0RD050

8

8

63

20

0,5

3

46D08020T0RD100

8

8

63

20

1

3

46D08020T0RD150

8

8

63

20

1,5

3

46D08020T0RD200

8

8

63

20

2

3

46D10022T1RD050

10

10

72

22

0,5

3

46D10022T1RD100

10

10

72

22

1

3

46D10022T1RD150

10

10

72

22

1,5

3

46D10022T1RD200

10

10

72

22

2

3

46D10022T1RD300

10

10

72

22

3

3

46D12025T2RD050

12

12

83

25

0,5

3

46D12025T2RD100

12

12

83

25

1

3

46D12025T2RD150

12

12

83

25

1,5

3

46D12025T2RD200

12

12

83

25

2

3

46D12025T2RD300

12

12

83

25

3

3

46D16032T3RD050

16

16

92

32

0,5

3

46D16032T3RD100

16

16

92

32

1

3

46D16032T3RD200

16

16

92

32

2

3

46D16032T3RD300

16

16

92

32

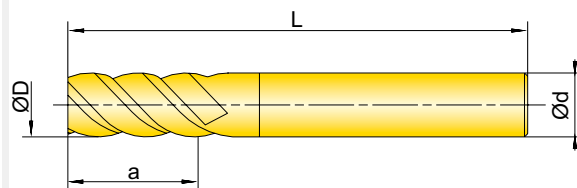
3

3

SOLID CARBIDE 3 FLUTE END MILL WITH CORNER RADIUS - 45° HELIX

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P
M
K
N_(K)
S_(M)
H_(PK)

+ Preferred choice
 ○ Second choice



e8

h6

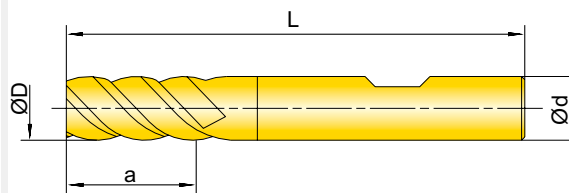


Designation	D	d	L	a	Z
47J02007T9RD380	2	3	38	7	4
47J02007T7RD500	2	6	57	7	4
47J03010T9RD380	3	3	38	10	4
47J03010T7RD500	3	6	57	10	4
47J04012U0RD500	4	4	50	12	4
47J04012T7RD500	4	6	57	12	4
47J05014U1RD500	5	5	50	14	4
47J05014T7RD500	5	6	57	14	4
47J06016T7RD500	6	6	57	16	4
47J07016UARD600	7	7	60	16	4
47J08020T0RD630	8	8	63	20	4
47J09020U9RD670	9	9	67	20	4
47J10022T1RD720	10	10	72	22	4
47J12025T2RD730	12	12	83	25	4
47J14025U8RD750	14	14	83	25	4
47J16032T3RD820	16	16	92	32	4
47J18032U2RD920	18	18	92	32	4
47J20038T4RD920	20	20	104	38	4

SOLID CARBIDE 4 FLUTE END MILL 45° HELIX - DIN 6535HA

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HB



Grade

IN2005

P

M

K

N_(K)

S_(M)

H_(PK)

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+

○

+ Preferred choice ○ Second choice



e8

h6



Designation

D

d

L

a

Z

47J08020WORD630

8

8

63

20

4

47J10022W1RD720

10

10

72

22

4

47J12025W2RD830

12

12

83

25

4

47J16032W3RD920

16

16

92

32

4

47J20038W4RD100

20

20

104

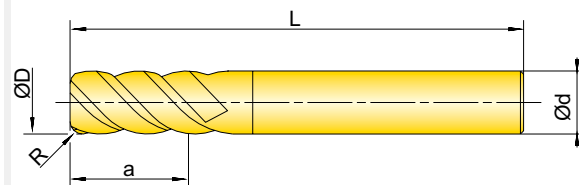
38

4

SOLID CARBIDE 4 FLUTE END MILL 45° HELIX - DIN 6535HB

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P
M
K
N_(K)
S_(M)
H_(PK)

+ Preferred choice
 ○ Second choice



e8

h6

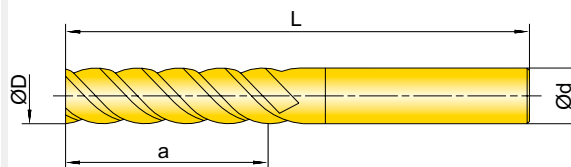


Designation	D	d	L	a	R	Z
47D06016T7RD050	6	6	57	16	0,5	4
47D06016T7RD100	6	6	57	16	1	4
47D08020T0RD050	8	8	63	20	0,5	4
47D08020T0RD100	8	8	63	20	1	4
47D08020T0RD150	8	8	63	20	1,5	4
47D08020T0RD200	8	8	63	20	2	4
47D10022T1RD050	10	10	72	22	0,5	4
47D10022T1RD100	10	10	72	22	1	4
47D10022T1RD150	10	10	72	22	1,5	4
47D10022T1RD200	10	10	72	22	2	4
47D10022T1RD300	10	10	72	22	3	4
47D12025T2RD050	12	12	83	25	0,5	4
47D12025T2RD100	12	12	83	25	1	4
47D12025T2RD150	12	12	83	25	1,5	4
47D12025T2RD200	12	12	83	25	2	4
47D12025T2RD300	12	12	83	25	3	4
47D16032T3RD050	16	16	92	32	0,5	4
47D16032T3RD100	16	16	92	32	1	4
47D16032T3RD150	16	16	92	32	1,5	4
47D16032T3RD200	16	16	92	32	2	4
47D16032T3RD250	16	16	92	32	2,5	4
47D16032T3RD300	16	16	92	32	3	4
47D20038T4RD050	20	20	104	38	0,5	4
47D20038T4RD100	20	20	104	38	1	4
47D20038T4RD200	20	20	104	38	2	4
47D20038T4RD300	20	20	104	38	3	4
47D20038T4RD400	20	20	104	38	4	4

SOLID CARBIDE 4 FLUTE END MILL WITH CORNER RADIUS - 45° HELIX

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P

M

K

N_(K)

S_(M)

H_(PK)

+

+

+

+

○

+ Preferred choice ○ Second choice



e8

h6



Designation

D

d

L

a

Z

47J06024T7RD650

6

6

65

24

4

47J08032T0RD800

8

8

80

32

4

47J10040T1RD100

10

10

100

40

4

47J12048T2RD100

12

12

100

48

4

47J14050U8RD100

14

14

100

50

4

48J16056T3RD120¹⁾

16

16

115

56

6

48J20060T4RD130¹⁾

20

20

125

60

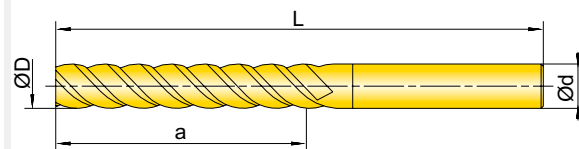
6

¹⁾ 6 flutes no center cutting

SOLID CARBIDE 4-6 FLUTE END MILL 45° HELIX - LONG LENGTH

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P M K N_(K) S_(M) H_(PK)

+ Preferred choice ○ Second choice



e8
h6



Designation

D

d

L

a

Z

47J10060T1RD110

10

10

110

60

4

47J12072T2RD150

12

12

150

72

4

48J16080T3RD150¹⁾

16

16

150

80

6

48J20080T4RD150¹⁾

20

20

150

80

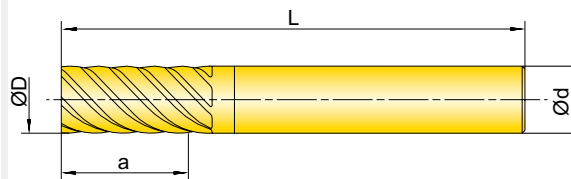
6

¹⁾ 6 flutes no center cutting

SOLID CARBIDE 4-6 FLUTE END MILL 45° HELIX - EXTRA LONG LENGTH

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P

M

K

N_(K)

S_(M)

H_(PK)

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+

+

+

○

+ Preferred choice ○ Second choice



e8

h6



Designation

D

d

L

a

Z

48J06016T7RD570

6

6

57

16

6

48J08020T0RD630

8

8

63

20

6

48J10022T1RD720

10

10

72

22

6

48J12025T2RD830

12

12

83

25

6

48J16032T3RD920

16

16

92

32

6

48J20038T4RD100

20

20

104

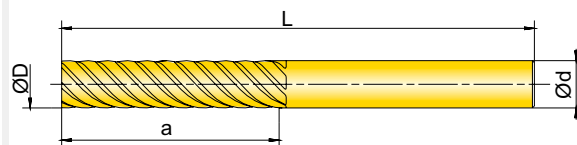
38

6

SOLID CARBIDE 6 FLUTE END MILL - 45° HELIX - MEDIUM LENGTH (FINISHING)

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2006

P M K N_(K) S_(M) H_(PK)

+ Preferred choice ○ Second choice



e8

h6

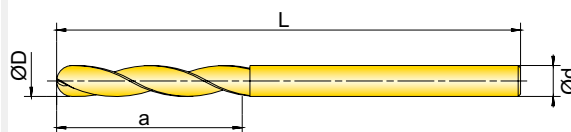


Designation	D	d	L	a	Z
48J06026T7RD700	6	6	70	26	6
48J08036T0RD900	8	8	90	36	6
48J10046T1RD100	10	10	100	46	6
48J12056T2RD110	12	12	110	56	6
48J16066T3RD130	16	16	130	66	6
48J20076T4RD140	20	20	140	76	6
48J25092T5RD180	25	25	180	92	6

SOLID CARBIDE 6 FLUTE END MILL - 45° HELIX - LONG LENGTH (FINISHING)

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA



Grade

IN05S

P

M

K

N_(K)

S_(M)

H_(PK)

+



h10

h6



+ Preferred choice ○ Second choice

Designation

D

d

L

a

Z

45B03030T9RB750

3

3

75

30

2

45B04030U0RB750

4

4

75

30

2

45B05040U1RB100

5

5

100

40

2

45B06050T7RB150

6

6

150

50

2

45B08050T0RB150

8

8

150

50

2

45B10060T1RB150

10

10

150

60

2

45B12075T2RB150

12

12

150

75

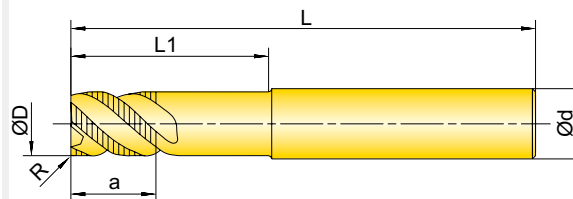
2

on request with diamond coating

SOLID CARBIDE 2 FLUTE BALL NOSE 30° HELIX - EXTRA LONG LENGTH

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA / 6535 HB



Grade

IN05S

P

M

K

N_(K)

S_(M)

H_(PK)

+

h6

h6



+ Preferred choice ○ Second choice

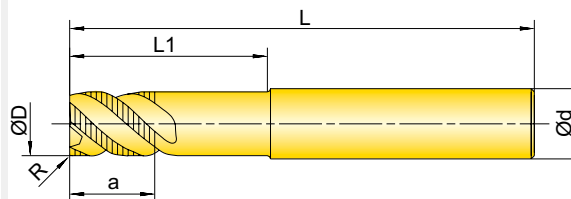
Designation	D	d	L	L1	a	R	Z
46D06009T7RN020 ¹⁾	6	6	57	21	9	0,2	3
46D06009WERN020 ²⁾	6	6	57	21	9	0,2	3
46D08012T0RN020 ¹⁾	8	8	63	27	12	0,2	3
46D08012W0RN020 ²⁾	8	8	63	27	12	0,2	3
46D10012T1RN020 ¹⁾	10	10	72	31	12	0,2	3
46D10012W1RN020 ²⁾	10	10	72	31	12	0,2	3
46D12012T2RN020 ¹⁾	12	12	83	37	12	0,2	3
46D12012W2RN020 ²⁾	12	12	83	37	12	0,2	3
46D16014T3RN020 ¹⁾	16	16	92	43	14	0,2	3
46D16014W3RN020 ²⁾	16	16	92	43	14	0,2	3
46D20017T4RN020 ¹⁾	20	20	104	53	17	0,2	3
46D20017W4RN020 ²⁾	20	20	104	53	17	0,2	3
on request with diamond coating							

¹⁾ DIN 6535HA; ²⁾ DIN 6535 HB

SOLID CARBIDE 3 FLUTE END MILL 45° HELIX SHORT LENGTH (ROUGHING)

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA / 6535 HB



Grade

IN05S

P

M

K

N_(S)

S_(M)

H_(PK)

+

△

h6

□

h6



+ Preferred choice ○ Second choice

Designation

D

d

L

L1

a

R

Z

46D06009T7RN021 ¹⁾	6	6	65	30	9	0,2	3
46D06009WERN021 ²⁾	6	6	65	30	9	0,2	3
46D08012TORN021 ¹⁾	8	8	78	40	12	0,2	3
46D08012WORN021 ²⁾	8	8	78	40	12	0,2	3
46D10012T1RN021 ¹⁾	10	10	100	50	12	0,2	3
46D10012W1RN021 ²⁾	10	10	100	50	12	0,2	3
46D12014T2RN021	12	12	100	55	14	0,2	3
46D12014W2RN021	12	12	100	55	14	0,2	3
46D16018T3RN021	16	16	150	80	18	0,2	3
46D16018W3RN021	16	16	150	80	18	0,2	3
46D20022T4RN021	20	20	150	80	22	0,2	3
46D20022W4RN021	20	20	150	80	22	0,2	3

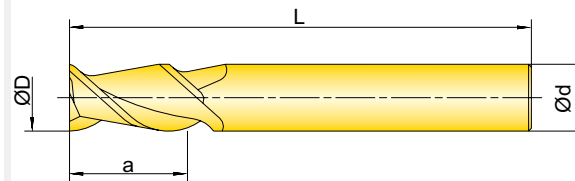
on request with diamond coating

¹⁾ DIN 6535HA; ²⁾ DIN 6535HB

SOLID CARBIDE 3 FLUTE END MILL 45° HELIX LONG LENGTH (ROUGHING)

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA



Grade

IN05S

P

M

K

N_(K)

S_(M)

H_(PK)

+



h6



h6



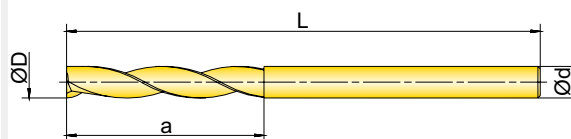
+ Preferred choice ○ Second choice

Designation	D	d	L	a	Z
45J04012T7RD570	4	6	57	12	2
45J05014T7RD570	5	6	57	14	2
45J06016T7RD570	6	6	57	16	2
45J08020T0RD630	8	8	63	20	2
45J10022T1RD720	10	10	72	22	2
45J12025T2RD830	12	12	83	25	2
45J16032T3RD920	16	16	92	32	2
45J20038T4RD100	20	20	104	38	2
on request with diamond coating					

SOLID CARBIDE 2 FLUTE ALUMINIUM SLOT DRILL - 45° HELIX - MEDIUM LENGTH

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA



Grade
IN05S

P	M	K	N _(K)	S _(M)	H _(PK)
			+		



h10
h6



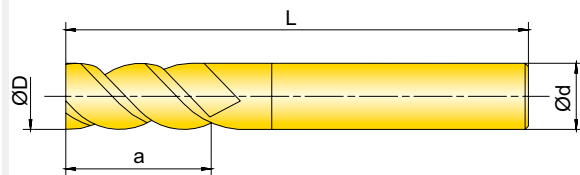
+ Preferred choice ○ Second choice

Designation	D	d	L	a	Z
45J03030T9RB750	3	3	75	30	2
45J04030U0RB750	4	4	75	30	2
45J05040U1RB100	5	5	100	40	2
45J06050T7RB150	6	6	150	50	2
45J08050T0RB150	8	8	150	50	2
45J10060T1RB150	10	10	150	60	2
45J12075T2RB150	12	12	150	75	2
on request with diamond coating					

SOLID CARBIDE 2 FLUTE ALUMINIUM SLOT DRILL - 30° HELIX - EXTRA LONG LENGTH

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA



Grade

IN05S

P

M

K

N_(K)

S_(M)

H_(PK)

+



e8

h6



+ Preferred choice ○ Second choice

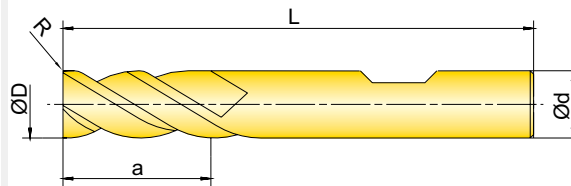
Designation	D	d	L	a	Z
46J03008T7RD500	3	6	50	8	3
46J04011T7RD450	4	6	45	11	3
46J05013T7RD500	5	6	50	13	3
46J06013T7RD500	6	6	50	13	3
46J08019T0RD600	8	8	60	19	3
46J10022T1RD700	10	10	70	22	3
46J12026T2RD750	12	12	75	26	3

on request with diamond coating

SOLID CARBIDE 3 FLUTE END MILL 45° HELIX

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA / 6535 HB



Grade

IN05S

P

M

K

N_(K)

S_(M)

H_(PK)

+

△

h6

□

h6



+ Preferred choice ○ Second choice

Designation

D

d

L

a

R

Z

46D05014T7RD020 ¹⁾	5	6	57	14	0,2	3
46D05014WERD020 ²⁾	5	6	57	14	0,2	3
46D06016T7RD020 ¹⁾	6	6	57	16	0,2	3
46D06016WERD020 ²⁾	6	6	57	16	0,2	3
46D08020T0RD020 ¹⁾	8	8	63	20	0,2	3
46D08020W0RD020 ²⁾	8	8	63	20	0,2	3
46D10022T1RD020 ¹⁾	10	10	72	22	0,2	3
46D10022W1RD020 ²⁾	10	10	72	22	0,2	3
46D12025T2RD020 ¹⁾	12	12	83	25	0,2	3
46D12025W2RD020 ²⁾	12	12	83	25	0,2	3
46D14030U8RD020 ¹⁾	14	14	83	30	0,2	3
46D14030WFRD020 ²⁾	14	14	83	30	0,2	3
46D16032T3RD020 ¹⁾	16	16	92	32	0,2	3
46D16032W3RD020 ²⁾	16	16	92	32	0,2	3
46D20038T4RD020 ¹⁾	20	20	104	38	0,2	3
46D20038W4RD020 ²⁾	20	20	104	38	0,2	3

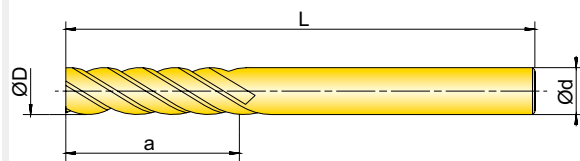
on request with diamond coating

¹⁾DIN 6535 HA; ²⁾DIN 6535 HB

SOLID CARBIDE 3 FLUTE END MILL 45° HELIX WITH CORNER RADIUS

MOLD AND DIE

ADAPTION ACC. TO DIN 6535 HA



Grade

IN05S

P

M

K

N_(K)

S_(M)

H_(PK)

+



h10

h6



+ Preferred choice ○ Second choice

Designation	D	d	L	a	Z
47J03030T9RB750	3	3	75	30	4
47J04030U0RB750	4	4	75	30	4
47J05040U1RB100	5	5	100	40	4
47J06050T7RB150	6	6	150	50	4
47J08050T0RB150	8	8	150	50	4
47J10060T1RB150	10	10	150	60	4
47J12075T2RB150	12	12	150	75	4

on request with diamond coating

SOLID CARBIDE 4 FLUTE END MILL - 30° HELIX - EXTRA LONG LENGTH

DRILLS/THREAD MILLING

	D	a	Description	Code	Page
	16 - 40	1xD	QUAD DRILL PLUS BSD03A	BSD03A	212
	10 - 48	1xD	QUAD DRILL PLUS BSD03B	BSD03B	214
	15 - 48	1xD	QUAD DRILL PLUS BSE01A	BSE01A	216
	13 - 29	2xD	QUAD DRILL PLUS Indexable Drill 2D Ø13 - Ø29	Indexable Drill 2D Ø13 - Ø29	218
	30 - 50	2xD	QUAD DRILL PLUS Indexable Drill 2D Ø30 - Ø50	Indexable Drill 2D Ø30 - Ø50	220
	12,5 - 27,5	3xD	QUAD DRILL PLUS Indexable Drill 3D Ø12,5 - Ø27,5	Indexable Drill 3D Ø12,5 - Ø27,5	222
	28 - 50,5	3xD	QUAD DRILL PLUS Indexable Drill 3D Ø28 - Ø50,5	Indexable Drill 3D Ø28-Ø50,5	224
	51 - 60	3xD	QUAD DRILL PLUS Indexable Drill 3D Ø51 - Ø60	Indexable Drill 3D Ø51 - Ø60	226
	13 - 29	4xD	QUAD DRILL PLUS Indexable Drill 4D Ø13 - Ø29	Indexable Drill 4D Ø13 - Ø29	228
	30 - 50	4xD	QUAD DRILL PLUS Indexable Drill 4D Ø30-Ø50	Indexable Drill 4D Ø30-Ø50	230
	13 - 27	5xD	QUAD DRILL PLUS Indexable Drill 5D Ø13 - Ø27	Indexable Drill 5D Ø13 - Ø27	232
	28 - 50	5xD	QUAD DRILL PLUS Indexable Drill 5D Ø28 - Ø50	Indexable Drill 5D Ø28 - Ø50	234
	51 - 80	2,5xD	QUAD DRILL PLUS Cartridge Indexable Drill 2,5D Ø51 - Ø80	Cartridge Indexable Drill 2,5D Ø51 - Ø80	236
	51 - 80	3,5xD	QUAD DRILL PLUS Cartridge Indexable Drill 3,5D Ø51 - Ø80	Cartridge Indexable Drill 3,5D Ø51 - Ø80	238

Subject to printing error or technical changes.

DRILLS/THREAD MILLING

	D	a	Description	Code	Page
	9,5 - 9,9	12	RAPID-THREAD End Mill Weldon Shank (a=12mm)	End Mill Weldon Shank (a=12mm)	240
	9,9	12	RAPID-THREAD End Mill Carbide Shank (a=12mm)	End Mill Carbide Shank (a=12mm)	242
	12 - 20	14	RAPID-THREAD End Mill Weldon Shank (a=14mm)	End Mill Weldon Shank (a=14mm)	244
	13,2 - 15,2	14	RAPID-THREAD End Mill Carbide Shank (a=14mm)	End Mill Carbide Shank (a=14mm)	246
	18 - 30	21	RAPID-THREAD End Mill Weldon Shank (a=21mm)	End Mill Weldon Shank (a=21mm)	248
	21	21	RAPID-THREAD End Mill Carbide Shank (a=21mm)	End Mill Carbide Shank (a=21mm)	250
	63	21	RAPID-THREAD Shell Mill (a=21mm)	Shell Mill (a=21mm)	252
	29 - 40	30	RAPID-THREAD End Mill Weldon Shank (a=30mm)	End Mill Weldon Shank (a=30mm)	254
	27	30	RAPID-THREAD End Mill Carbide Shank (a=30mm)	End Mill Carbide Shank (a=30mm)	256
	63 - 100	30	RAPID-THREAD Shell Mill (a=30mm)	Shell Mill (a=30mm)	258
	48 - 50	40	RAPID-THREAD End Mill Weldon Shank (a=40mm)	End Mill Weldon Shank (a=40mm)	260
	80 - 100	40	RAPID-THREAD Shell Mill (a=40mm)	Shell Mill (a=40mm)	262
	23	23	RAPID-THREAD End Mill Weldon Shank (a=23mm)	End Mill Weldon Shank (a=23mm)	264
	32	32	RAPID-THREAD End Mill Weldon Shank (a=32mm)	End Mill Weldon Shank (a=32mm)	266

Subject to printing error or technical changes.

DRILLS/THREAD MILLING

	D	a	Description	Code	Page
	45	37	RAPID-THREAD End Mill Weldon Shank (a=37mm)	End Mill Weldon Shank (a=37mm)	268
	63	38	RAPID-THREAD Shell Mill (a=38mm)	Shell Mill (a=38mm)	270
	3,8 - 20	10,3 - 43,5	RAPID-THREAD SC ISO-Threading with central internal Coolant	SC ISO-Threading with central internal Coolant	272
	3,2 - 20	6,8 - 45,3	RAPID-THREAD SC UN-Threading with central internal Coolant	SC UN-Threading with central internal Coolant	273
	7,8 - 20	14,1 - 47,3	RAPID-THREAD SC BSP-Threading with central internal Coolant	SC BSP-Threading with central internal Coolant	274
	7,8 - 16	14,1 - 28,9	RAPID-THREAD SC BSPT-Threading with central internal Coolant	SC BSPT-Threading with central internal Coolant	275
	7,6 - 20	10,8 - 39,7	RAPID-THREAD SC NPT-Threading with central internal Coolant	SC NPT-Threading with central internal Coolant	276
	7,6 - 20	10,8 - 39,7	RAPID-THREAD SC NPTF-Threading with central internal Coolant	SC NPTF-Threading with central internal Coolant	277
	4,8 - 15	10,5 - 33,8	RAPID-THREAD SC ISO-Threading with internal Coolant in the flutes	SC ISO-Threading with internal Coolant in the flutes	278
	5 - 14,4	11,3 - 34,3	RAPID-THREAD SC UN-Threading with internal Coolant in the flutes	SC UN-Threading with internal Coolant in the flutes	279
	7,8 - 16	14,1 - 38,1	RAPID-THREAD SC BSP-Threading with internal Coolant in the flutes	SC BSP-Threading with internal Coolant in the flutes	280
	7,8 - 16	14,1 - 28,9	RAPID-THREAD SC BSPT-Threading with internal Coolant in the flutes	SC BSPT-Threading with internal Coolant in the flutes	281
	7,6 - 15,5	10,8 - 22,7	RAPID-THREAD SC NPT-Threading with internal Coolant in the flutes	SC NPT-Threading with internal Coolant in the flutes	282
	7,6 - 15,5	10,8 - 22,7	RAPID-THREAD SC NPTF-Threading with internal Coolant in the flutes	SC NPTF-Threading with internal Coolant in the flutes	283

Subject to printing error or technical changes.

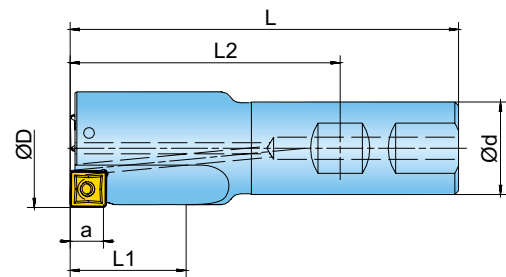
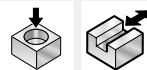
DRILLS/THREAD MILLING

	D	a	Description	Code	Page
	2,2 - 20	5,3 - 43,5	RAPID THREAD SC ISO-Threading internal	SC ISO-Threading internal	284
	10 - 12	16,5 - 21	RAPID THREAD SC ISO-Threading external	SC ISO-Threading external	285
	2,5 - 20	6 - 45,3	RAPID THREAD SC UN-Threading internal	SC UN-Threading internal	286
	6 - 20	9,5 - 47,3	RAPID THREAD SC BSP-Threading internal & external	SC BSP-Threading internal & external	287
	6 - 16	9,5 - 28,9	RAPID THREAD SC BSPT-Threading internal & external	SC BSPT-Threading internal & external	288
	6 - 20	9,9 - 39,7	RAPID THREAD SC NPT-Threading internal & external	SC NPT-Threading internal & external	289
	6 - 20	9,9 - 39,7	RAPID THREAD SC NPTF-Threading internal & external	SC NPTF-Threading internal & external	290
	1,05 - 15		RAPID THREAD SC ISO-Threading short internal (right version)	SC ISO-Threading short internal (right version)	291
	1,15 - 14,4		RAPID THREAD SC UN-Threading short internal (right Version)	SC UN-Threading short internal (right Version)	292
	1,55 - 9		RAPID THREAD SC ISO-Threading short internal (left version)	SC ISO-Threading short internal (left version)	293
	1,15 - 9,2		RAPID THREAD SC UN-Threading short internal (left version)	SC UN-Threading short internal (left version)	294

Subject to printing error or technical changes.

DRILLS/THREAD MILLING

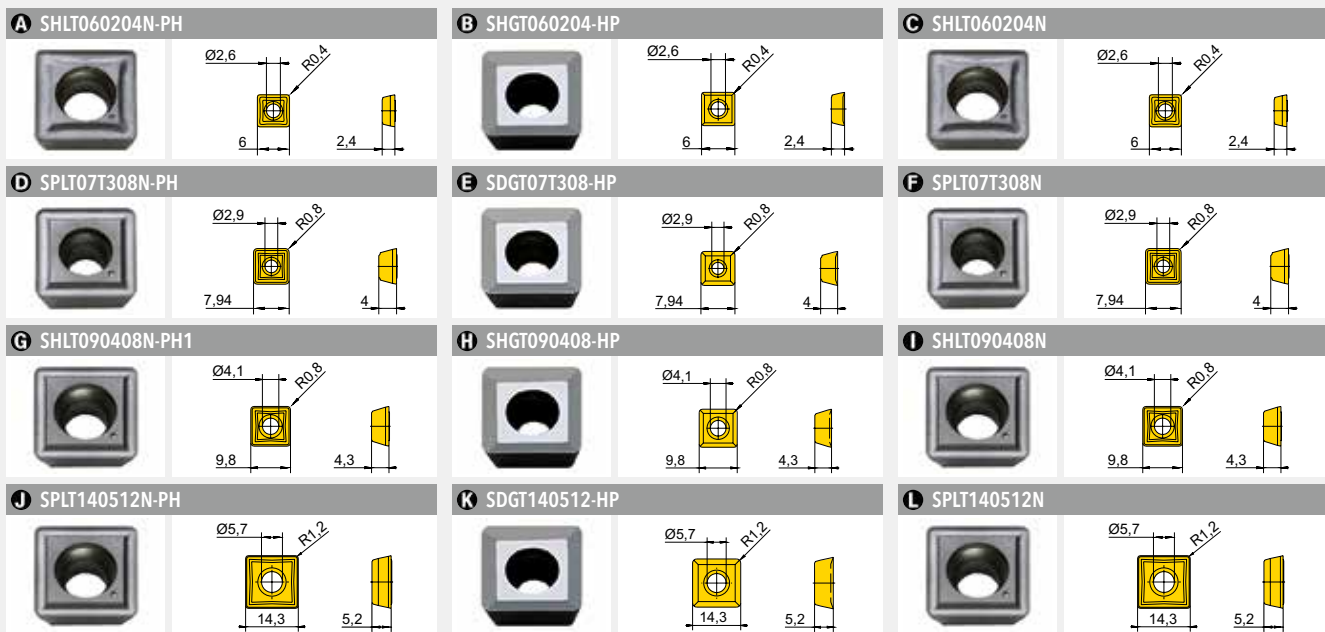
ADAPTION ACC. TO DIN 1835 B (WELDON)



Designation	D	d	L	L1	L2	a	Z	Zeff		 kg	Related Insert
BS.016.008	16	20	75	16	50	5,4	2	1	✓	0,14	A B C
BS.020.011	20	20	85	20	60	5,4	2	1	✓	0,16	A B C
BS.025.010	25	25	95	25	63	7,0	2	1	✓	0,28	D E F
BS.030.009	30	25	105	30	73	8,9	2	1	✓	0,35	G H I
BS.032.008	32	25	105	32	73	8,9	2	1	✓	0,37	G H I
BS.040.009	40	32	120	40	84	13,0	2	1	✓	0,68	J K L

QUAD DRILL PLUS BSD03A

DRILLS/THREAD MILLING



Designation	fz(min/max)	Design	Grade	IN10K	IN2005	IN2010	IN2530	IN6520			
SHLT060204N-PH ¹⁾	0,06/0,20	positive geometry R0,4									
SHGT060204-HP	0,08/0,15	non-ferrous geometry, polished R0,4									
SHLT060204N	0,08/0,25	cast iron geometry R0,4									
SPLT07T308N-PH ¹⁾	0,06/0,20	positive geometry R0,8									
SDGT07T308-HP	0,08/0,15	non-ferrous geometry, polished R0,8									
SPLT07T308N	0,10/0,25	cast iron geometry R0,8									
SHLT090408N-PH1 ¹⁾	0,07/0,22	positive geometry R0,8									
SHGT090408-HP	0,10/0,20	non-ferrous geometry, polished R0,8									
SHLT090408N	0,12/0,25	cast iron geometry R0,8									
SPLT140512N-PH ¹⁾	0,06/0,26	positive geometry R1,2									
SDGT140512-HP	0,15/0,26	non-ferrous geometry, polished R1,2									
SPLT140512N	0,18/0,30	cast iron geometry R1,2									

¹⁾ Use IN6520 grade only for peripheral inserts

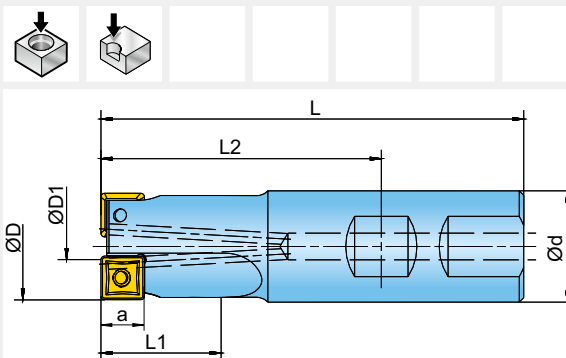
● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS		①	②
Diameter Range			
16 - 20	SM22-052-00 (0,8Nm) DS-T07S		
25	SM25-064-00 (1,1Nm) DS-T08S		
30 - 32	SM35-088-60 (3,0Nm) DS-T10S		
40	SM50-122-50 (7,5Nm) DS-T20S		

① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 1835 B (WELDON)



Designation	D	D1	d	L	L1	L2	a	Z			Related Insert
BS.010.001	10	4,5	12	70	10	47,5	4,5	1	✓	0,10	A B C
BS.011.001	11	4,5	12	70	11	47,5	4,5	1	✓	0,10	A B C
BS.013.007	13	4,5	16	75	13	51	4,5	2	✓	0,11	A B C
BS.015.002	15	4,5	20	75	15	50	5,4	2	✓	0,13	D B F
BS.018.008	18	7,5	20	75	18	50	5,4	2	✓	0,14	D B F
BS.020.010	20	9,5	20	85	20	60	5,4	2	✓	0,16	D B F
BS.024.007	24	6,5	25	95	24	63	7,0	2	✓	0,27	G H I
BS.026.007	26	5,0	25	100	26	68	10,5	2	✓	0,29	J K L
BS.030.008	30	9,0	25	105	30	73	10,5	2	✓	0,35	J K L
BS.033.007	33	12,0	25	105	33	73	10,5	2	✓	0,38	J K L
BS.036.007	36	15,0	32	110	36	74	10,5	3	✓	0,56	J K L
BS.040.008	40	14,5	32	120	40	84	13	3	✓	0,62	M N O
BS.048.007	48	22,0	40	130	48	90	13	3	✓	1,10	M N O

Diameter D1 corresponds with the minimum diameter of the through hole

SPARE PARTS



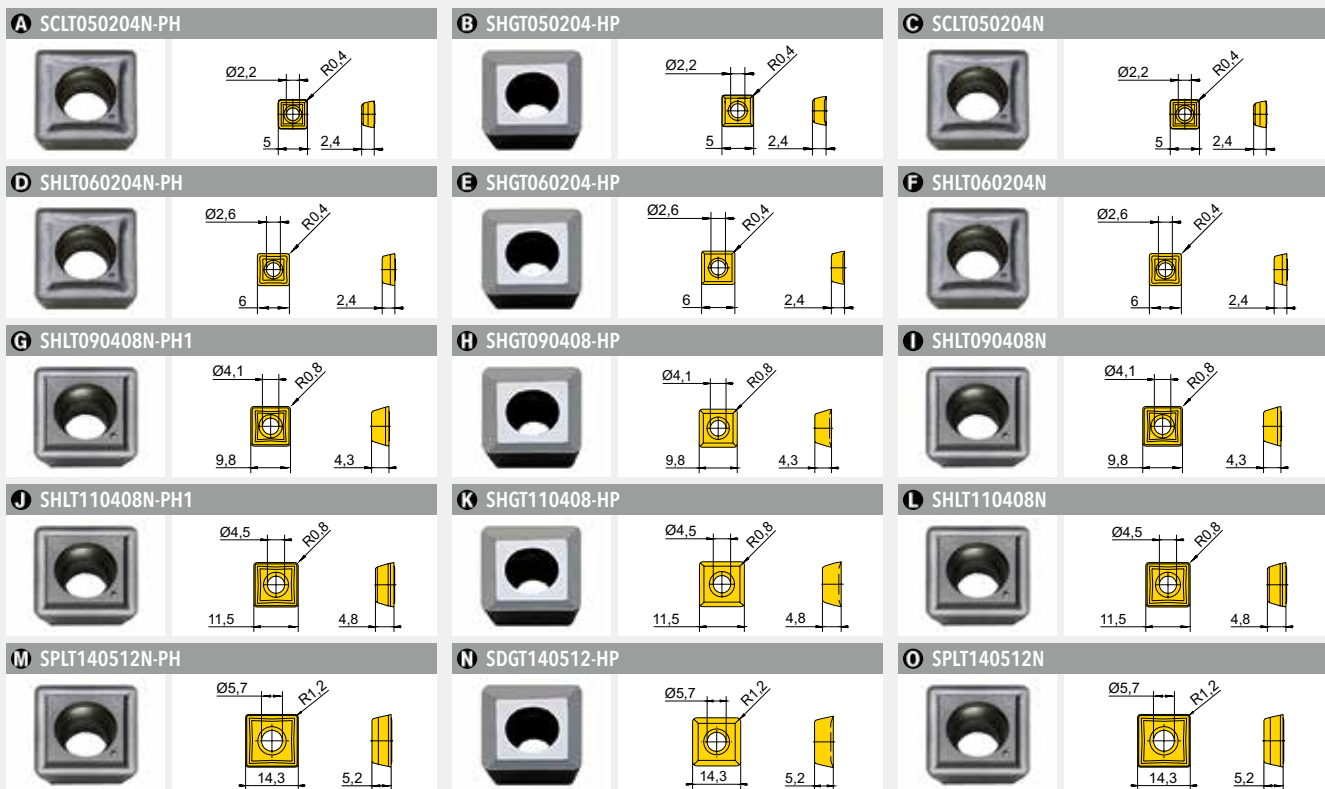
Diameter Range

10 - 13	SM20-043-00 (0,7Nm)	DS-TP06S (TX-Plus)
15 - 20	SM22-052-00 (0,8Nm)	DS-T07S
24	SM35-088-60 (3,0Nm)	DS-T10S
26 - 36	SM40-093-20 (4,5Nm)	DS-T15S
40 - 48	SM50-122-50 (7,5Nm)	DS-T20S

① = Insert screw ② = Screw driver

QUAD DRILL PLUS BSD03B

DRILLS/THREAD MILLING



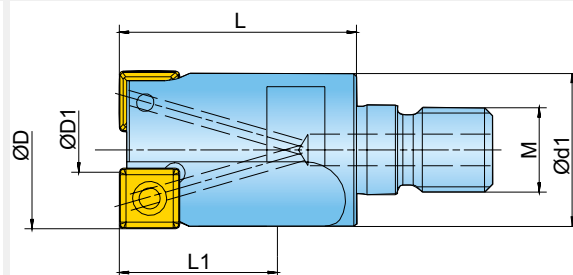
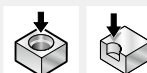
Designation	fz(min/max)	Design	Grade	IN10K	IN2005	IN2010	IN2530	IN6520			
SCLT050204N-PH ¹⁾	0,05/0,12	positive geometry R0,4									
SHGT050204-HP	0,05/0,12	non-ferrous geometry, polished R0,4									
SCLT050204N	0,05/0,12	cast iron geometry R0,4									
SHLT060204N-PH ¹⁾	0,06/0,20	positive geometry R0,4									
SHGT060204-HP	0,08/0,15	non-ferrous geometry, polished R0,4									
SHLT060204N	0,08/0,25	cast iron geometry R0,4									
SHLT090408N-PH1 ¹⁾	0,07/0,22	positive geometry R0,8									
SHGT090408-HP	0,10/0,20	non-ferrous geometry, polished R0,8									
SHLT090408N	0,12/0,25	cast iron geometry R0,8									
SHLT110408N-PH1 ¹⁾	0,08/0,23	positive geometry R0,8									
SHGT110408-HP	0,14/0,23	non-ferrous geometry, polished R0,8									
SHLT110408N	0,16/0,28	cast iron geometry R0,8									
SPLT140512N-PH ¹⁾	0,06/0,26	positive geometry R1,2									
SDGT140512-HP	0,15/0,26	non-ferrous geometry, polished R1,2									
SPLT140512N	0,18/0,30	cast iron geometry R1,2									

¹⁾ Use IN6520 grade only for peripheral inserts

● = P ● = M ● = K ● = N ● = S ○ = H

DRILLS/THREAD MILLING

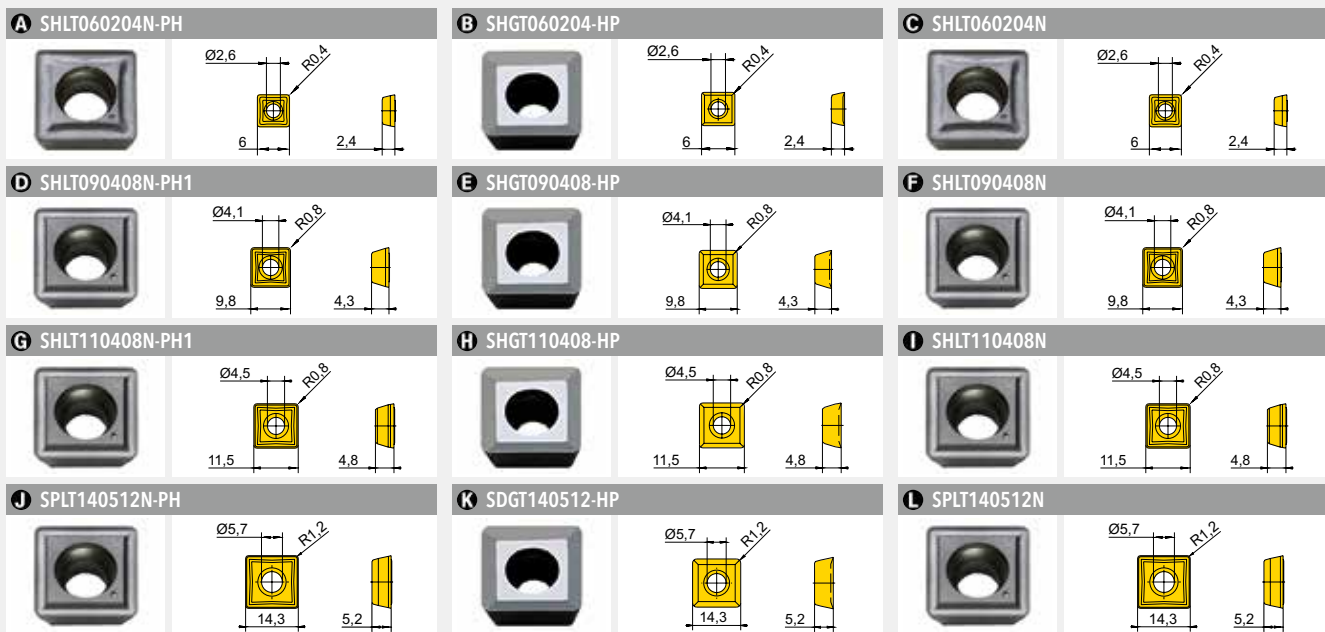
SCREW-IN TYPE ADAPTION



Designation	D	D1	d1	L	L1	M	Z	IK	kg	Related Insert
BS.015.009	15	4,5	13	30	15	8	2	✓	0,03	A B C
BS.018.010	18	7,5	13	30	18	8	2	✓	0,04	A B C
BS.020.013	20	9,5	18	35	20	10	2	✓	0,06	A B C
BS.024.013	24	6,5	21	35	24	12	2	✓	0,07	D E F
BS.026.011	26	5,0	21	40	26	12	2	✓	0,08	G H I
BS.030.014	30	9,0	29	45	30	16	2	✓	0,15	G H I
BS.033.011	33	12,0	29	50	33	16	2	✓	0,20	G H I
BS.036.011	36	15,0	29	50	36	16	2	✓	0,24	G H I
BS.040.012	40	14,5	29	60	40	16	2	✓	0,30	J K L
BS.048.008	48	22,0	29	70	48	16	2	✓	0,50	J K L

Diameter D1 corresponds with the minimum diameter of the through hole

DRILLS/THREAD MILLING



Designation	fz(min/max)	Design	Grade	IN10K	IN2005	IN2010	IN2530	IN6520			
SHLT060204N-PH ¹⁾	0,06/0,20	positive geometry R0,4									
SHGT060204-HP	0,08/0,15	non-ferrous geometry, polished R0,4									
SHLT060204N	0,08/0,25	cast iron geometry R0,4									
SHLT090408N-PH1 ¹⁾	0,07/0,22	positive geometry R0,8									
SHGT090408-HP	0,10/0,20	non-ferrous geometry, polished R0,8									
SHLT090408N	0,12/0,25	cast iron geometry R0,8									
SHLT110408N-PH1 ¹⁾	0,08/0,23	positive geometry R0,8									
SHGT110408-HP	0,14/0,23	non-ferrous geometry, polished R0,8									
SHLT110408N	0,16/0,28	cast iron geometry R0,8									
SPLT140512N-PH1 ¹⁾	0,06/0,26	positive geometry R1,2									
SDGT140512-HP	0,15/0,26	non-ferrous geometry, polished R1,2									
SPLT140512N	0,18/0,30	cast iron geometry R1,2									

¹⁾ Use IN6520 grade only for peripheral inserts

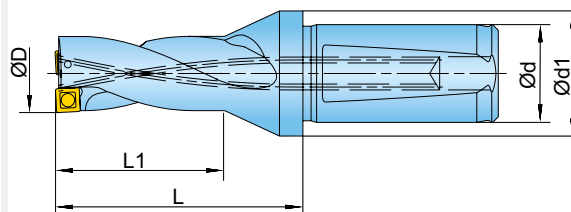
● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS		①	②
Diameter Range			
15 - 20	SM22-052-00 (0,8Nm) DS-T07S		
24	SM35-088-60 (3,0Nm) DS-T10S		
26 - 36	SM40-093-20 (4,5Nm) DS-T15S		
40 - 48	SM50-122-50 (7,5Nm) DS-T20S		

① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

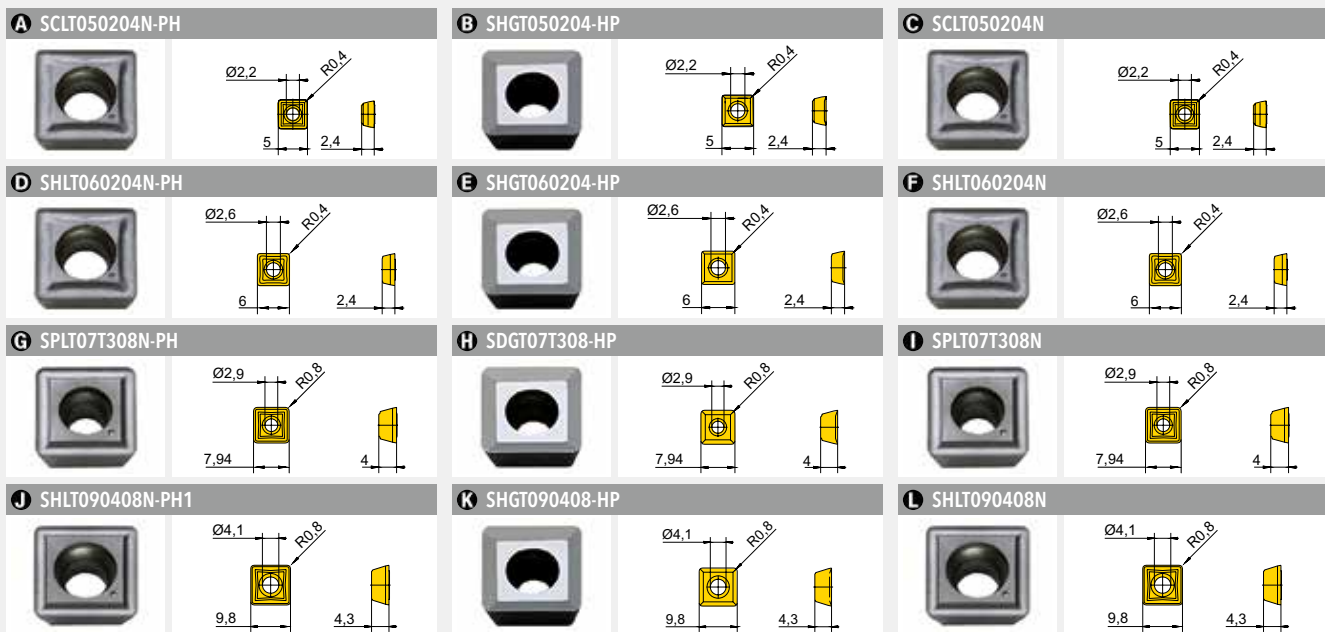
ADAPTION ACC. TO DIN 1835 E



Designation	D	d	d1	L	L1	Z	Z _{eff}	IK	kg	Related Insert
BS.013.002	13	20	25	44	26	2	1	✓	0,15	A B C
BS.014.002	14	20	25	46	28	2	1	✓	0,16	A B C
BS.015.004	15	20	25	49	30	2	1	✓	0,16	A B C
BS.016.005	16	25	32	52	32	2	1	✓	0,26	D E F
BS.017.003	17	25	32	54	34	2	1	✓	0,26	D E F
BS.018.005	18	25	32	57	36	2	1	✓	0,26	D E F
BS.019.004	19	25	32	59	38	2	1	✓	0,27	D E F
BS.020.007	20	25	32	63	40	2	1	✓	0,29	D E F
BS.021.003	21	25	32	65	42	2	1	✓	0,33	D E F
BS.022.007	22	25	32	67	44	2	1	✓	0,33	G H I
BS.023.008	23	25	45	71	46	2	1	✓	0,42	G H I
BS.024.009	24	25	45	74	48	2	1	✓	0,44	G H I
BS.025.012	25	25	45	77	50	2	1	✓	0,45	G H I
BS.026.008	26	25	45	79	52	2	1	✓	0,46	G H I
BS.027.008	27	25	45	81	54	2	1	✓	0,47	G H I
BS.028.006	28	25	45	84	56	2	1	✓	0,49	J K L
BS.029.007	29	32	45	86	58	2	1	✓	0,66	J K L

QUAD DRILL PLUS INDEXABLE DRILL 2D Ø13-Ø29

DRILLS/THREAD MILLING



Designation	fz(min/max)	Design	Grade	IN10K	IN2005	IN2010	IN2530	IN6520			
SCLT050204N-PH ¹⁾	0,05/0,12	positive geometry R0,4									
SHGT050204-HP	0,05/0,12	non-ferrous geometry, polished R0,4									
SCLT050204N	0,05/0,12	cast iron geometry R0,4									
SHLT060204N-PH ¹⁾	0,06/0,20	positive geometry R0,4									
SHGT060204-HP	0,08/0,15	non-ferrous geometry, polished R0,4									
SHLT060204N	0,08/0,25	cast iron geometry R0,4									
SPLT07T308N-PH ¹⁾	0,06/0,20	positive geometry R0,8									
SDGT07T308-HP	0,08/0,15	non-ferrous geometry, polished R0,8									
SPLT07T308N	0,10/0,25	cast iron geometry R0,8									
SHLT090408N-PH1 ¹⁾	0,07/0,22	positive geometry R0,8									
SHGT090408-HP	0,10/0,20	non-ferrous geometry, polished R0,8									
SHLT090408N	0,12/0,25	cast iron geometry R0,8									

¹⁾ Use IN6520 grade only for peripheral inserts

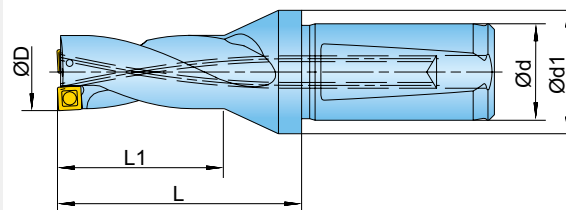
● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS		①	②
Diameter Range			
13 - 15	SM20-043-00 (0,7Nm) DS-TP06S (TX-Plus)		
16 - 21	SM22-052-00 (0,8Nm) DS-T07S		
22 - 27	SM25-064-00 (1,1Nm) DS-T08S		
28 - 29	SM35-088-60 (3,0Nm) DS-T10S		

① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

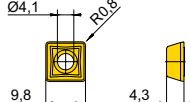
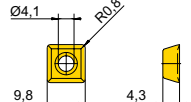
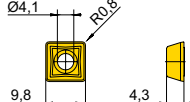
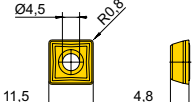
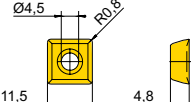
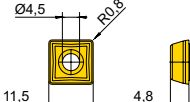
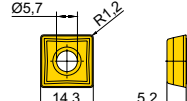
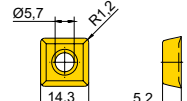
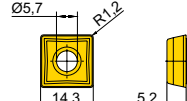
ADAPTION ACC. TO DIN 1835 E



Designation	D	d	d1	L	L1	Z	Z _{eff}	IK	kg	Related Insert
BS.030.010	30	32	55	91	60	2	1	✓	0,78	A B C
BS.031.006	31	32	55	94	62	2	1	✓	0,81	A B C
BS.032.009	32	32	55	96	64	2	1	✓	0,84	A B C
BS.033.008	33	32	55	99	66	2	1	✓	0,87	A B C
BS.034.006	34	32	55	101	68	2	1	✓	0,89	D E F
BS.035.006	35	32	55	104	70	2	1	✓	0,92	D E F
BS.036.008	36	32	55	107	72	2	1	✓	0,96	D E F
BS.037.006	37	32	55	110	74	2	1	✓	0,97	D E F
BS.038.006	38	32	55	113	76	2	1	✓	1,00	D E F
BS.039.006	39	32	55	115	78	2	1	✓	1,05	D E F
BS.040.013	40	32	60	118	80	2	1	✓	1,10	D E F
BS.041.003	41	40	60	121	82	2	1	✓	1,48	D E F
BS.042.007	42	40	60	123	84	2	1	✓	1,50	G H I
BS.043.006	43	40	60	126	86	2	1	✓	1,55	G H I
BS.044.003	44	40	60	128	88	2	1	✓	1,60	G H I
BS.045.003	45	40	60	132	90	2	1	✓	1,66	G H I
BS.046.003	46	40	60	135	92	2	1	✓	1,71	G H I
BS.047.003	47	40	60	137	94	2	1	✓	1,76	G H I
BS.048.004	48	40	60	140	96	2	1	✓	1,84	G H I
BS.049.003	49	40	60	142	98	2	1	✓	1,86	G H I
BS.050.003	50	40	60	145	100	2	1	✓	1,93	G H I

QUAD DRILL PLUS INDEXABLE DRILL 2D Ø30-Ø50

DRILLS/THREAD MILLING

A SHLT090408N-PH1			B SHGT090408-HP			C SHLT090408N					
											
D SHLT110408N-PH1			E SHGT110408-HP			F SHLT110408N					
											
G SPLT140512N-PH			H SDGT140512-HP			I SPLT140512N					
											
Designation	fz(min/max)	Design	Grade	IN10K	IN2005	IN2010	IN2530	IN6520			
SHLT090408N-PH1 ¹⁾	0,07/0,22	positive geometry R0,8									
SHGT090408-HP	0,10/0,20	non-ferrous geometry, polished R0,8									
SHLT090408N	0,12/0,25	cast iron geometry R0,8									
SHLT110408N-PH1 ¹⁾	0,08/0,23	positive geometry R0,8									
SHGT110408-HP	0,14/0,23	non-ferrous geometry, polished R0,8									
SHLT110408N	0,16/0,28	cast iron geometry R0,8									
SPLT140512N-PH ¹⁾	0,06/0,26	positive geometry R1,2									
SDGT140512-HP	0,15/0,26	non-ferrous geometry, polished R1,2									
SPLT140512N	0,18/0,30	cast iron geometry R1,2									

¹⁾ Use IN6520 grade only for peripheral inserts

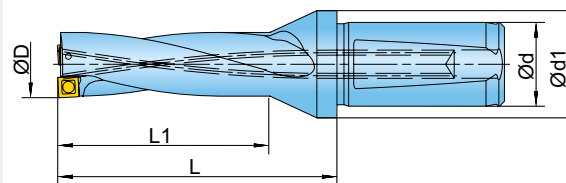
● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS	①	②
Diameter Range		
30 - 33	SM35-088-60 (3,0Nm) DS-T10S	
34 - 41	SM40-093-20 (4,5Nm) DS-T15S	
42 - 50	SM50-122-50 (7,5Nm) DS-T20S	

① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

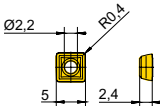
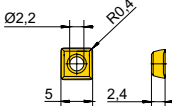
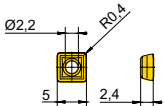
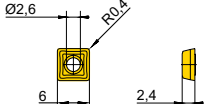
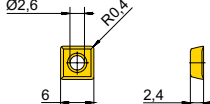
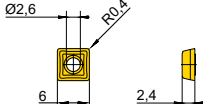
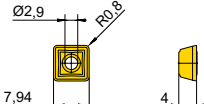
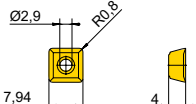
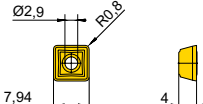
ADAPTION ACC. TO DIN 1835 E



Designation	D	d	d1	L	L1	Z	Z _{eff}	IK	kg	Related Insert
BS.013.003	12,5	20	25	57	38	2	1	✓	0,16	A B C
BS.013.004	13	20	25	57	39	2	1	✓	0,16	A B C
BS.014.003	13,5	20	25	60	41	2	1	✓	0,16	A B C
BS.014.004	14	20	25	60	42	2	1	✓	0,17	A B C
BS.015.005	14,5	20	25	64	44	2	1	✓	0,17	A B C
BS.015.006	15	20	25	64	45	2	1	✓	0,17	A B C
BS.016.010	15,5	25	32	68	47	2	1	✓	0,29	D E F
BS.016.006	16	25	32	68	48	2	1	✓	0,30	D E F
BS.017.006	16,5	25	32	71	50	2	1	✓	0,30	D E F
BS.017.004	17	25	32	71	51	2	1	✓	0,30	D E F
BS.018.009	17,5	25	32	75	53	2	1	✓	0,31	D E F
BS.018.006	18	25	32	75	54	2	1	✓	0,32	D E F
BS.019.007	18,5	25	32	78	55	2	1	✓	0,32	D E F
BS.019.005	19	25	32	78	57	2	1	✓	0,32	D E F
BS.020.012	19,5	25	32	83	59	2	1	✓	0,33	D E F
BS.020.008	20	25	32	83	60	2	1	✓	0,34	D E F
BS.021.006	20,5	25	32	86	61	2	1	✓	0,35	D E F
BS.021.004	21	25	32	86	63	2	1	✓	0,36	D E F
BS.022.006	21,5	25	32	89	64	2	1	✓	0,37	D E F
BS.022.008	22	25	32	89	66	2	1	✓	0,37	G H I
BS.023.007	22,5	25	45	94	67	2	1	✓	0,42	G H I
BS.023.009	23	25	45	94	69	2	1	✓	0,45	G H I
BS.024.010	23,5	25	45	98	70	2	1	✓	0,47	G H I
BS.024.011	24	25	45	98	72	2	1	✓	0,48	G H I
BS.025.013	24,5	25	45	102	74	2	1	✓	0,49	G H I
BS.025.014	25	25	45	102	75	2	1	✓	0,50	G H I
BS.026.013	25,5	25	45	105	78	2	1	✓	0,51	G H I
BS.026.009	26	25	45	105	78	2	1	✓	0,52	G H I
BS.027.009	26,5	25	45	108	79	2	1	✓	0,52	G H I
BS.027.010	27	25	45	108	81	2	1	✓	0,53	G H I
BS.028.009	27,5	25	45	112	84	2	1	✓	0,54	G H I

QUAD DRILL PLUS INDEXABLE DRILL 3D Ø12,5-Ø27,5

DRILLS/THREAD MILLING

A SCLT050204N-PH			B SHGT050204-HP			C SCLT050204N					
											
D SHLT060204N-PH			E SHGT060204-HP			F SHLT060204N					
											
G SPLT07T308N-PH			H SDGT07T308-HP			I SPLT07T308N					
											
Designation	fz(min/max)	Design	Grade	IN10K	IN2005	IN2010	IN2530	IN6520			
SCLT050204N-PH ¹⁾	0,05/0,12	positive geometry R0,4									
SHGT050204-HP	0,05/0,12	non-ferrous geometry, polished R0,4									
SCLT050204N	0,05/0,12	cast iron geometry R0,4									
SHLT060204N-PH ¹⁾	0,06/0,20	positive geometry R0,4									
SHGT060204-HP	0,08/0,15	non-ferrous geometry, polished R0,4									
SHLT060204N	0,08/0,25	cast iron geometry R0,4									
SPLT07T308N-PH ¹⁾	0,06/0,20	positive geometry R0,8									
SDGT07T308-HP	0,08/0,15	non-ferrous geometry, polished R0,8									
SPLT07T308N	0,10/0,25	cast iron geometry R0,8									

¹⁾ Use IN6520 grade only for peripheral inserts

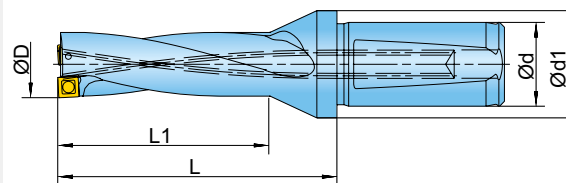
● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS		①	②
Diameter Range			
12,5 - 15	SM20-043-00 (0,7Nm) DS-TP06S (TX-Plus)		
15,5 - 21,5	SM22-052-00 (0,8Nm) DS-T07S		
22 - 27,5	SM25-064-00 (1,1Nm) DS-T08S		

① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

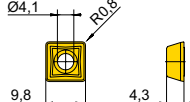
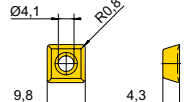
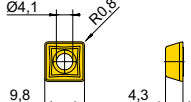
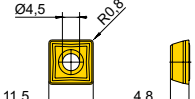
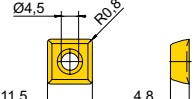
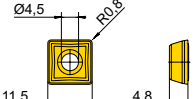
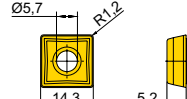
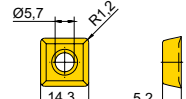
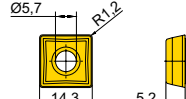
ADAPTION ACC. TO DIN 1835 E



Designation	D	d	d1	L	L1	Z	Z _{eff}	IK	kg	Related Insert
BS.028.007	28	25	45	112	84	2	1	✓	0,56	ABC
BS.029.008	28,5	32	45	115	85	2	1	✓	0,72	ABC
BS.029.009	29	32	45	115	87	2	1	✓	0,75	ABC
BS.030.013	29,5	32	55	121	88	2	1	✓	0,84	ABC
BS.030.011	30	32	55	121	90	2	1	✓	0,87	ABC
BS.031.007	31	32	55	125	93	2	1	✓	0,90	ABC
BS.032.010	32	32	55	128	96	2	1	✓	0,93	ABC
BS.033.009	33	32	55	132	99	2	1	✓	0,97	ABC
BS.034.007	34	32	55	135	102	2	1	✓	1,01	DEF
BS.035.010	34,5	32	55	139	104	2	1	✓	1,04	DEF
BS.035.007	35	32	55	139	105	2	1	✓	1,05	DEF
BS.036.009	36	32	55	143	108	2	1	✓	1,10	DEF
BS.037.007	37	32	55	147	111	2	1	✓	1,11	DEF
BS.038.010	37,5	32	55	151	113	2	1	✓	1,14	DEF
BS.038.007	38	32	55	151	114	2	1	✓	1,17	DEF
BS.039.007	39	32	55	154	117	2	1	✓	1,23	DEF
BS.040.010	40	32	60	158	120	2	1	✓	1,31	DEF
BS.041.007	40,5	32	60	162	122	2	1	✓	1,39	DEF
BS.041.004	41	40	60	162	123	2	1	✓	1,48	DEF
BS.042.008	42	40	60	165	126	2	1	✓	1,62	GHI
BS.043.007	43	40	60	169	129	2	1	✓	1,78	GHI
BS.044.004	44	40	60	172	132	2	1	✓	1,83	GHI
BS.045.004	45	40	60	177	135	2	1	✓	1,92	GHI
BS.046.004	46	40	60	181	138	2	1	✓	1,99	GHI
BS.047.006	46,5	40	60	184	140	2	1	✓	1,96	GHI
BS.047.004	47	40	60	184	141	2	1	✓	2,05	GHI
BS.048.005	48	40	60	188	144	2	1	✓	2,11	GHI
BS.049.004	49	40	60	191	147	2	1	✓	2,16	GHI
BS.050.004	50	40	60	195	150	2	1	✓	2,26	GHI
BS.051.003	50,5	40	60	198	152	2	1	✓	2,31	GHI

QUAD DRILL PLUS INDEXABLE DRILL 3D Ø28-Ø50,5

DRILLS/THREAD MILLING

A SHLT090408N-PH1			B SHGT090408-HP			C SHLT090408N					
											
D SHLT110408N-PH1			E SHGT110408-HP			F SHLT110408N					
											
G SPLT140512N-PH			H SDGT140512-HP			I SPLT140512N					
											
Designation	fz(min/max)	Design	Grade	IN10K	IN2005	IN2010	IN2530	IN6520			
SHLT090408N-PH1 ¹⁾	0,07/0,22	positive geometry R0,8									
SHGT090408-HP	0,10/0,20	non-ferrous geometry, polished R0,8									
SHLT090408N	0,12/0,25	cast iron geometry R0,8									
SHLT110408N-PH1 ¹⁾	0,08/0,23	positive geometry R0,8									
SHGT110408-HP	0,14/0,23	non-ferrous geometry, polished R0,8									
SHLT110408N	0,16/0,28	cast iron geometry R0,8									
SPLT140512N-PH ¹⁾	0,06/0,26	positive geometry R1,2									
SDGT140512-HP	0,15/0,26	non-ferrous geometry, polished R1,2									
SPLT140512N	0,18/0,30	cast iron geometry R1,2									

¹⁾ Use IN6520 grade only for peripheral inserts

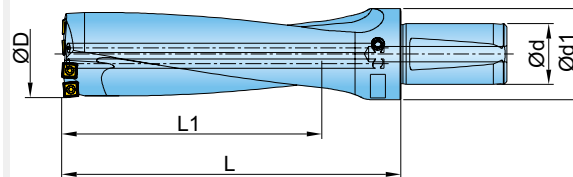
● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS	①	②
Diameter Range		
28 - 33	SM35-088-60 (3,0Nm) DS-T10S	
34 - 41	SM40-093-20 (4,5Nm) DS-T15S	
42 - 50,5	SM50-122-50 (7,5Nm) DS-T20S	

① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

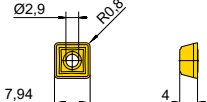
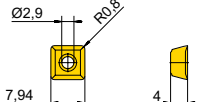
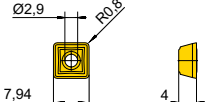
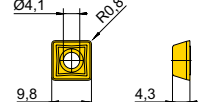
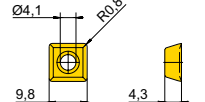
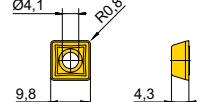
ADAPTION ACC. TO DIN 1835 E



Designation	D	d	d1	L	L1	Z	Z _{eff}	IK	kg	Related Insert
BS.051.002	51	40	75	199	153	4	1	✓	2,25	A B C
BS.052.001	52	40	75	203	156	4	1	✓	2,35	A B C
BS.053.001	53	40	75	206	159	4	1	✓	2,45	A B C
BS.054.002	54	40	75	208	162	4	1	✓	2,55	A B C
BS.055.001	55	40	75	211	165	4	1	✓	2,65	A B C
BS.056.001	56	40	75	215	168	4	1	✓	2,75	D B F
BS.057.002	57	40	75	220	171	4	1	✓	2,85	D B F
BS.058.001	58	40	75	224	174	4	1	✓	2,95	D B F
BS.059.001	59	40	75	227	177	4	1	✓	3,07	D B F
BS.060.001	60	40	75	231	180	4	1	✓	3,15	D B F

QUAD DRILL PLUS INDEXABLE DRILL 3D Ø51 - Ø60

DRILLS/THREAD MILLING

A SPLT07T308N-PH			B SDGT07T308-HP			C SPLT07T308N					
											
D SHLT090408N-PH1			E SHGT090408-HP			F SHLT090408N					
											
Designation	fz(min/max)	Design	Grade	IN10K	IN2005	IN2010	IN2530	IN6520			
SPLT07T308N-PH ¹⁾	0,06/0,20	positive geometry R0,8									
SDGT07T308-HP	0,08/0,15	non-ferrous geometry, polished R0,8									
SPLT07T308N	0,10/0,25	cast iron geometry R0,8									
SHLT090408N-PH1 ¹⁾	0,07/0,22	positive geometry R0,8									
SHGT090408-HP	0,10/0,20	non-ferrous geometry, polished R0,8									
SHLT090408N	0,12/0,25	cast iron geometry R0,8									

¹⁾Use IN6520 grade only for peripheral inserts

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS



Diameter Range

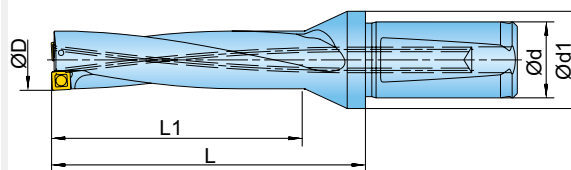
51 - 55 SM25-064-00 (1,1Nm) DS-T08S

56 - 60 SM35-088-60 (3,0Nm) DS-T10S

① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

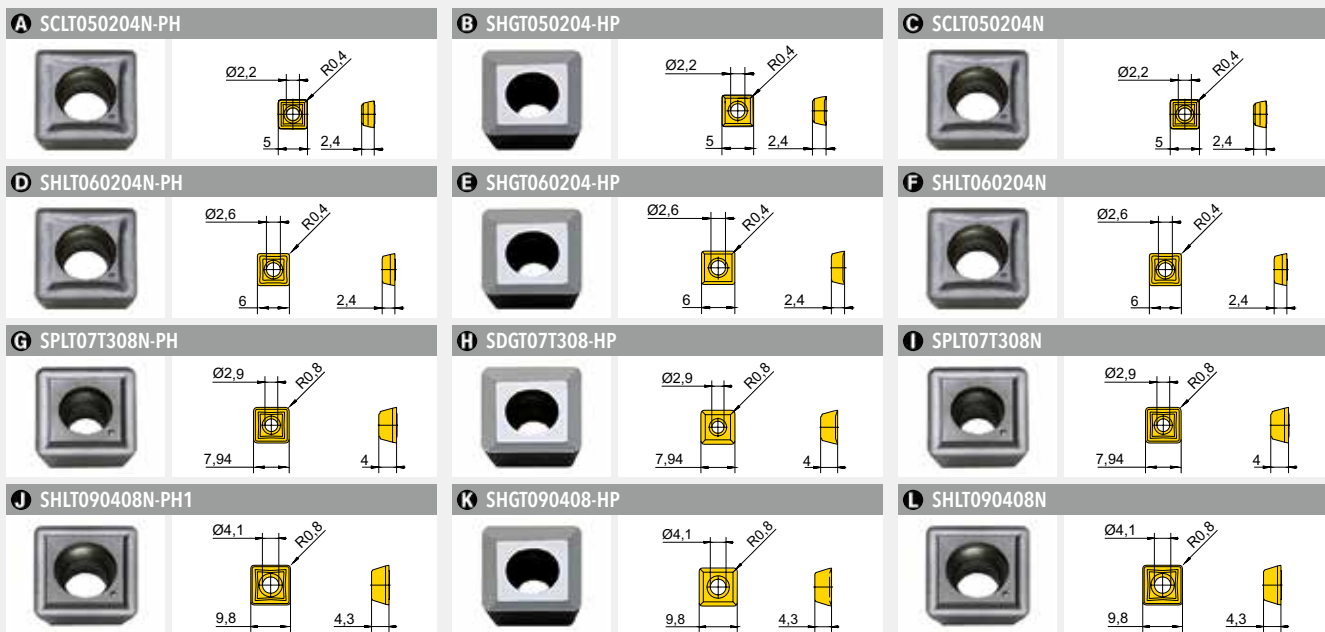
ADAPTION ACC. TO DIN 1835 E



Designation	D	d	d1	L	L1	Z	Z _{eff}	IK	kg	Related Insert
BS.013.006	13	20	25	70	52	2	1	✓	0,17	A B C
BS.014.006	14	20	25	74	56	2	1	✓	0,18	A B C
BS.015.008	15	20	25	79	60	2	1	✓	0,18	A B C
BS.016.007	16	25	32	84	64	2	1	✓	0,28	D E F
BS.017.005	17	25	32	88	68	2	1	✓	0,32	D E F
BS.018.007	18	25	32	93	72	2	1	✓	0,34	D E F
BS.019.006	19	25	32	97	76	2	1	✓	0,35	D E F
BS.020.009	20	25	32	103	80	2	1	✓	0,37	D E F
BS.021.005	21	25	32	107	84	2	1	✓	0,39	D E F
BS.022.009	22	25	32	111	88	2	1	✓	0,40	G H I
BS.023.010	23	25	45	117	92	2	1	✓	0,48	G H I
BS.024.012	24	25	45	122	96	2	1	✓	0,52	G H I
BS.025.015	25	25	45	127	100	2	1	✓	0,54	G H I
BS.026.010	26	25	45	131	104	2	1	✓	0,57	G H I
BS.027.011	27	25	45	135	108	2	1	✓	0,59	G H I
BS.028.008	28	25	45	140	112	2	1	✓	0,62	J K L
BS.029.010	29	32	45	144	116	2	1	✓	0,80	J K L

QUAD DRILL PLUS INDEXABLE DRILL 4D Ø13 - Ø29

DRILLS/THREAD MILLING



Designation	fz(min/max)	Design	Grade	IN10K	IN2005	IN2010	IN2530	IN6520			
SCLT050204N-PH ¹⁾	0,05/0,12	positive geometry R0,4									
SHGT050204-HP	0,05/0,12	non-ferrous geometry, polished R0,4									
SCLT050204N	0,05/0,12	cast iron geometry R0,4									
SHLT060204N-PH ¹⁾	0,06/0,20	positive geometry R0,4									
SHGT060204-HP	0,08/0,15	non-ferrous geometry, polished R0,4									
SHLT060204N	0,08/0,25	cast iron geometry R0,4									
SPLT07T308N-PH ¹⁾	0,06/0,20	positive geometry R0,8									
SDGT07T308-HP	0,08/0,15	non-ferrous geometry, polished R0,8									
SPLT07T308N	0,10/0,25	cast iron geometry R0,8									
SHLT090408N-PH1 ¹⁾	0,07/0,22	positive geometry R0,8									
SHGT090408-HP	0,10/0,20	non-ferrous geometry, polished R0,8									
SHLT090408N	0,12/0,25	cast iron geometry R0,8									

¹⁾ Use IN6520 grade only for peripheral inserts

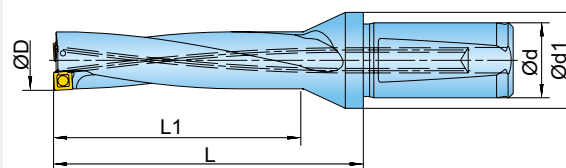
● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS		①	②
Diameter Range			
13 - 15	SM20-043-00 (0,7Nm) DS-TP06S (TX-Plus)		
16 - 21	SM22-052-00 (0,8Nm) DS-T07S		
22 - 27	SM25-064-00 (1,1Nm) DS-T08S		
28 - 29	SM35-088-60 (3,0Nm) DS-T10S		

① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

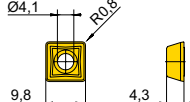
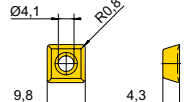
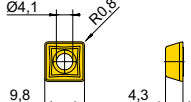
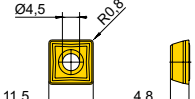
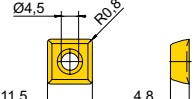
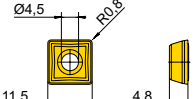
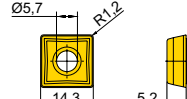
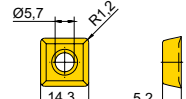
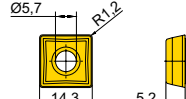
ADAPTION ACC. TO DIN 1835 E



Designation	D	d	d1	L	L1	Z	Z _{eff}	IK	kg	Related Insert
BS.030.012	30	32	55	151	120	2	1	✓	0,94	A B C
BS.031.008	31	32	55	156	124	2	1	✓	0,97	A B C
BS.032.011	32	32	55	160	128	2	1	✓	1,04	A B C
BS.033.010	33	32	55	165	132	2	1	✓	1,09	A B C
BS.034.008	34	32	55	169	136	2	1	✓	1,13	D E F
BS.035.008	35	32	55	174	140	2	1	✓	1,17	D E F
BS.036.010	36	32	55	179	144	2	1	✓	1,23	D E F
BS.037.008	37	32	55	184	148	2	1	✓	1,29	D E F
BS.038.008	38	32	55	189	152	2	1	✓	1,34	D E F
BS.039.008	39	32	55	193	156	2	1	✓	1,41	D E F
BS.040.011	40	32	60	198	160	2	1	✓	1,50	D E F
BS.041.005	41	40	60	203	164	2	1	✓	1,86	D E F
BS.042.009	42	40	60	207	168	2	1	✓	1,94	G H I
BS.043.008	43	40	60	212	172	2	1	✓	2,02	G H I
BS.044.005	44	40	60	216	176	2	1	✓	2,10	G H I
BS.045.005	45	40	60	222	180	2	1	✓	2,19	G H I
BS.046.005	46	40	60	227	184	2	1	✓	2,30	G H I
BS.047.005	47	40	60	231	188	2	1	✓	2,37	G H I
BS.048.006	48	40	60	236	192	2	1	✓	2,47	G H I
BS.049.005	49	40	60	240	196	2	1	✓	2,59	G H I
BS.050.005	50	40	60	245	200	2	1	✓	2,64	G H I

QUAD DRILL PLUS INDEXABLE DRILL 4D Ø30-Ø50

DRILLS/THREAD MILLING

A SHLT090408N-PH1			B SHGT090408-HP			C SHLT090408N					
											
D SHLT110408N-PH1			E SHGT110408-HP			F SHLT110408N					
											
G SPLT140512N-PH			H SDGT140512-HP			I SPLT140512N					
											
Designation	fz(min/max)	Design	Grade	IN10K	IN2005	IN2010	IN2530	IN6520			
SHLT090408N-PH1 ¹⁾	0,07/0,22	positive geometry R0,8									
SHGT090408-HP	0,10/0,20	non-ferrous geometry, polished R0,8									
SHLT090408N	0,12/0,25	cast iron geometry R0,8									
SHLT110408N-PH1 ¹⁾	0,08/0,23	positive geometry R0,8									
SHGT110408-HP	0,14/0,23	non-ferrous geometry, polished R0,8									
SHLT110408N	0,16/0,28	cast iron geometry R0,8									
SPLT140512N-PH ¹⁾	0,06/0,26	positive geometry R1,2									
SDGT140512-HP	0,15/0,26	non-ferrous geometry, polished R1,2									
SPLT140512N	0,18/0,30	cast iron geometry R1,2									

¹⁾ Use IN6520 grade only for peripheral inserts

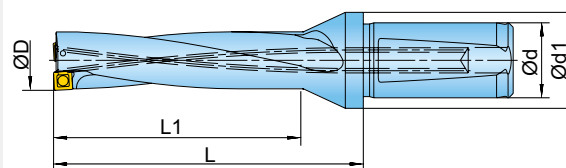
● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS	①	②
Diameter Range		
30 - 33	SM35-088-60 (3,0Nm) DS-T10S	
34 - 41	SM40-093-20 (4,5Nm) DS-T15S	
42 - 50	SM50-122-50 (7,5Nm) DS-T20S	

① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

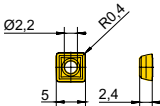
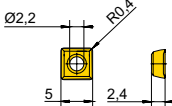
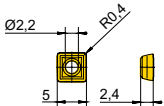
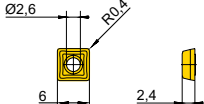
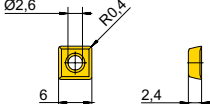
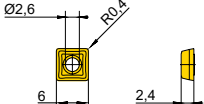
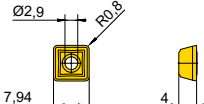
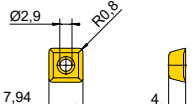
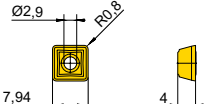
ADAPTION ACC. TO DIN 1835 E



Designation	D	d	d1	L	L1	Z	Z _{eff}	IK	kg	Related Insert
BS.013.008	13	20	25	83	65	2	1	✓	0,26	A B C
BS.014.007	14	20	25	88	70	2	1	✓	0,28	A B C
BS.015.010	15	20	25	94	75	2	1	✓	0,30	A B C
BS.016.014	16	25	32	100	80	2	1	✓	0,32	D B F
BS.017.007	17	25	32	105	85	2	1	✓	0,34	D B F
BS.018.011	18	25	32	111	90	2	1	✓	0,36	D B F
BS.019.008	19	25	32	116	95	2	1	✓	0,38	D B F
BS.020.016	20	25	32	123	100	2	1	✓	0,40	D B F
BS.021.007	21	25	32	128	105	2	1	✓	0,42	D B F
BS.022.010	22	25	32	133	110	2	1	✓	0,44	G H I
BS.023.011	23	25	45	140	115	2	1	✓	0,51	G H I
BS.024.014	24	25	45	146	120	2	1	✓	0,56	G H I
BS.025.018	25	25	45	152	125	2	1	✓	0,59	G H I
BS.026.012	26	25	45	157	130	2	1	✓	0,62	G H I
BS.027.012	27	25	45	162	135	2	1	✓	0,65	G H I

QUAD DRILL PLUS INDEXABLE DRILL 5D Ø13 - Ø27

DRILLS/THREAD MILLING

A SCLT050204N-PH			B SHGT050204-HP			C SCLT050204N					
											
D SHLT060204N-PH			E SHGT060204-HP			F SHLT060204N					
											
G SPLT07T308N-PH			H SDGT07T308-HP			I SPLT07T308N					
											
Designation	fz(min/max)	Design	Grade	IN10K	IN2005	IN2010	IN2530	IN6520			
SCLT050204N-PH ¹⁾	0,05/0,12	positive geometry R0,4									
SHGT050204-HP	0,05/0,12	non-ferrous geometry, polished R0,4									
SCLT050204N	0,05/0,12	cast iron geometry R0,4									
SHLT060204N-PH ¹⁾	0,06/0,20	positive geometry R0,4									
SHGT060204-HP	0,08/0,15	non-ferrous geometry, polished R0,4									
SHLT060204N	0,08/0,25	cast iron geometry R0,4									
SPLT07T308N-PH ¹⁾	0,06/0,20	positive geometry R0,8									
SDGT07T308-HP	0,08/0,15	non-ferrous geometry, polished R0,8									
SPLT07T308N	0,10/0,25	cast iron geometry R0,8									

¹⁾ Use IN6520 grade only for peripheral inserts

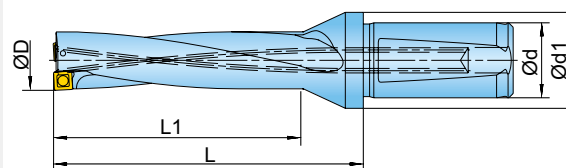
● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS		①	②
Diameter Range			
13 - 15	SM20-043-00 (0,7Nm) DS-TP06S (TX-Plus)		
16 - 21	SM22-052-00 (0,8Nm) DS-T07S		
22 - 27	SM25-064-00 (1,1Nm) DS-T08S		

① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

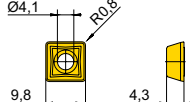
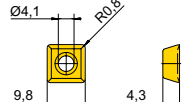
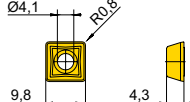
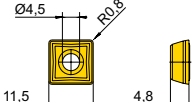
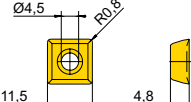
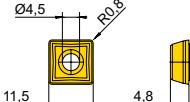
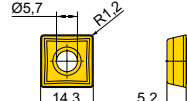
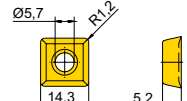
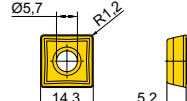
ADAPTION ACC. TO DIN 1835 E



Designation	D	d	d1	L	L1	Z	Z _{eff}	IK	kg	Related Insert
BS.028.010	28	25	45	168	140	2	1	✓	0,68	A B C
BS.029.011	29	32	45	173	145	2	1	✓	0,86	A B C
BS.030.015	30	32	55	181	150	2	1	✓	1,04	A B C
BS.031.009	31	32	55	187	155	2	1	✓	1,08	A B C
BS.032.014	32	32	55	192	160	2	1	✓	1,14	A B C
BS.033.012	33	32	55	198	165	2	1	✓	1,20	A B C
BS.034.009	34	32	55	203	170	2	1	✓	1,26	D E F
BS.035.009	35	32	55	209	175	2	1	✓	1,29	D E F
BS.036.012	36	32	55	215	180	2	1	✓	1,39	D E F
BS.037.009	37	32	55	221	185	2	1	✓	1,40	D E F
BS.038.009	38	32	55	227	190	2	1	✓	1,50	D E F
BS.039.009	39	32	55	232	195	2	1	✓	1,56	D E F
BS.040.014	40	32	60	238	200	2	1	✓	1,68	D E F
BS.041.006	41	40	60	244	205	2	1	✓	2,08	D E F
BS.050.006	50	50	75	297	250	2	1	✓	3,81	G H I

QUAD DRILL PLUS INDEXABLE DRILL 5D Ø28 - Ø50

DRILLS/THREAD MILLING

A SHLT090408N-PH1			B SHGT090408-HP			C SHLT090408N					
											
D SHLT110408N-PH1			E SHGT110408-HP			F SHLT110408N					
											
G SPLT140512N-PH			H SDGT140512-HP			I SPLT140512N					
											
Designation	fz(min/max)	Design	Grade	IN10K	IN2005	IN2010	IN2530	IN6520			
SHLT090408N-PH1 ¹⁾	0,07/0,22	positive geometry R0,8									
SHGT090408-HP	0,10/0,20	non-ferrous geometry, polished R0,8									
SHLT090408N	0,12/0,25	cast iron geometry R0,8									
SHLT110408N-PH1 ¹⁾	0,08/0,23	positive geometry R0,8									
SHGT110408-HP	0,14/0,23	non-ferrous geometry, polished R0,8									
SHLT110408N	0,16/0,28	cast iron geometry R0,8									
SPLT140512N-PH ¹⁾	0,06/0,26	positive geometry R1,2									
SDGT140512-HP	0,15/0,26	non-ferrous geometry, polished R1,2									
SPLT140512N	0,18/0,30	cast iron geometry R1,2									

¹⁾ Use IN6520 grade only for peripheral inserts

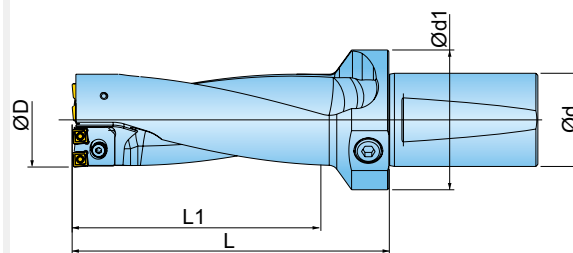
● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS	①	②
Diameter Range		
28 - 33	SM35-088-60 (3,0Nm) DS-T10S	
34 - 41	SM40-093-20 (4,5Nm) DS-T15S	
50	SM50-122-50 (7,5Nm) DS-T20S	

① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 1835 E

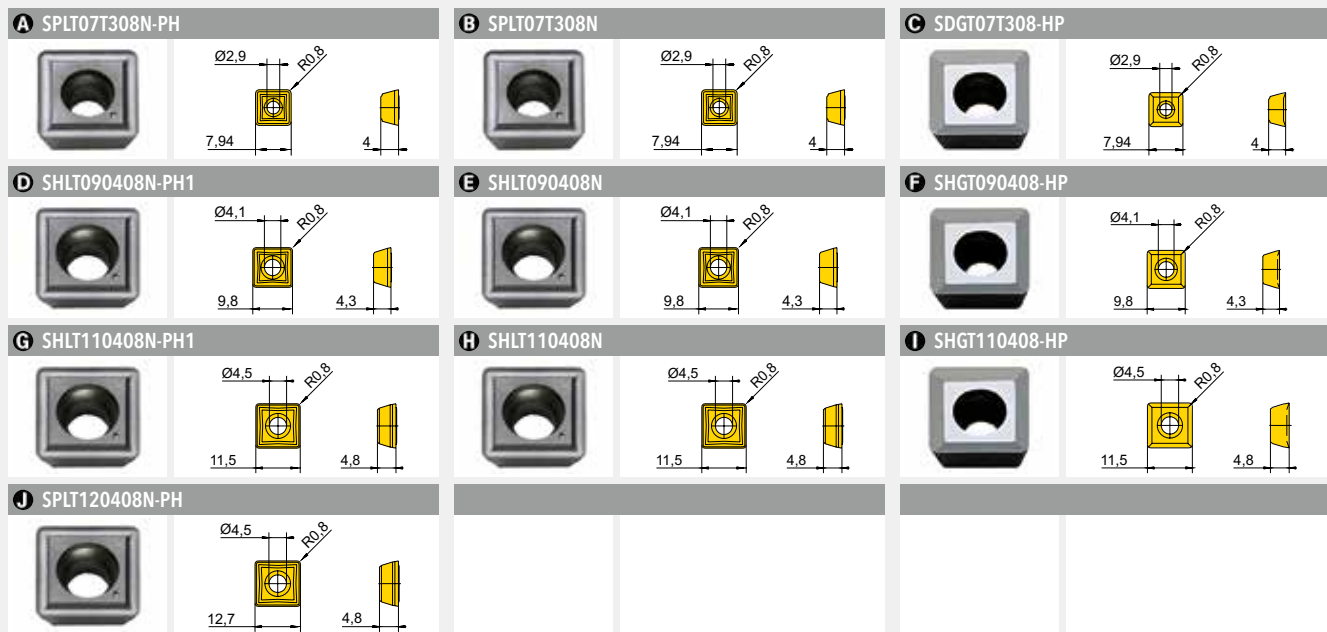


Designation	D	d	d1	L	L1	Z	Z _{eff}	Setting Plate	IK	kg	Related Insert
BS.051.004	51	50	75	170	133	4	1	-	✓	2,89	A B C
BS.051.004	52	50	75	170	133	4	1	PA-5108	✓	2,89	A B C
BS.051.004	53	50	75	170	133	4	1	PA-5109	✓	2,89	A B C
BS.054.003	54	50	75	180	140	4	1	-	✓	3,20	A B C
BS.054.003	55	50	75	180	140	4	1	PA-5108	✓	3,20	A B C
BS.054.003	56	50	75	180	140	4	1	PA-5109	✓	3,20	A B C
BS.057.003	57	50	75	201	155	4	1	-	✓	3,51	D E F
BS.057.003	58	50	75	201	155	4	1	PA-5110	✓	3,51	D E F
BS.057.003	59	50	75	201	155	4	1	PA-5111	✓	3,51	D E F
BS.057.003	60	50	75	201	155	4	1	PA-5112	✓	3,51	D E F
BS.057.003	61	50	75	201	155	4	1	PA-5113	✓	3,51	D E F
BS.057.003	62	50	75	201	155	4	1	PA-5114	✓	3,51	D E F
BS.063.002	63	50	75	215	165	4	1	-	✓	4,17	D E F
BS.063.002	64	50	75	215	165	4	1	PA-5110	✓	4,17	D E F
BS.063.002	65	50	75	215	165	4	1	PA-5111	✓	4,17	D E F
BS.063.002	66	50	75	215	165	4	1	PA-5112	✓	4,17	D E F
BS.067.002	67	50	75	240	183	4	1	-	✓	4,90	G H I
BS.067.002	68	50	75	240	183	4	1	PA-5115	✓	4,90	G H I
BS.067.002	69	50	75	240	183	4	1	PA-5116	✓	4,90	G H I
BS.067.002	70	50	75	240	183	4	1	PA-5117	✓	4,90	G H I
BS.067.002	71	50	75	240	183	4	1	PA-5118	✓	4,90	G H I
BS.067.002	72	50	75	240	183	4	1	PA-5119	✓	4,90	G H I
BS.067.002	73	50	75	240	183	4	1	PA-5120	✓	4,90	G H I
BS.074.001	74	50	75	250	200	4	1	-	✓	5,87	J
BS.074.001	75	50	75	250	200	4	1	PA-5115	✓	5,87	J
BS.074.001	76	50	75	250	200	4	1	PA-5116	✓	5,87	J
BS.074.001	77	50	75	250	200	4	1	PA-5117	✓	5,87	J
BS.074.001	78	50	75	250	200	4	1	PA-5118	✓	5,87	J
BS.074.001	79	50	75	250	200	4	1	PA-5119	✓	5,87	J
BS.074.001	80	50	75	250	200	4	1	PA-5120	✓	5,87	J

Included in delivery: body, cartridges and setting plates

QUAD DRILL PLUS CARTRIDGE INDEXABLE DRILL 2,5D Ø51 - Ø80

DRILLS/THREAD MILLING



Designation	fz(min/max)	Design	Grade	IN10K	IN2005	IN2010	IN2530	IN6520			
SPLT07T308N-PH ¹⁾	0,06/0,20	positive geometry R0,8									
SPLT07T308N	0,10/0,25	cast iron geometry R0,8									
SDGT07T308-HP	0,08/0,15	non-ferrous geometry, polished R0,8									
SHLT090408N-PH1 ¹⁾	0,07/0,22	positive geometry R0,8									
SHLT090408N	0,12/0,25	cast iron geometry R0,8									
SHGT090408-HP	0,10/0,20	non-ferrous geometry, polished R0,8									
SHLT110408N-PH1 ¹⁾	0,08/0,23	positive geometry R0,8									
SHLT110408N	0,16/0,28	cast iron geometry R0,8									
SHGT110408-HP	0,14/0,23	non-ferrous geometry, polished R0,8									
SPLT120408N-PH	0,08/0,28	positive geometry R0,8									

¹⁾ Use IN6520 grade only for peripheral inserts

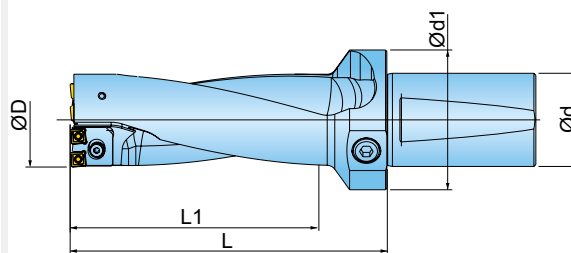
● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS					
	①	②	③	④	⑤
Diameter Range					
51 - 53	55E212R01	55E192R01	SM25-064-00 (1,1Nm)	DS-T08S	SH M4x0.7x16
54 - 56	55E223R01	55E213R01	SM25-064-00 (1,1Nm)	DS-T08S	SH M4x0.7x16
57 - 62	55F243R02	55F233R01	SM35-088-60 (3,0Nm)	DS-T10S	SH M5X0.8X16 (6,5Nm)
63 - 66	55F263R01	55F243R03	SM35-088-60 (3,0Nm)	DS-T10S	SH M5X0.8X16 (6,5Nm)
67 - 73	55G294R01	55G264R01	SM40-093-20 (4,5Nm)	DS-T15S	SH M6x1.0x20
74 - 80	55H314R00	55H294R00	SM40-093-20 (4,5Nm)	DS-T15S	SH M6x1.0x20

① = Peripheral cartridge ② = Center cartridge ③ = Insert screw ④ = Screw driver ⑤ = Clamp screw ⑥ = Shim

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 1835 E

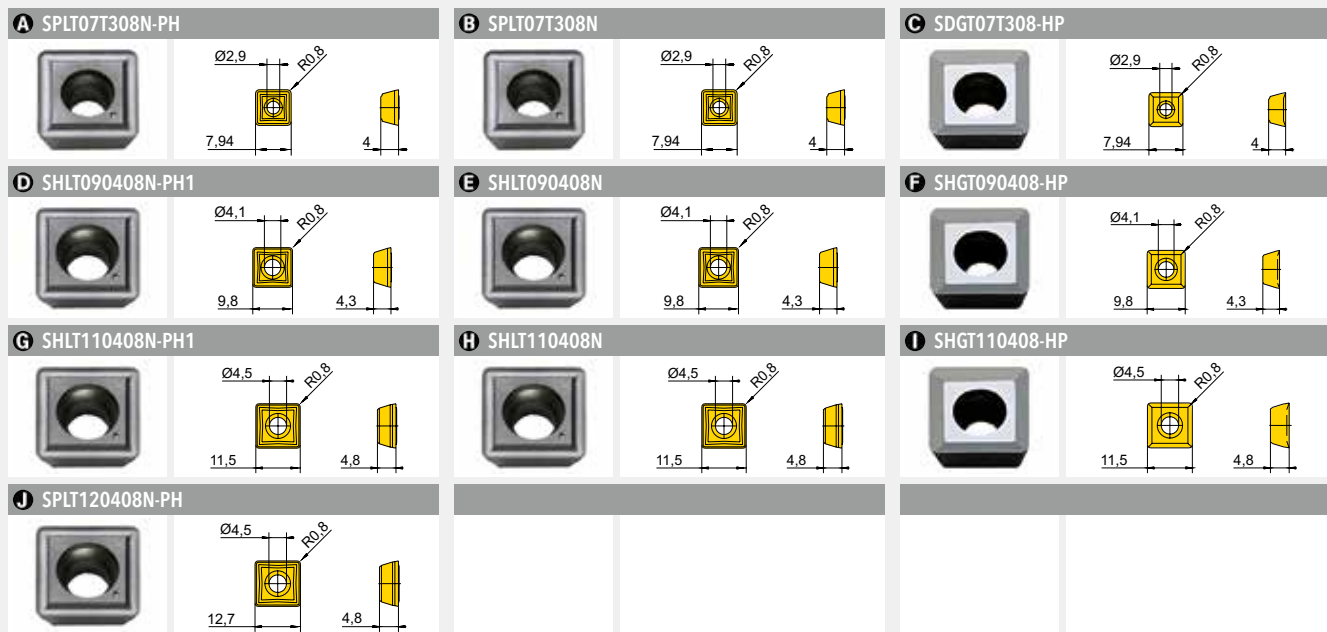


Designation	D	d	d1	L	L1	Z	Z _{eff}	Setting Plate	IK	kg	Related Insert
BS.051.005	51	50	75	223	186	4	1	-	✓	3,66	A B C
BS.051.005	52	50	75	223	186	4	1	PA-5108	✓	3,66	A B C
BS.051.005	53	50	75	223	186	4	1	PA-5109	✓	3,66	A B C
BS.054.004	54	50	75	236	196	4	1	-	✓	3,98	A B C
BS.054.004	55	50	75	236	196	4	1	PA-5108	✓	3,98	A B C
BS.054.004	56	50	75	236	196	4	1	PA-5109	✓	3,98	A B C
BS.057.004	57	50	75	263	217	4	1	-	✓	4,28	D E F
BS.057.004	58	50	75	263	217	4	1	PA-5110	✓	4,28	D E F
BS.057.004	59	50	75	263	217	4	1	PA-5111	✓	4,28	D E F
BS.057.004	60	50	75	263	217	4	1	PA-5112	✓	4,28	D E F
BS.057.004	61	50	75	263	217	4	1	PA-5113	✓	4,28	D E F
BS.057.004	62	50	75	263	217	4	1	PA-5114	✓	4,28	D E F
BS.063.003	63	50	75	281	231	4	1	-	✓	5,60	D E F
BS.063.003	64	50	75	281	231	4	1	PA-5110	✓	5,60	D E F
BS.063.003	65	50	75	281	231	4	1	PA-5111	✓	5,60	D E F
BS.063.003	66	50	75	281	231	4	1	PA-5112	✓	5,60	D E F
BS.067.003	67	50	75	313	256	4	1	-	✓	6,40	G H I
BS.067.003	68	50	75	313	256	4	1	PA-5115	✓	6,40	G H I
BS.067.003	69	50	75	313	256	4	1	PA-5116	✓	6,40	G H I
BS.067.003	70	50	75	313	256	4	1	PA-5117	✓	6,40	G H I
BS.067.003	71	50	75	313	256	4	1	PA-5118	✓	6,40	G H I
BS.067.003	72	50	75	313	256	4	1	PA-5119	✓	6,40	G H I
BS.067.003	73	50	75	313	256	4	1	PA-5120	✓	6,40	G H I
BS.074.002	74	50	75	330	280	4	1	-	✓	7,66	J
BS.074.002	75	50	75	330	280	4	1	PA-5115	✓	7,66	J
BS.074.002	76	50	75	330	280	4	1	PA-5116	✓	7,66	J
BS.074.002	77	50	75	330	280	4	1	PA-5117	✓	7,66	J
BS.074.002	78	50	75	330	280	4	1	PA-5118	✓	7,66	J
BS.074.002	79	50	75	330	280	4	1	PA-5119	✓	7,66	J
BS.074.002	80	50	75	330	280	4	1	PA-5120	✓	7,66	J

Included in delivery: body, cartridges and setting plates

QUAD DRILL PLUS CARTRIDGE INDEXABLE DRILL 3,5D Ø51 - Ø80

DRILLS/THREAD MILLING



Designation	fz(min/max)	Design	Grade	IN10K	IN2005	IN2010	IN2530	IN6520			
SPLT07T308N-PH ¹⁾	0,06/0,20	positive geometry R0,8									
SPLT07T308N	0,10/0,25	cast iron geometry R0,8									
SDGT07T308-HP	0,08/0,15	non-ferrous geometry, polished R0,8									
SHLT090408N-PH1 ¹⁾	0,07/0,22	positive geometry R0,8									
SHLT090408N	0,12/0,25	cast iron geometry R0,8									
SHGT090408-HP	0,10/0,20	non-ferrous geometry, polished R0,8									
SHLT110408N-PH1 ¹⁾	0,08/0,23	positive geometry R0,8									
SHLT110408N	0,16/0,28	cast iron geometry R0,8									
SHGT110408-HP	0,14/0,23	non-ferrous geometry, polished R0,8									
SPLT120408N-PH	0,08/0,28	positive geometry R0,8									

¹⁾ Use IN6520 grade only for peripheral inserts

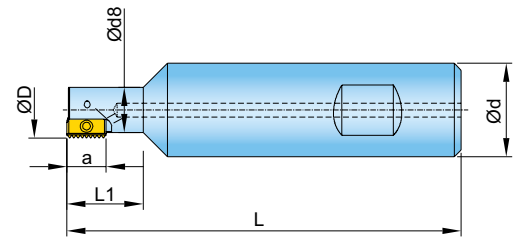
● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS					
	①	②	③	④	⑤
Diameter Range					
51 - 53	55E212R01	55E192R01	SM25-064-00 (1,1Nm)	DS-T08S	SH M4x0.7x16
54 - 56	55E223R01	55E213R01	SM25-064-00 (1,1Nm)	DS-T08S	SH M4x0.7x16
57 - 62	55F243R02	55F233R01	SM35-088-60 (3,0Nm)	DS-T10S	SH M5X0.8X16 (6,5Nm)
63 - 66	55F263R01	55F243R03	SM35-088-60 (3,0Nm)	DS-T10S	SH M5X0.8X16 (6,5Nm)
67 - 73	55G294R01	55G264R01	SM40-093-20 (4,5Nm)	DS-T15S	SH M6x1.0x20
74 - 80	55H314R00	55H294R00	SM40-093-20 (4,5Nm)	DS-T15S	SH M6x1.0x20

① = Peripheral cartridge ② = Center cartridge ③ = Insert screw ④ = Screw driver ⑤ = Clamp screw ⑥ = Shim

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 1835 B (WELDON)



Designation	D	d	d8	L	L1	a	Z	IK
12Y1H009035W4R00	9,5	20	7,5	85	14	12	1	✓
12Y1H010035W4R00	9,9	20	7,2	85	16	12	1	✓

END MILL WELDON SHANK (A=12MM)

RAPID THREAD

SPARE PARTS



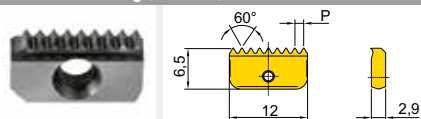
IS12 (1,3Nm)

IK12

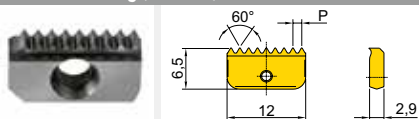
① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

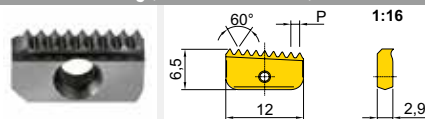
A ISO-threading (internal)



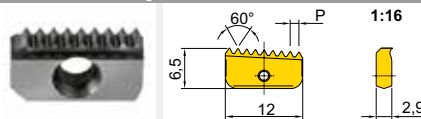
B UN-threading (internal)



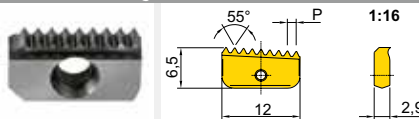
C NPT-threading (internal & external)



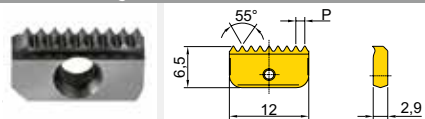
D NPTF-threading (internal & external)



E BSPT-threading (internal & external)



BSP-threading (internal & external)



Designation	Pitch	Grade	IN2005		
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ISO-threading (internal)

LYEU12050IS	0,5	A	
LYEU12075IS	0,75	A	
LYEU12100IS	1	A	
LYEU12125IS	1,25	A	
LYEU12150IS	1,5	A	

UN-threading (internal)

LYEU12320UN	32	B	
LYEU12280UN	28	B	
LYEU12240UN	24	B	
LYEU12200UN	20	B	

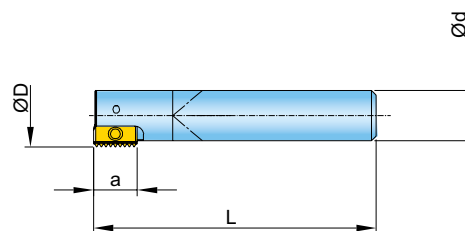
Designation	Pitch	Grade	IN2005		
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LYEU12180UN	18	B	
LYEU12160UN	16	B	
NPT-threading (internal & external)			
LYEU12180NT	18	C	
NPTF-threading (internal & external)			
LYEU12180NF	18	D	
BSPT-threading (internal & external)			
LYEU12190BT	19	E	
BSP-threading (internal & external)			
LYEU12190BW	19	F	

● = P ● = M ● = K ● = N ● = S ○ = H

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 1835 A



Designation

D

d

L

a

Z

12Y5H009089TOR00

9,9

8

125

12

1

END MILL CARBIDE SHANK (A=12MM)

RAPID THREAD

SPARE PARTS

①



②



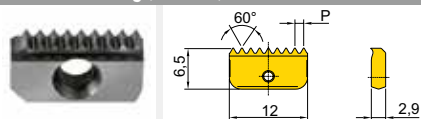
IS12 (1,3Nm)

IK12

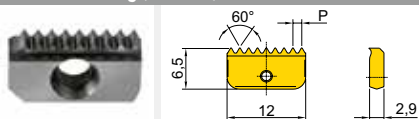
① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

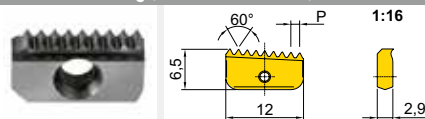
A ISO-threading (internal)



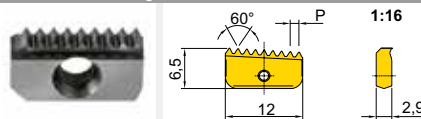
B UN-threading (internal)



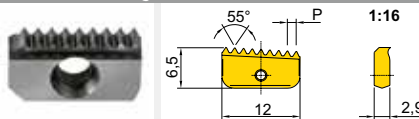
C NPT-threading (internal & external)



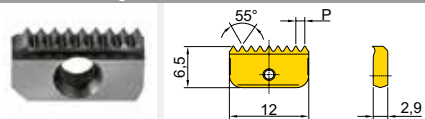
D NPTF-threading (internal & external)



E BSPT-threading (internal & external)



BSP-threading (internal & external)



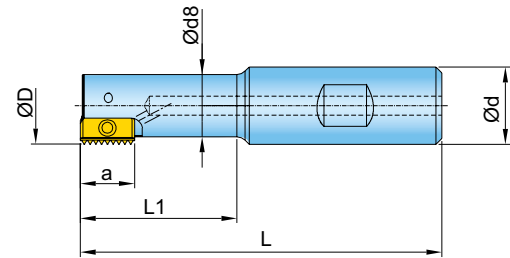
Designation	Pitch	Grade	IN2005		
ISO-threading (internal)					
LYEU12050IS	0,5	A			
LYEU12075IS	0,75	A			
LYEU12100IS	1	A			
LYEU12125IS	1,25	A			
LYEU12150IS	1,5	A			
UN-threading (internal)					
LYEU12320UN	32	B			
LYEU12280UN	28	B			
LYEU12240UN	24	B			
LYEU12200UN	20	B			

Designation	Pitch	Grade	IN2005		
LYEU12180UN	18	B			
LYEU12160UN	16	B			
NPT-threading (internal & external)					
LYEU12180NT	18	C			
NPTF-threading (internal & external)					
LYEU12180NF	18	D			
BSPT-threading (internal & external)					
LYEU12190BT	19	E			
BSP-threading (internal & external)					
LYEU12190BW	19	F			

● = P ● = M ● = K ● = N ● = S ○ = H

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 1835 B (WELDON)



Designation	D	d	d8	L	L1	a	Z	IK
12Y1J012025W4R00	12	20	8,9	75	20	14	1	✓
12Y1J014035W4R00	14,5	20	11,2	85	25	14	1	✓
12Y1J017035W4R00	17	20	13,4	85	30	14	1	✓
12Y1J020043W4R00	20	20	16	93	41	14	2	✓

END MILL WELDON SHANK (A=14MM)

RAPID THREAD

SPARE PARTS



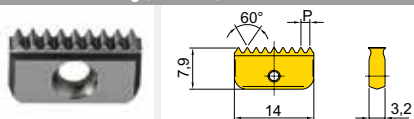
IS14 (1,3Nm)

IK14

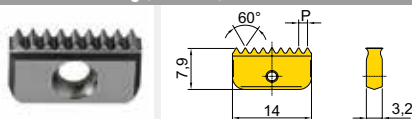
① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

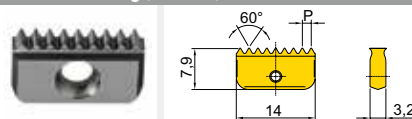
A ISO-threading (internal)



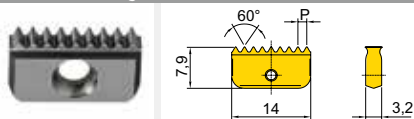
B ISO-threading (external)



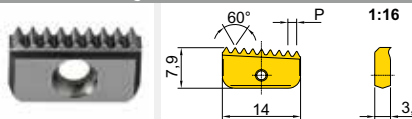
C UN-threading (internal)



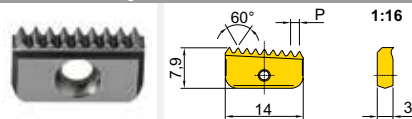
D UN-threading (external)



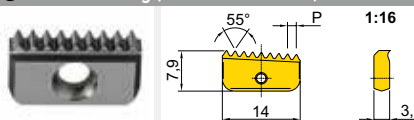
E NPT-threading (internal & external)



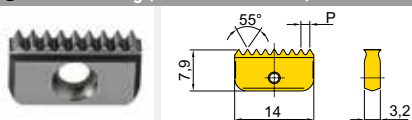
F NPFT-threading (internal & external)



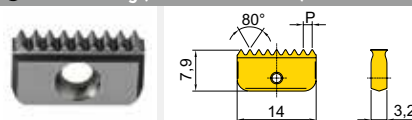
G BSPT-threading (internal & external)



H BSP-threading (internal & external)



I PG-threading (internal & external)



Designation	Pitch	Grade	IN2005		
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ISO-threading (internal)

LYEU14050IS	0,5	A			
LYEU14075IS	0,75	A			
LYEU14100IS	1	A			
LYEU14125IS	1,25	A			
LYEU14150IS	1,5	A			
LYEU14175IS	1,75	A			
LYEU14200IS	2	A			
LYEU14250IS	2,5	A			

ISO-threading (external)

LYEU14075IS-X	0,75	B			
LYEU14100IS-X	1	B			
LYEU14125IS-X	1,25	B			
LYEU14150IS-X	1,5	B			
LYEU14175IS-X	1,75	B			
LYEU14200IS-X	2	B			
LYEU14250IS-X	2,5	B			

UN-threading (internal)

LYEU14320UN	32	C			
LYEU14280UN	28	C			
LYEU14270UN	27	C			
LYEU14240UN	24	C			
LYEU14200UN	20	C			
LYEU14180UN	18	C			
LYEU14160UN	16	C			
LYEU14140UN	14	C			
LYEU14120UN	12	C			

Designation	Pitch	Grade	IN2005		
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UN-threading (external)

LYEU14100UN	10	C			
LYEU14320UN-X	32	D			
LYEU14280UN-X	28	D			
LYEU14240UN-X	24	D			
LYEU14200UN-X	20	D			
LYEU14180UN-X	18	D			
LYEU14160UN-X	16	D			
LYEU14140UN-X	14	D			
LYEU14120UN-X	12	D			

NPT-threading (internal & external)

LYEU14180NT	18	E			
LYEU14140NT	14	E			

NPFT-threading (internal & external)

LYEU14180NF	18	F			
LYEU14140NF	14	F			

BSPT-threading (internal & external)

LYEU14190BT	19	G			
LYEU14140BT	14	G			

BSP-threading (internal & external)

LYEU14240BW	24	H			
LYEU14200BW	20	H			
LYEU14190BW	19	H			
LYEU14160BW	16	H			
LYEU14140BW	14	H			

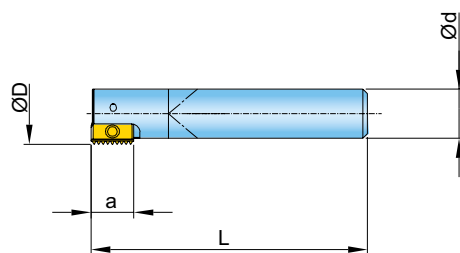
PG-threading (internal & external)

LYEU14180PG	18	I			
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● = P ● = M ● = K ● = N ● = S ○ = H

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 1835 A



Designation

D

d

L

a

Z



12Y5J013070T1R00

13,2

10

110

14

1



12Y5J013110T1R00

13,2

10

150

14

1



12Y5J015130T2R00

15,2

12

175

14

1



END MILL CARBIDE SHANK (A=14MM)

RAPID THREAD

SPARE PARTS

①



②



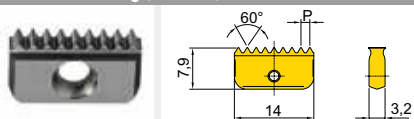
IS14 (1,3Nm)

IK14

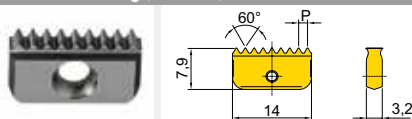
① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

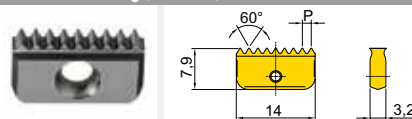
A ISO-threading (internal)



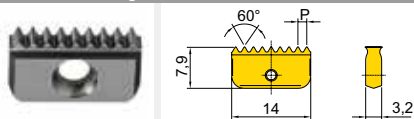
B ISO-threading (external)



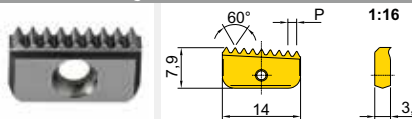
C UN-threading (internal)



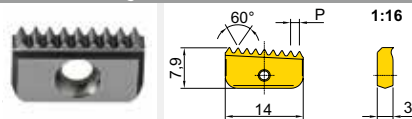
D UN-threading (external)



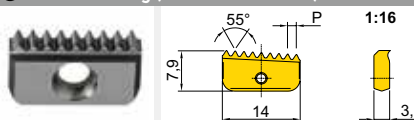
E NPT-threading (internal & external)



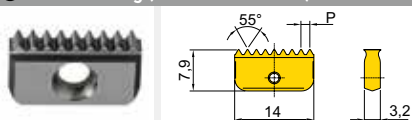
F NPFT-threading (internal & external)



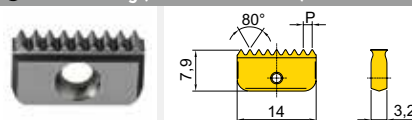
G BSPT-threading (internal & external)



H BSP-threading (internal & external)



I PG-threading (internal & external)



Designation	Pitch	Grade	IN2005		
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ISO-threading (internal)

LYEU14050IS	0,5	A	
LYEU14075IS	0,75	A	
LYEU14100IS	1	A	
LYEU14125IS	1,25	A	
LYEU14150IS	1,5	A	
LYEU14175IS	1,75	A	
LYEU14200IS	2	A	
LYEU14250IS	2,5	A	

ISO-threading (external)

LYEU14075IS-X	0,75	B	
LYEU14100IS-X	1	B	
LYEU14125IS-X	1,25	B	
LYEU14150IS-X	1,5	B	
LYEU14175IS-X	1,75	B	
LYEU14200IS-X	2	B	
LYEU14250IS-X	2,5	B	

UN-threading (internal)

LYEU14320UN	32	C	
LYEU14280UN	28	C	
LYEU14270UN	27	C	
LYEU14240UN	24	C	
LYEU14200UN	20	C	
LYEU14180UN	18	C	
LYEU14160UN	16	C	
LYEU14140UN	14	C	
LYEU14120UN	12	C	

Designation	Pitch	Grade	IN2005		
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UN-threading (external)

LYEU14100UN	10	C	
LYEU14320UN-X	32	D	
LYEU14280UN-X	28	D	
LYEU14240UN-X	24	D	
LYEU14200UN-X	20	D	
LYEU14180UN-X	18	D	
LYEU14160UN-X	16	D	
LYEU14140UN-X	14	D	
LYEU14120UN-X	12	D	

NPT-threading (internal & external)

LYEU14180NT	18	E	
LYEU14140NT	14	E	

NPFT-threading (internal & external)

LYEU14180NF	18	F	
LYEU14140NF	14	F	

BSPT-threading (internal & external)

LYEU14190BT	19	G	
LYEU14140BT	14	G	

BSP-threading (internal & external)

LYEU14240BW	24	H	
LYEU14200BW	20	H	
LYEU14190BW	19	H	
LYEU14160BW	16	H	
LYEU14140BW	14	H	

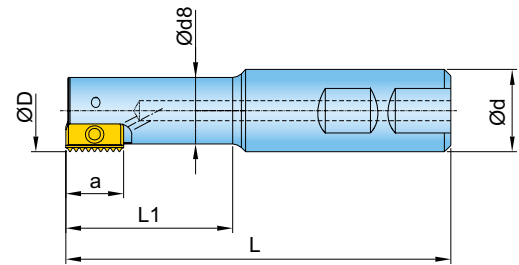
PG-threading (internal & external)

LYEU14180PG	18	I	
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● = P ● = M ● = K ● = N ● = S ○ = H

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 1835 B (WELDON)



Designation	D	d	d8	L	L1	a	Z	IK
12Y1N018035W4R00 ¹⁾	18	20	14,4	85	30	21	1	✓
12Y1N021044W4R00	21	20	16,5	94	40	21	1	✓
12Y1N025075W4R00	25	20	-	125	-	21	1	✓
12Y1N030052W5R00	30	25	24	108	52	21	2	✓

¹⁾not with insert LYEU21350IS

END MILL WELDON SHANK (A=21MM)

RAPID THREAD

SPARE PARTS



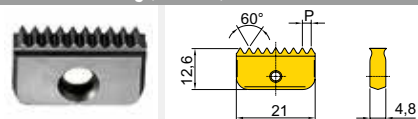
IS21 (5,2Nm)

IK21

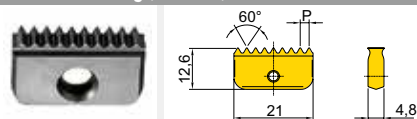
① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

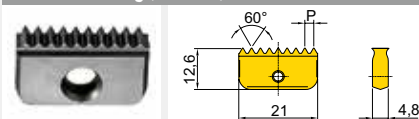
A ISO-threading (internal)



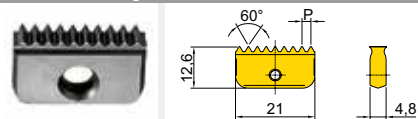
B ISO-threading (external)



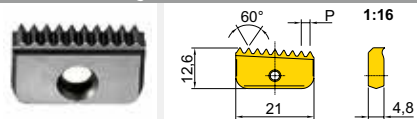
C UN-threading (internal)



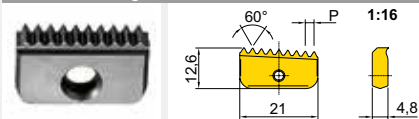
D UN-threading (external)



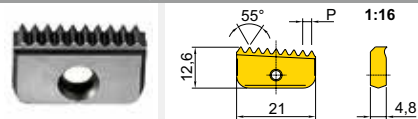
E NPT-threading (internal & external)



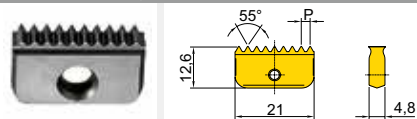
F NPTF-threading (internal & external)



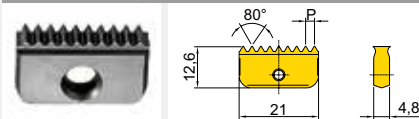
G BSPT-threading (internal & external)



H BSP-threading (internal & external)



I PG-threading (internal & external)



Designation	Pitch	Grade	IN2005		
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ISO-threading (internal)

LYEU21100IS	1	A			
LYEU21150IS	1,5	A			
LYEU21175IS	1,75	A			
LYEU21200IS	2	A			
LYEU21250IS	2,5	A			
LYEU21300IS	3	A			
LYEU21350IS	3,5	A			

ISO-threading (external)

LYEU21100IS-X	1	B			
LYEU21150IS-X	1,5	B			
LYEU21200IS-X	2	B			
LYEU21250IS-X	2,5	B			
LYEU21300IS-X	3	B			

UN-threading (internal)

LYEU21240UN	24	C			
LYEU21200UN	20	C			
LYEU21180UN	18	C			
LYEU21160UN	16	C			
LYEU21140UN	14	C			
LYEU21120UN	12	C			
LYEU21100UN	10	C			
LYEU21080UN	8	C			
LYEU21070UN	7	C			

UN-threading (external)

Designation	Pitch	Grade	IN2005		
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LYEU21240UN-X	24	D			
LYEU21200UN-X	20	D			
LYEU21180UN-X	18	D			
LYEU21160UN-X	16	D			
LYEU21140UN-X	14	D			
LYEU21120UN-X	12	D			
LYEU21100UN-X	10	D			

NPT-threading (internal & external)

LYEU21140NT	14	E			
LYEU21115NT	11,5	E			

NPTF-threading (internal & external)

LYEU21140NF	14	F			
LYEU21115NF	11,5	F			

BSPT-threading (internal & external)

LYEU21140BT	14	G			
LYEU21110BT	11	G			

BSP-threading (internal & external)

LYEU21200BW	20	H			
LYEU21190BW	19	H			
LYEU21160BW	16	H			
LYEU21140BW	14	H			
LYEU21110BW	11	H			

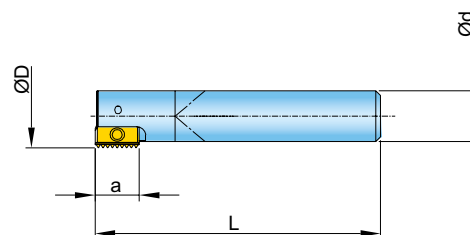
PG-threading (internal & external)

LYEU21180PG	18	I			
LYEU21160PG	16	I			

● = P ● = M ● = K ● = N ● = S ○ = H

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 1835 A



Designation

D

d

L

a

Z



12Y5N021082T3R00

21

16

130

21

1

✓

12Y5N021152T3R00

21

16

200

21

1

✓

END MILL CARBIDE SHANK (A=21MM)

RAPID THREAD

SPARE PARTS

①



②



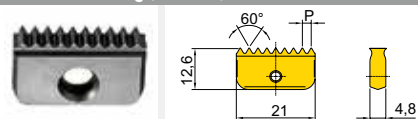
IS21 (5,2Nm)

IK21

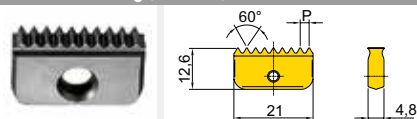
① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

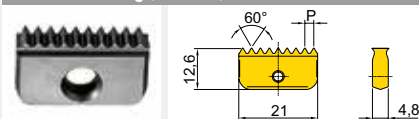
A ISO-threading (internal)



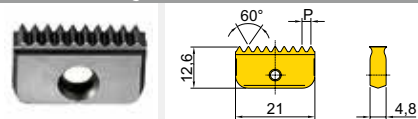
B ISO-threading (external)



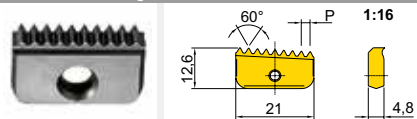
C UN-threading (internal)



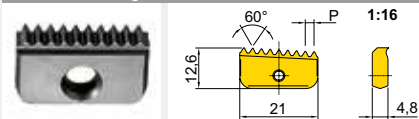
D UN-threading (external)



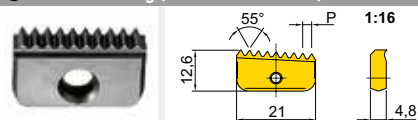
E NPT-threading (internal & external)



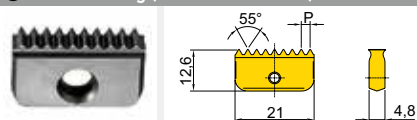
F NPTF-threading (internal & external)



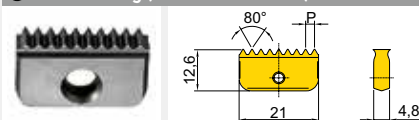
G BSPT-threading (internal & external)



H BSP-threading (internal & external)



I PG-threading (internal & external)



Designation	Pitch	Grade	IN2005		
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ISO-threading (internal)

LYEU21100IS	1	A			
LYEU21150IS	1,5	A			
LYEU21175IS	1,75	A			
LYEU21200IS	2	A			
LYEU21250IS	2,5	A			
LYEU21300IS	3	A			
LYEU21350IS	3,5	A			

ISO-threading (external)

LYEU21100IS-X	1	B			
LYEU21150IS-X	1,5	B			
LYEU21200IS-X	2	B			
LYEU21250IS-X	2,5	B			
LYEU21300IS-X	3	B			

UN-threading (internal)

LYEU21240UN	24	C			
LYEU21200UN	20	C			
LYEU21180UN	18	C			
LYEU21160UN	16	C			
LYEU21140UN	14	C			
LYEU21120UN	12	C			
LYEU21100UN	10	C			
LYEU21080UN	8	C			
LYEU21070UN	7	C			

UN-threading (external)

Designation	Pitch	Grade	IN2005		
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LYEU21240UN-X	24	D			
LYEU21200UN-X	20	D			
LYEU21180UN-X	18	D			
LYEU21160UN-X	16	D			
LYEU21140UN-X	14	D			
LYEU21120UN-X	12	D			
LYEU21100UN-X	10	D			

NPT-threading (internal & external)

LYEU21140NT	14	E			
LYEU21115NT	11,5	E			

NPTF-threading (internal & external)

LYEU21140NF	14	F			
LYEU21115NF	11,5	F			

BSPT-threading (internal & external)

LYEU21140BT	14	G			
LYEU21110BT	11	G			

BSP-threading (internal & external)

LYEU21200BW	20	H			
LYEU21190BW	19	H			
LYEU21160BW	16	H			
LYEU21140BW	14	H			
LYEU21110BW	11	H			

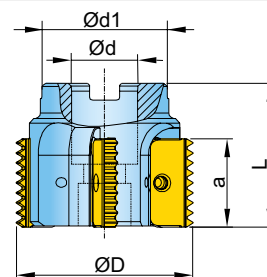
PG-threading (internal & external)

LYEU21180PG	18	I			
LYEU21160PG	16	I			

● = P ● = M ● = K ● = N ● = S ○ = H

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	L	a	Z
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12Y1N063050F1R00	63	22	40	50	21	5
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RAPID THREAD SHELL MILL (A=21MM)

SPARE PARTS



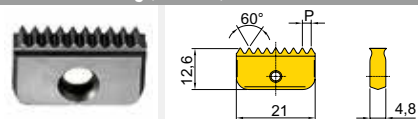
IS21 (5,2Nm)

IK21

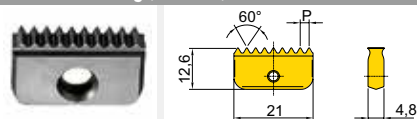
① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

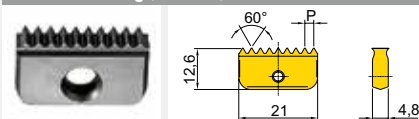
A ISO-threading (internal)



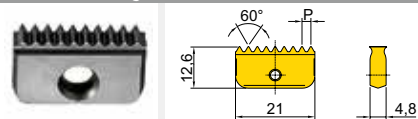
B ISO-threading (external)



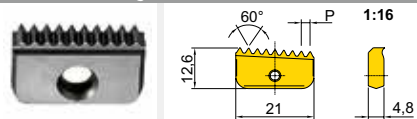
C UN-threading (internal)



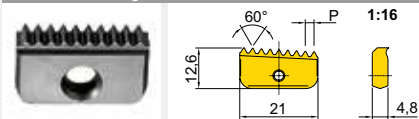
D UN-threading (external)



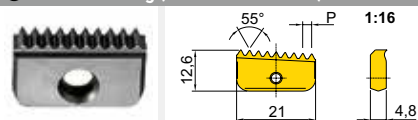
E NPT-threading (internal & external)



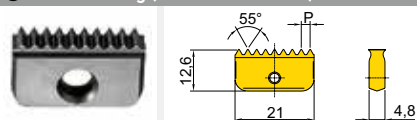
F NPTF-threading (internal & external)



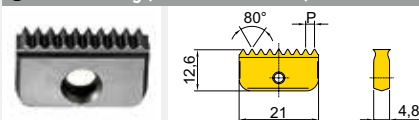
G BSPT-threading (internal & external)



H BSP-threading (internal & external)



I PG-threading (internal & external)



Designation	Pitch	Grade	IN2005
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ISO-threading (internal)

LYEU21100IS	1	A	
LYEU21150IS	1,5	A	
LYEU21175IS	1,75	A	
LYEU21200IS	2	A	
LYEU21250IS	2,5	A	
LYEU21300IS	3	A	
LYEU21350IS	3,5	A	

ISO-threading (external)

LYEU21100IS-X	1	B	
LYEU21150IS-X	1,5	B	
LYEU21200IS-X	2	B	
LYEU21250IS-X	2,5	B	
LYEU21300IS-X	3	B	

UN-threading (internal)

LYEU21240UN	24	C	
LYEU21200UN	20	C	
LYEU21180UN	18	C	
LYEU21160UN	16	C	
LYEU21140UN	14	C	
LYEU21120UN	12	C	
LYEU21100UN	10	C	
LYEU21080UN	8	C	
LYEU21070UN	7	C	

UN-threading (external)

Designation	Pitch	Grade	IN2005
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LYEU21240UN-X	24	D	
LYEU21200UN-X	20	D	
LYEU21180UN-X	18	D	
LYEU21160UN-X	16	D	
LYEU21140UN-X	14	D	
LYEU21120UN-X	12	D	
LYEU21100UN-X	10	D	

NPT-threading (internal & external)

LYEU21140NT	14	E	
LYEU21115NT	11,5	E	

NPTF-threading (internal & external)

LYEU21140NF	14	F	
LYEU21115NF	11,5	F	

BSPT-threading (internal & external)

LYEU21140BT	14	G	
LYEU21110BT	11	G	

BSP-threading (internal & external)

LYEU21200BW	20	H	
LYEU21190BW	19	H	
LYEU21160BW	16	H	
LYEU21140BW	14	H	
LYEU21110BW	11	H	

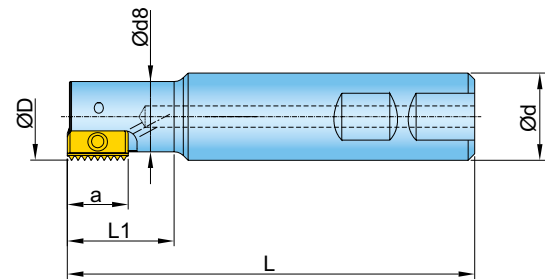
PG-threading (internal & external)

LYEU21180PG	18	I	
LYEU21160PG	16	I	

● = P ● = M ● = K ● = N ● = S ○ = H

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 1835 B (WELDON)



Designation	D	d	d8	L	L1	a	Z	IK
12Y1S029054W5R00	29	25	23	110	50	30	1	✓
12Y1S031094W5R00	31	25	-	150	-	30	1	✓
12Y1S038090W6R00	38	32	-	150	-	30	1	✓
12Y1S040070W6R00	40	32	30	130	70	30	2	✓

END MILL WELDON SHANK (A=30MM)

RAPID THREAD

SPARE PARTS



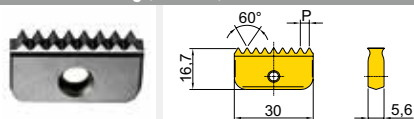
IS30 (10,0Nm)

IK30

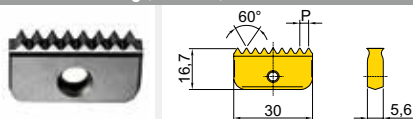
① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

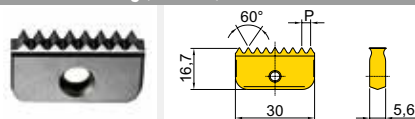
A ISO-threading (internal)



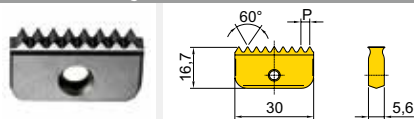
B ISO-threading (external)



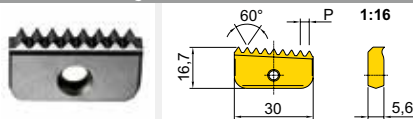
C UN-threading (internal)



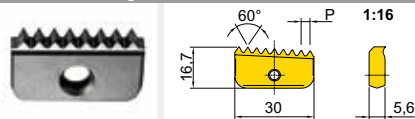
D UN-threading (external)



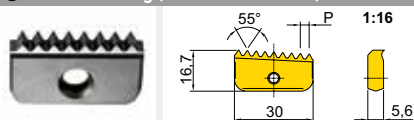
E NPT-threading (internal & external)



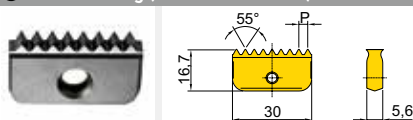
NPTF-threading (internal & external)



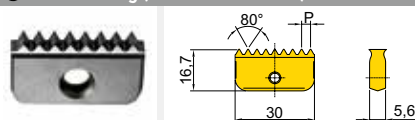
G BSPT-threading (internal & external)



H BSP-threading (internal & external)



I PG-threading (internal & external)



Designation	Pitch	Grade	IN2005
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ISO-threading (internal)

LYEU30150IS	1,5	A	
LYEU30200IS	2	A	
LYEU30300IS	3	A	
LYEU30350IS	3,5	A	
LYEU30400IS	4	A	
LYEU30450IS	4,5	A	
LYEU30500IS	5	A	

ISO-threading (external)

LYEU30150IS-X	1,5	B	
LYEU30200IS-X	2	B	
LYEU30300IS-X	3	B	
LYEU30350IS-X	3,5	B	
LYEU30400IS-X	4	B	

UN-threading (internal)

LYEU30200UN	20	C	
LYEU30180UN	18	C	
LYEU30160UN	16	C	
LYEU30140UN	14	C	
LYEU30120UN	12	C	
LYEU30100UN	10	C	
LYEU30080UN	8	C	
LYEU30060UN	6	C	

Designation	Pitch	Grade	IN2005
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UN-threading (external)

LYEU30200UN-X	20	D	
LYEU30180UN-X	18	D	
LYEU30160UN-X	16	D	
LYEU30140UN-X	14	D	
LYEU30120UN-X	12	D	
LYEU30100UN-X	10	D	
LYEU30080UN-X	8	D	
LYEU30060UN-X	6	D	

NPT-threading (internal & external)

LYEU30115NT	11,5	E	
LYEU30080NT	8	E	

NPTF-threading (internal & external)

LYEU30115NF	11,5	F	
LYEU30080NF	8	F	

BSPT-threading (internal & external)

LYEU30110BT	11	G	
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BSP-threading (internal & external)

LYEU30160BW	16	H	
LYEU30140BW	14	H	
LYEU30110BW	11	H	

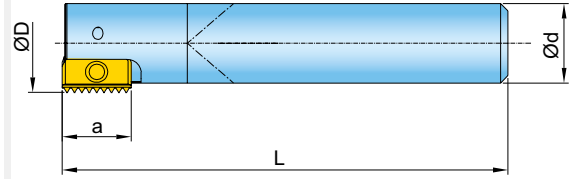
PG-threading (internal & external)

LYEU30160PG	16	I	
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● = P ● = M ● = K ● = N ● = S ○ = H

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 1835 A



Designation

D

d

L

a

Z



12Y5S027220T4R00

27

20

270

30

1



END MILL CARBIDE SHANK (A=30MM)

RAPID THREAD

SPARE PARTS



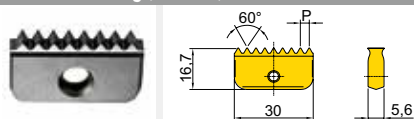
IS30 (10,0Nm)

IK30

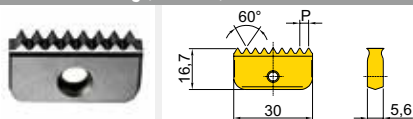
① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

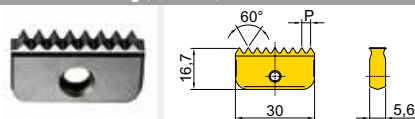
A ISO-threading (internal)



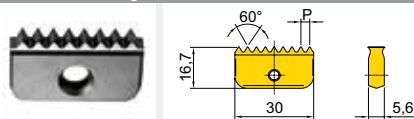
B ISO-threading (external)



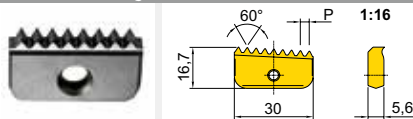
C UN-threading (internal)



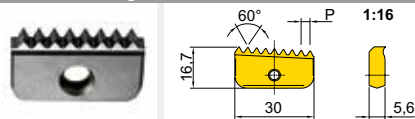
D UN-threading (external)



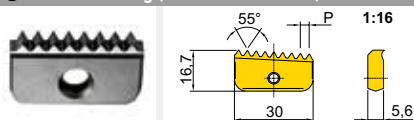
E NPT-threading (internal & external)



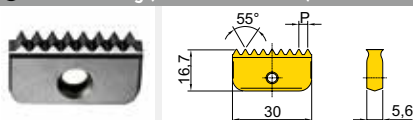
NPTF-threading (internal & external)



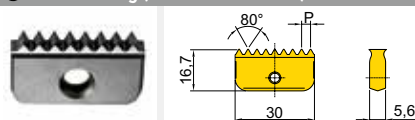
G BSPT-threading (internal & external)



H BSP-threading (internal & external)



I PG-threading (internal & external)



Designation	Pitch	Grade	IN2005
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ISO-threading (internal)			
LYEU30150IS	1,5	A	
LYEU30200IS	2	A	
LYEU30300IS	3	A	
LYEU30350IS	3,5	A	
LYEU30400IS	4	A	
LYEU30450IS	4,5	A	
LYEU30500IS	5	A	
ISO-threading (external)			
LYEU30150IS-X	1,5	B	
LYEU30200IS-X	2	B	
LYEU30300IS-X	3	B	
LYEU30350IS-X	3,5	B	
LYEU30400IS-X	4	B	
UN-threading (internal)			
LYEU30200UN	20	C	
LYEU30180UN	18	C	
LYEU30160UN	16	C	
LYEU30140UN	14	C	
LYEU30120UN	12	C	
LYEU30100UN	10	C	
LYEU30080UN	8	C	
LYEU30060UN	6	C	

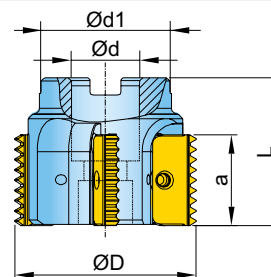
Designation	Pitch	Grade	IN2005
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UN-threading (external)			
LYEU30200UN-X	20	D	
LYEU30180UN-X	18	D	
LYEU30160UN-X	16	D	
LYEU30140UN-X	14	D	
LYEU30120UN-X	12	D	
LYEU30100UN-X	10	D	
LYEU30080UN-X	8	D	
LYEU30060UN-X	6	D	
NPT-threading (internal & external)			
LYEU30115NT	11,5	E	
LYEU30080NT	8	E	
NPTF-threading (internal & external)			
LYEU30115NF	11,5	F	
LYEU30080NF	8	F	
BSPT-threading (internal & external)			
LYEU30110BT	11	G	
BSP-threading (internal & external)			
LYEU30160BW	16	H	
LYEU30140BW	14	H	
LYEU30110BW	11	H	
PG-threading (internal & external)			
LYEU30160PG	16	I	

● = P ● = M ● = K ● = N ● = S ○ = H

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	L	a	Z
12Y1S063050F1R00	63	22	55	50	30	4
12Y1S080055F2R00	80	27	58	55	30	4
12Y1S100060F3R00	100	32	66	60	30	4

RAPID THREAD SHELL MILL (A=30MM)

SPARE PARTS



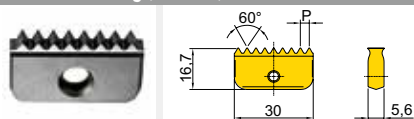
IS30 (10,0Nm)

IK30

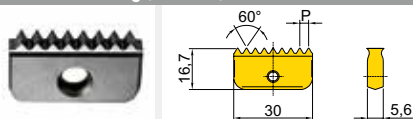
① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

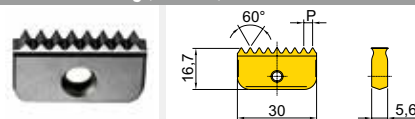
A ISO-threading (internal)



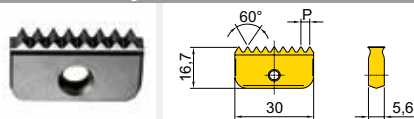
B ISO-threading (external)



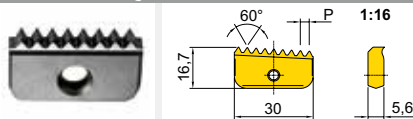
C UN-threading (internal)



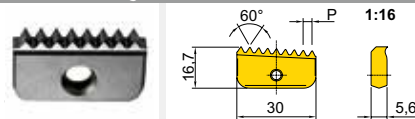
D UN-threading (external)



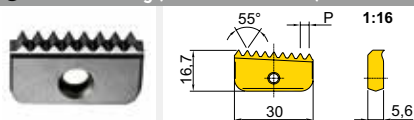
E NPT-threading (internal & external)



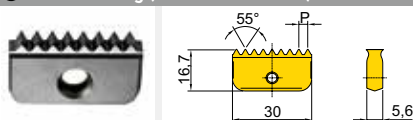
NPTF-threading (internal & external)



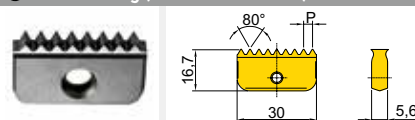
G BSPT-threading (internal & external)



H BSP-threading (internal & external)



I PG-threading (internal & external)



Designation	Pitch	Grade	IN2005
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ISO-threading (internal)			
LYEU30150IS	1,5	A	
LYEU30200IS	2	A	
LYEU30300IS	3	A	
LYEU30350IS	3,5	A	
LYEU30400IS	4	A	
LYEU30450IS	4,5	A	
LYEU30500IS	5	A	
ISO-threading (external)			
LYEU30150IS-X	1,5	B	
LYEU30200IS-X	2	B	
LYEU30300IS-X	3	B	
LYEU30350IS-X	3,5	B	
LYEU30400IS-X	4	B	
UN-threading (internal)			
LYEU30200UN	20	C	
LYEU30180UN	18	C	
LYEU30160UN	16	C	
LYEU30140UN	14	C	
LYEU30120UN	12	C	
LYEU30100UN	10	C	
LYEU30080UN	8	C	
LYEU30060UN	6	C	

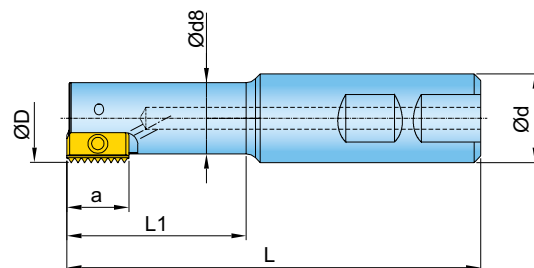
Designation	Pitch	Grade	IN2005
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UN-threading (external)			
LYEU30200UN-X	20	D	
LYEU30180UN-X	18	D	
LYEU30160UN-X	16	D	
LYEU30140UN-X	14	D	
LYEU30120UN-X	12	D	
LYEU30100UN-X	10	D	
LYEU30080UN-X	8	D	
LYEU30060UN-X	6	D	
NPT-threading (internal & external)			
LYEU30115NT	11,5	E	
LYEU30080NT	8	E	
NPTF-threading (internal & external)			
LYEU30115NF	11,5	F	
LYEU30080NF	8	F	
BSPT-threading (internal & external)			
LYEU30110BT	11	G	
BSP-threading (internal & external)			
LYEU30160BW	16	H	
LYEU30140BW	14	H	
LYEU30110BW	11	H	
PG-threading (internal & external)			
LYEU30160PG	16	I	

● = P ● = M ● = K ● = N ● = S ○ = H

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 1835 B (WELDON)



Designation

D

d

d8

L

L1

a

Z



12Y1U048083W7R00

48

40

35

153

78

40

1



12Y1U050083W7R00

50

40

38

153

78

40

2



END MILL WELDON SHANK (A=40MM)

RAPID THREAD

SPARE PARTS

①



②



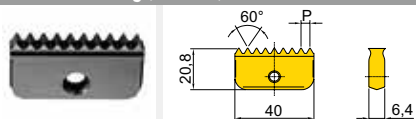
IS40 (10,0Nm)

IK40

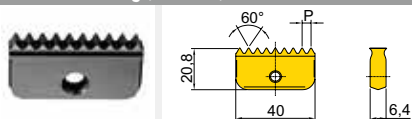
① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

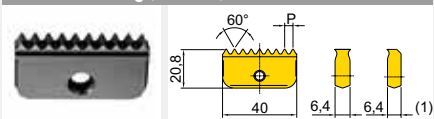
A ISO-threading (internal)



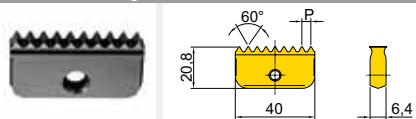
B ISO-threading (external)



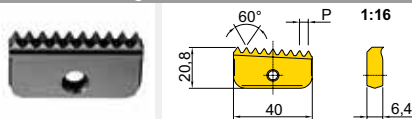
C UN-threading (internal)



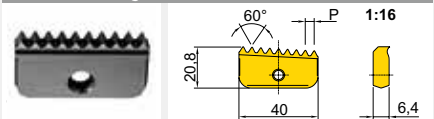
D UN-threading (external)



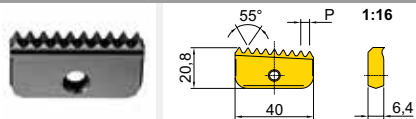
E NPT-threading (internal & external)



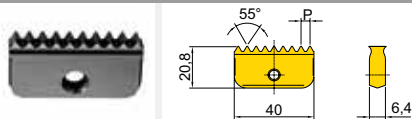
F NPTF-threading (internal & external)



G BSPT-threading (internal & external)



H BSP-threading (internal & external)



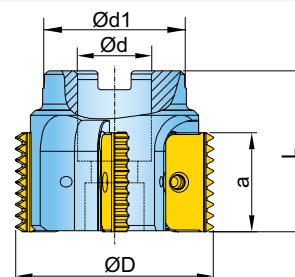
Designation	Pitch	Grade	IN2005		
ISO-threading (internal)					
LYEU40150IS	1,5	A			
LYEU40200IS	2	A			
LYEU40300IS	3	A			
LYEU40350IS	3,5	A			
LYEU40400IS	4	A			
LYEU40450IS	4,5	A			
LYEU40500IS	5	A			
LYEU40550IS	5,5	A			
LYEU40600IS	6	A			
ISO-threading (external)					
LYEU40150IS-X	1,5	B			
LYEU40200IS-X	2	B			
LYEU40300IS-X	3	B			
LYEU40400IS-X	4	B			
LYEU40500IS-X	5	B			
LYEU40600IS-X	6	B			
UN-threading (internal)					
LYEU40160UN	16	C			
LYEU40140UN	14	C			
LYEU40120UN	12	C			
LYEU40100UN	10	C			

Designation	Pitch	Grade	IN2005		
LYEU40080UN	8	C			
LYEU40060UN	6	C			
LYEU40045UN	4,5	C			
LYEU40040UN	4	C			
UN-threading (external)					
LYEU40160UN-X	16	D			
LYEU40140UN-X	14	D			
LYEU40120UN-X	12	D			
LYEU40100UN-X	10	D			
LYEU40080UN-X	8	D			
LYEU40060UN-X	6	D			
NPT-threading (internal & external)					
LYEU40115NT	11,5	E			
LYEU40080NT	8	E			
NPTF-threading (internal & external)					
LYEU40115NF	11,5	F			
LYEU40080NF	8	F			
BSPT-threading (internal & external)					
LYEU40110BT	11	G			
BSP-threading (internal & external)					
LYEU40110BW	11	H			
LYEU40080BW	8	H			

● = P ● = M ● = K ● = N ● = S ○ = H

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	L	a	Z
12Y1U080065F2R00	80	27	58	65	40	4
12Y1U100070F3R00	100	32	66	70	40	4

RAPID THREAD SHELL MILL (A=40MM)

SPARE PARTS



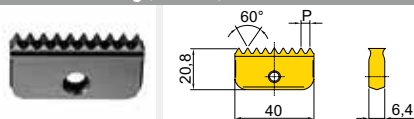
IS40 (10,0Nm)

IK40

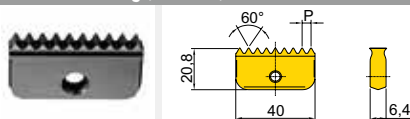
① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

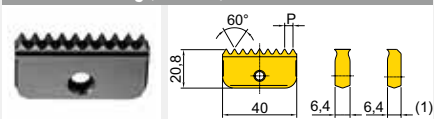
A ISO-threading (internal)



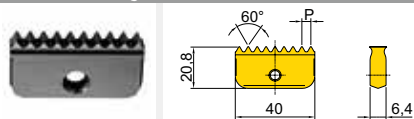
B ISO-threading (external)



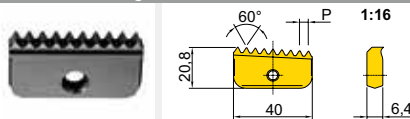
C UN-threading (internal)



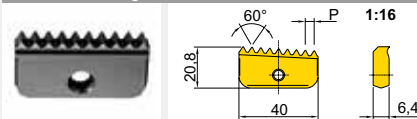
D UN-threading (external)



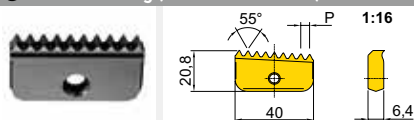
E NPT-threading (internal & external)



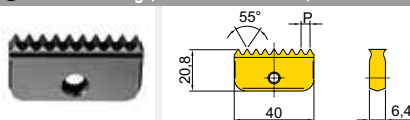
F NPTF-threading (internal & external)



G BSPT-threading (internal & external)



H BSP-threading (internal & external)



Designation	Pitch	Grade	IN2005
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ISO-threading (internal)			
LYEU40150IS	1,5	A	
LYEU40200IS	2	A	
LYEU40300IS	3	A	
LYEU40350IS	3,5	A	
LYEU40400IS	4	A	
LYEU40450IS	4,5	A	
LYEU40500IS	5	A	
LYEU40550IS	5,5	A	
LYEU40600IS	6	A	
ISO-threading (external)			
LYEU40150IS-X	1,5	B	
LYEU40200IS-X	2	B	
LYEU40300IS-X	3	B	
LYEU40400IS-X	4	B	
LYEU40500IS-X	5	B	
LYEU40600IS-X	6	B	
UN-threading (internal)			
LYEU40160UN	16	C	
LYEU40140UN	14	C	
LYEU40120UN	12	C	
LYEU40100UN	10	C	

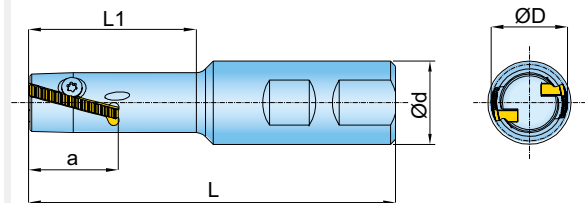
Designation	Pitch	Grade	IN2005
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LYEU40080UN	8	C	
LYEU40060UN	6	C	
LYEU40045UN	4,5	C	
LYEU40040UN	4	C	
UN-threading (external)			
LYEU40160UN-X	16	D	
LYEU40140UN-X	14	D	
LYEU40120UN-X	12	D	
LYEU40100UN-X	10	D	
LYEU40080UN-X	8	D	
LYEU40060UN-X	6	D	
NPT-threading (internal & external)			
LYEU40115NT	11,5	E	
LYEU40080NT	8	E	
NPTF-threading (internal & external)			
LYEU40115NF	11,5	F	
LYEU40080NF	8	F	
BSPT-threading (internal & external)			
LYEU40110BT	11	G	
BSP-threading (internal & external)			
LYEU40110BW	11	H	
LYEU40080BW	8	H	

● = P ● = M ● = K ● = N ● = S ○ = H

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 1835 B (WELDON)



Designation	D	d	L	L1	a	Z
22Y3Q023054W5R00	23	25	110	50	23	2

END MILL WELDON SHANK (A=23MM)

RAPID THREAD

SPARE PARTS



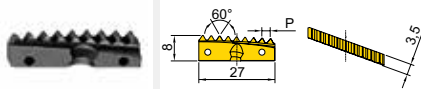
IS23 (5,2Nm)

IK21

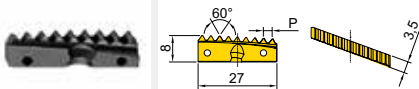
① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

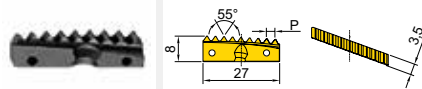
A ISO-threading (internal)



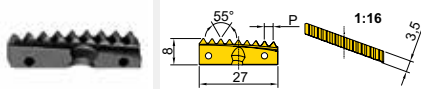
B UN/UNC/UNF/UNEF/UNS-threading (internal)



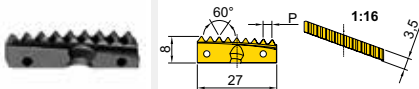
C BSP/BSW/BSF/BSP-threading (internal & external)



D BSPT-threading (internal & external)



E NPT-threading (internal & external)



Designation	Pitch	Grade	IN2005		
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ISO-threading (internal)					
LYER27100IS	1	A			
LYER27150IS	1,5	A			
LYER27200IS	2	A			
LYER27300IS	3	A			
UN/UNC/UNF/UNEF/UNS-threading (internal)					
LYER27240UN	24	B			
LYER27160UN	16	B			

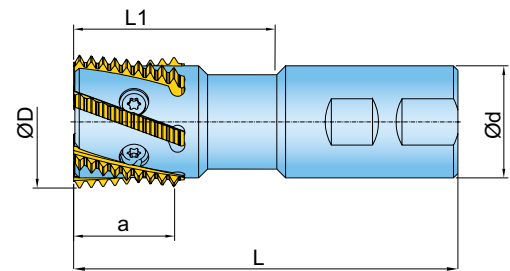
Designation	Pitch	Grade	IN2005		
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LYER27120UN	12	B			
LYER27080UN	8	B			
BSP/BSW/BSF/BSP-threading (internal & external)					
LYER27110BW	11	C			
BSPT-threading (internal & external)					
LYER27110BT	11	D			
NPT-threading (internal & external)					
LYER27115NT	11,5	E			

● = P ● = M ● = K ● = N ● = S ○ = H

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 1835 B (WELDON)



Designation	D	d	L	L1	a	Z
22Y3R032070W6R00	32	32	130	60	32	5

END MILL WELDON SHANK (A=32MM)

RAPID THREAD

SPARE PARTS



IS32 (10,0Nm)

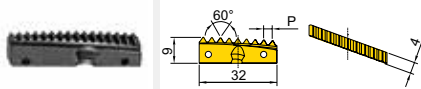


IK22

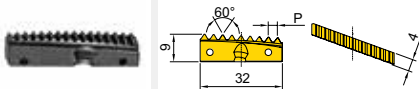
① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

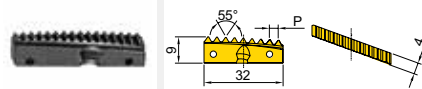
A ISO-threading (internal)



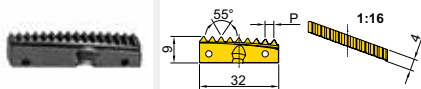
B UN/UNC/UNF/UNEF/UNS-threading (internal)



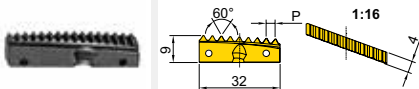
C BSP/BSW/BSF/BSP-threading (internal & external)



D BSPT-threading (internal & external)



E NPT-threading (internal & external)



Designation	Pitch	Grade	IN2005		
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ISO-threading (internal)

LYER32150IS	1,5	A	
LYER32200IS	2	A	
LYER32300IS	3	A	
LYER32400IS	4	A	

UN/UNC/UNF/UNEF/UNS-threading (internal)

LYER32160UN	16	B	
LYER32120UN	12	B	

Designation	Pitch	Grade	IN2005		
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LYER32080UN

8 B

LYER32060UN

6 B

BSP/BSW/BSF/BSP-threading (internal & external)

LYER32110BW 11 C

BSPT-threading (internal & external)

LYER32110BT 11 D

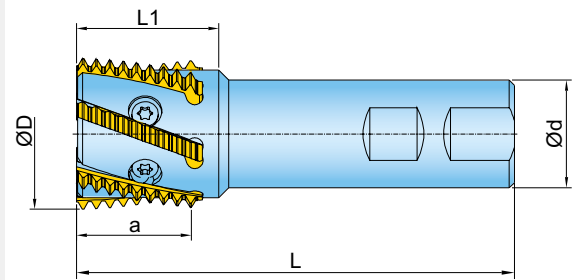
NPT-threading (internal & external)

LYER32115NT 11,5 E

● = P ● = M ● = K ● = N ● = S ○ = H

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 1835 B (WELDON)



Designation	D	d	L	L1	a	Z
22Y3S045070W6R00	45	32	130	40	37	6

SPARE PARTS



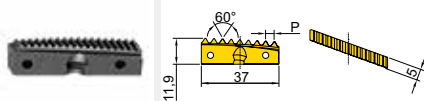
IS45 (10,0Nm)

IK40

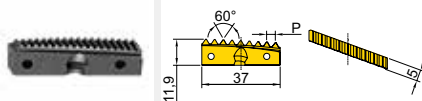
① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

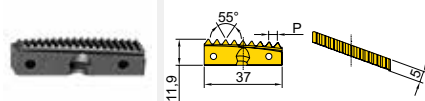
A ISO-threading (internal)



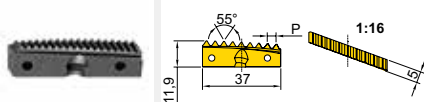
B UN/UNC/UNF/UNEF/UNS-threading (internal)



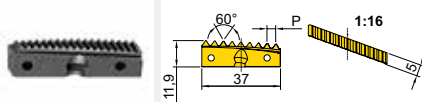
C BSP/BSW/BSF/BSP-threading (internal & external)



D BSPT-threading (internal & external)



E NPT-threading (internal & external)



Designation	Pitch	Grade	IN2005		
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ISO-threading (internal)

LYER37150IS	1,5	A	
LYER37200IS	2	A	
LYER37300IS	3	A	
LYER37400IS	4	A	

UN/UNC/UNF/UNEF/UNS-threading (internal)

LYER37160UN	16	B	
LYER37120UN	12	B	

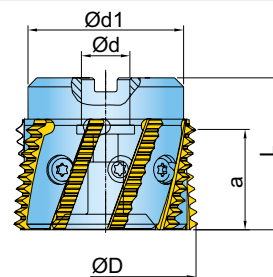
Designation	Pitch	Grade	IN2005		
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LYER37080UN	8	B	
LYER37060UN	6	B	
BSP/BSW/BSF/BSP-threading (internal & external)			
LYER37110BW	11	C	
BSPT-threading (internal & external)			
LYER37110BT	11	D	
NPT-threading (internal & external)			
LYER37115NT	11,5	E	

● = P ● = M ● = K ● = N ● = S ○ = H

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	L	a	Z
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22Y3T063050F1R00	63	22	55	50	38	9
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RAPID THREAD SHELL MILL (A=38MM)

SPARE PARTS



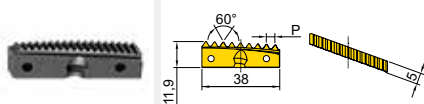
IS63 (10,0Nm)

IK40

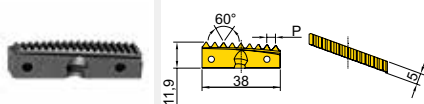
① = Insert screw ② = Screw driver

DRILLS/THREAD MILLING

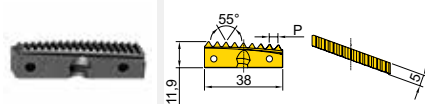
A ISO-threading (internal)



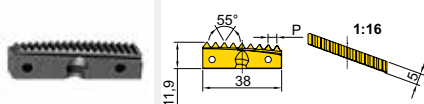
B UN/UNC/UNF/UNEF/UNS-threading (internal)



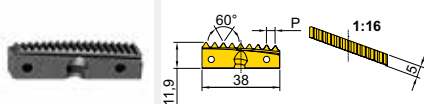
C BSP/BSW/BSF/BSP-threading (internal & external)



D BSPT-threading (internal & external)



E NPT-threading (internal & external)



Designation	Pitch	Grade	IN2005		
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ISO-threading (internal)

LYER38150IS	1,5	A	
LYER38200IS	2	A	
LYER38300IS	3	A	
LYER38400IS	4	A	

UN/UNC/UNF/UNEF/UNS-threading (internal)

LYER38160UN	16	B	
LYER38120UN	12	B	

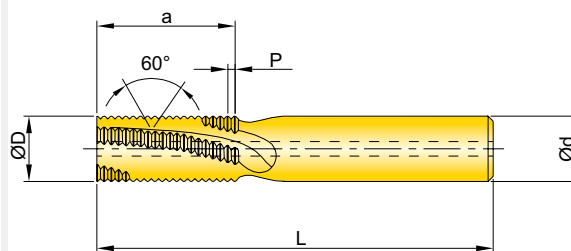
Designation	Pitch	Grade	IN2005		
-------------	-------	-------	--------	--	--

LYER38080UN	8	B	
LYER38060UN	6	B	
BSP/BSW/BSF/BSP-threading (internal & external)			
LYER38110BT	11	C	
BSPT-threading (internal & external)			
LYER38110BW	11	D	
NPT-threading (internal & external)			
LYER38115NT	11,5	E	

● = P ● = M ● = K ● = N ● = S ○ = H

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 6535 HA



Grade	P	M	K	N _(K)	S _(M)	H _(PK)
IN2005	+	+	+	○	+	



h6

+ Preferred choice ○ Second choice

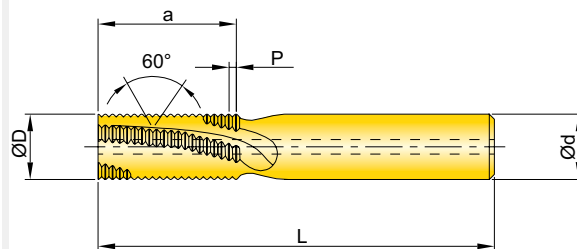
Designation	D	d	L	a	P	Std. pitch	Fine pitch. Ø	Z	IK
46Y050IST7RB100	3,8	6	58	10,3	0,5	-	≥ 5	3	✓
46Y070IST7RB070	3,1	6	58	7,4	0,7	M4	≥ 5	3	✓
46Y075IST7RB100	4,5	6	58	10,1	0,75	-	≥ 6	3	✓
46Y080IST7RB090	3,8	6	58	9,2	0,8	M5	≥ 6	3	✓
46Y100IST7RB110	4,6	6	58	10,5	1	M6	≥ 7	3	✓
46Y100IST7RB150	4,6	6	58	14,5	1	M6	≥ 7	3	✓
46Y100IST7RB130	6	6	58	12,5	1	-	≥ 9	3	✓
47Y100IST1RB240	10	10	73	24,5	1	-	≥ 12	4	✓
47Y100IST0RB170	8	8	64	16,5	1	-	≥ 10	4	✓
46Y125IST7RB140	6	6	58	14,4	1,25	M8	≥ 10	3	✓
46Y125IST7RB190	6	6	58	19,4	1,25	M8	≥ 10	3	✓
46Y150IST0RB170	7,8	8	64	17	1,5	M10	≥ 12	3	✓
46Y150IST0RB250	7,8	8	64	24,8	1,5	M10	≥ 12	3	✓
47Y150IST1RB220	10	10	73	21,8	1,5	-	≥ 14	4	✓
47Y150IST2RB260	12	12	84	26,3	1,5	-	≥ 16	4	✓
48Y150IST3RB340	16	16	105	33,8	1,5	-	≥ 20	6	✓
46Y175IST1RB200	9	10	73	20,1	1,75	M12	≥ 12	3	✓
46Y175IST1RB290	9	10	73	28,9	1,75	M12	≥ 12	3	✓
46Y200IST1RB270	10	10	73	27	2	M14	≥ 15	3	✓
47Y200IST2RB270	11,8	12	84	27	2	M16	≥ 17	4	✓
47Y200IST2RB390	11,8	12	84	39	2	M16	≥ 17	4	✓
48Y200IST4RB410	20	20	105	41	2	-	≥ 26	6	✓
47Y250IST3RB340	15	16	105	33,8	2,5	M20	≥ 22	5	✓
47Y250IST3RB490	15	16	105	48,8	2,5	M20	≥ 22	5	✓
47Y300IST4RB410	18	20	105	40,5	3	M24	≥ 25	4	✓
47Y300IST4RB590	18	20	120	58,5	3	M24	≥ 25	4	✓
47Y300IST4RB440	20	20	105	43,5	3	M27	≥ 27	4	✓

SC ISO-THREADING WITH CENTRAL INTERNAL COOLANT

RAPID THREAD

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 1835 A



Grade

IN2005

P
M
K
N_(K)
S_(M)
H_(PK)

+ Preferred choice
 ○ Second choice



h6

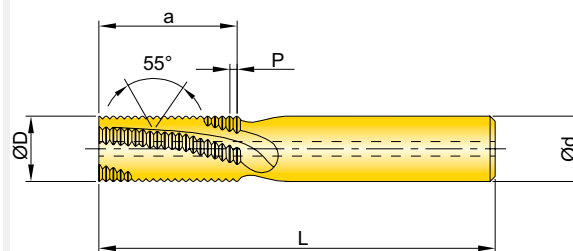
Designation	D	d	L	a	P	UNC	UNF	UNEF	Z	IK
46Y-32UNT7RB070	3,2	6	58	6,8	32	8	10	12	3	✓
47Y-31UNT0RB190	8	8	64	18,7	32	-	-	3/8	4	✓
46Y-32UNT7RB140	6	6	58	14,7	32	-	-	5/16	3	✓
46Y-28UNT7RB110	5	6	58	11,3	28	-	1/4	-	3	✓
46Y-28UNT7RB140	6	6	58	14,1	28	-	-	7/16 - 1/2	3	✓
46Y-24UNT0RB140	6,6	8	64	14,3	24	-	5/16	-	3	✓
46Y-24UNT0RB210	8	8	64	20,6	24	-	3/8	9/16 - 5/8	4	✓
46Y-20UNT7RB120	4,7	6	58	12,1	20	1/4	-	-	3	✓
46Y-20UNT0RB210	8	8	64	21	20	-	7/16	-	3	✓
47Y-20UNT1RB220	10	10	73	22,3	20	-	1/2	-	4	✓
47Y-20UNT2RB270	12	12	84	27,3	20	-	-	3/4 - 1	5	✓
46Y-18UNT7RB150	5,6	6	58	14,8	18	5/16	-	-	3	✓
47Y-18UNT2RB260	11,3	12	84	26,1	18	-	9/16 - 5/8	1/8 - 1 5/8	4	✓
46Y-16UNT0RB170	6,7	8	64	16,7	16	3/8	-	-	3	✓
47Y-16UNT2RB310	12	12	84	31	16	-	3/4	-	4	✓
46Y-14UNT0RB210	7,7	8	64	20,9	14	7/16	-	-	3	✓
47Y-14UNT3RB370	16	16	105	37,2	14	-	7/8	-	5	✓
46Y-13UNT1RB230	9,2	10	73	22,5	13	1/2	-	-	3	✓
46Y-26UNT2RB270	10,5	12	84	26,5	12	9/16	-	-	3	✓
47Y-12UNT3RB410	16	16	105	41,3	12	-	1 - 1 1/2	-	5	✓
46Y-11UNT2RB290	11,4	12	84	28,9	11	5/8	-	-	3	✓
47Y-10UNT3RB340	14,4	16	105	34,3	10	3/4	-	-	4	✓
46Y-09UNT3RB380	16	16	105	38,1	9	7/8	-	-	3	✓
47Y-08UNT4RB430	19,5	20	105	42,9	8	1	-	-	4	✓
47Y-07UNT4RB450	20	20	105	45,3	7	1 1/8 - 1 1/4	-	-	4	✓

SC UN-THREADING WITH CENTRAL INTERNAL COOLANT

RAPID THREAD

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P

M

K

N_(K)

S_(M)

H_(PK)

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+ Preferred choice ○ Second choice



h6

Designation

D

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P

BSP

Z



46Y-28BWT0RB140

7,8

8

64

14,1

28

G1/8

3



47Y-19BWT1RB170

10

10

73

16,7

19

G1/4 - 3/8

4



47Y-14BWT3RB260

16

16

105

26,3

14

G1/2 - 7/8

5



47Y-11BWT3RB380

16

16

105

38,1

11

G ≥ 1

4



47Y-11BWT4RB470

20

20

105

47,3

11

G ≥ 1

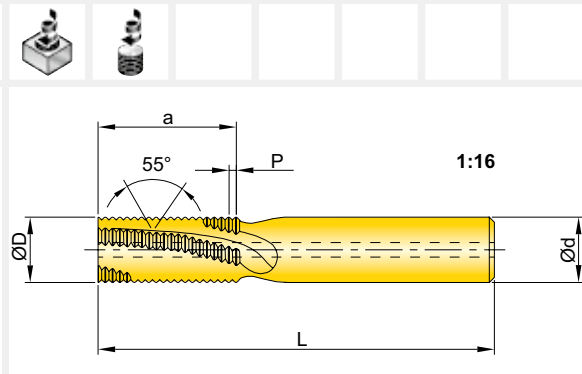
5



RAPID THREAD SC BSP-THREADING WITH CENTRAL INTERNAL COOLANT

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P M K N_(K) S_(M) H_(PK)

+ Preferred choice ○ Second choice

h6

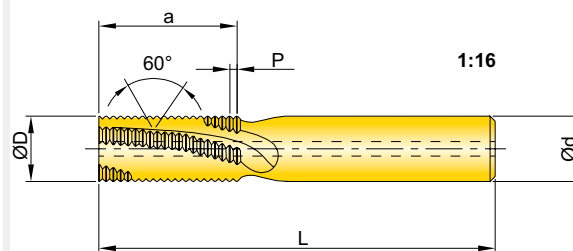
Designation	D	d	L	a	P	BSPT	Z	
46Y-28BTORB140	7,8	8	64	14,1	28	RC1/8	4	✓
47Y-19BT1RB160	10	10	73	16,7	19	RC1/4 - 3/8	4	✓
47Y-14BT3RB260	16	16	105	26,3	14	RC1/2 - 7/8	4	✓
47Y-11BT3RB280	16	16	105	28,9	11	RC1 - 2	4	✓

SC BSPT-THREADING WITH CENTRAL INTERNAL COOLANT

RAPID THREAD

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P M K N_(K) S_(M) H_(PK)
+ + + ○ +

+ Preferred choice ○ Second choice



h6

Designation

D

d

L

a

P

NPT

Z



46Y-27NTTORB110

7,6

8

64

10,8

27

1/8

3



47Y-18NTT1RB160

10

10

73

16,2

18

1/4 - 3/8

4



47Y-14NTT3RB230

15,5

16

105

22,7

14

1/2 - 3/4

4



47Y-11NTT4RB300

20

20

105

29,8

11,5

1 - 2

4



47Y-08NTT4RB400

20

20

105

39,7

8

≥ 2 1/2

4

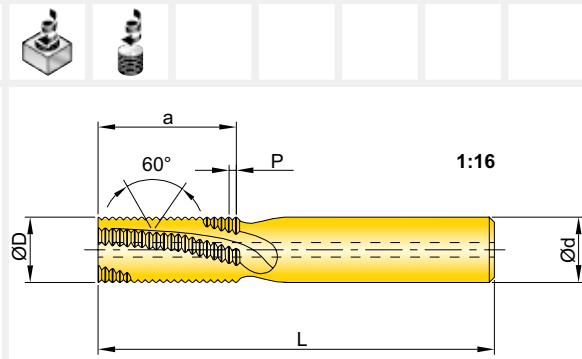


SC NPT-THREADING WITH CENTRAL INTERNAL COOLANT

RAPID THREAD

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P
M
K
N_(K)
S_(M)
H_(PK)

+ Preferred choice
 O Second choice



h6

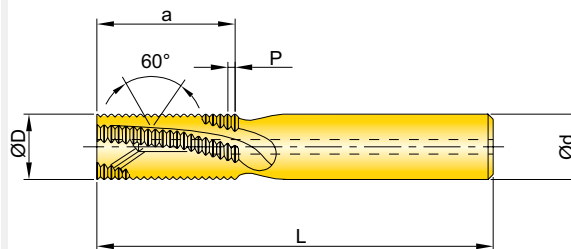
Designation	D	d	L	a	P	NPTF	Z	
46Y-27NFTORB110	7,6	8	64	10,8	27	1/8	3	✓
47Y-18NFT1RB160	10	10	73	16,2	18	1/4 - 3/8	4	✓
47Y-14NFT3RB230	15,5	16	105	22,7	14	1/2 - 3/4	4	✓
47Y-11NFT3RB300	20	20	105	29,8	11,5	1 - 2	4	✓
47Y-08NFT4RB400	20	20	105	39,7	8	≥ 2 1/2	4	✓

SC NPTF-THREADING WITH CENTRAL INTERNAL COOLANT

RAPID THREAD

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P M K N_(K) S_(M) H_(PK)
+ + + ○ +

+ Preferred choice ○ Second choice



h6

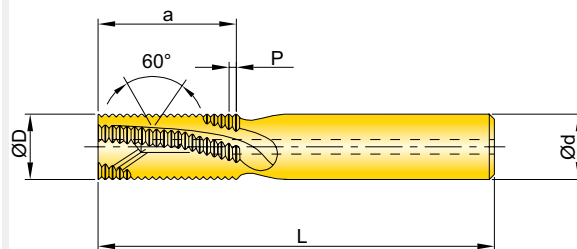
Designation	D	d	L	a	P	Std. pitch	Fine pitch. Ø	Z	IK
46Y100IST7RC110	4,8	6	58	10,5	1	M6	≥ 7	3	✓
46Y100IST7RC130	6	6	58	12,5	1	-	≥ 9	3	✓
47Y100IST0RC170	8	8	64	16,5	1	-	≥ 10	4	✓
46Y125IST7RC140	6	6	58	14,4	1,25	M8	≥ 10	3	✓
46Y125IST7RC190	6	6	58	19,4	1,25	M8	≥ 10	3	✓
46Y150IST0RC170	7,8	8	64	17	1,5	M10	≥ 12	3	✓
47Y150IST1RC220	10	10	73	21,8	1,5	-	≥ 14	4	✓
47Y150IST2RC260	12	12	84	26,3	1,5	-	≥ 16	4	✓
47Y150IST3RC340	16	16	101	33,8	1,5	-	≥ 20	5	✓
46Y175ISU9RC200	9	10	73	20,1	1,75	M12	≥ 12	3	✓
46Y175ISU9RC290	9	10	73	28,9	1,75	M12	≥ 12	3	✓
46Y200IST1RC270	10	10	73	27	2	M14	≥ 15	3	✓
47Y200ISS0RC270	11,8	12	84	27	2	M16	≥ 17	4	✓
47Y250ISS0RC340	15	16	101	33,8	2,5	M20	≥ 22	5	✓

SC ISO-THREADING WITH INTERNAL COOLANT IN THE FLUTES

RAPID THREAD

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P	M	K	N _(K)	S _(M)	H _(PK)
+	+	+	○	+	

⊕ Preferred choice ○ Second choice



h6

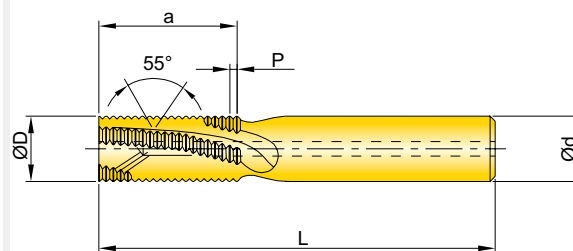
Designation	D	d	L	a	P	UNC	UNF	UNEF	Z	🔍
46Y-28UNT7RC110	5	6	58	11,3	28	-	1/4	-	3	✓
46Y-28UNT7RC140	6	6	58	14,1	28	-	-	7/16 - 1/2	3	✓
46Y-24UNT0RC140	6,6	8	64	14,3	24	-	5/6	-	3	✓
47Y-24UNT0RC210	8	8	64	20,6	24	-	3/8	9/16 - 5/8	4	✓
46Y-20UNT0RC210	8	8	64	21	20	-	7/16	-	3	✓
47Y-20UNT1RC220	10	10	73	22,3	20	-	1/2	-	4	✓
47Y-20UNT2RC270	12	12	84	27,3	20	-	-	3/4 - 1	5	✓
46Y-18UNT7RC150	5,6	6	58	14,8	18	5/16	-	-	3	✓
47Y-18UNT2RC260	11,3	12	84	26,1	18	-	9/16 - 5/8	1 1/8 - 1 5/8	4	✓
46Y-16UNT0RC170	6,7	8	64	16,7	16	3/8	-	-	3	✓
47Y-16UNT2RC310	12	12	84	31	16	-	3/4	-	4	✓
46Y-14UNT0RC210	7,7	8	64	20,9	14	7/16	-	-	3	✓
47Y-14UNT3RC370	16	16	101	37,2	14	-	7/8	-	5	✓
46Y-13UNT1RC230	9,2	10	73	22,5	13	1/2	-	-	3	✓
46Y-12UNT2RC270	10,5	12	84	26,5	12	9/16	-	-	3	✓
46Y-11UNT2RC290	11,4	12	84	28,9	11	5/8	-	-	3	✓
47Y-10UNT3RC340	14,4	16	101	34,3	10	3/4	-	-	4	✓

SC UN-THREADING WITH INTERNAL COOLANT IN THE FLUTES

RAPID THREAD

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P

M

K

N_(K)

S_(M)

H_(PK)

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○

+

+ Preferred choice ○ Second choice



h6

Designation

D

d

L

a

P

BSP

Z



46Y-28BWT0RC140

7,8

8

64

14,1

28

G1/8

3



47Y-19BWT1RC170

10

10

73

16,7

19

G1/4 - 3/8

4



47Y-14BWT3RC260

16

16

101

26,3

14

G1/2 - 7/8

5



47Y-11BWT3RC380

16

16

101

38,1

11

G ≥ 1

4

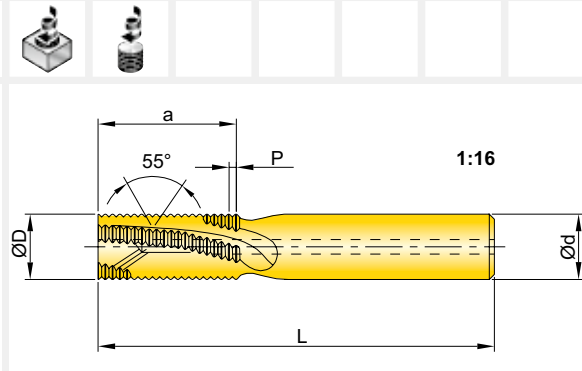


SC BSP-THREADING WITH INTERNAL COOLANT IN THE FLUTES

RAPID THREAD

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P
M
K
N_(K)
S_(M)
H_(PK)

+ Preferred choice
 O Second choice



h6

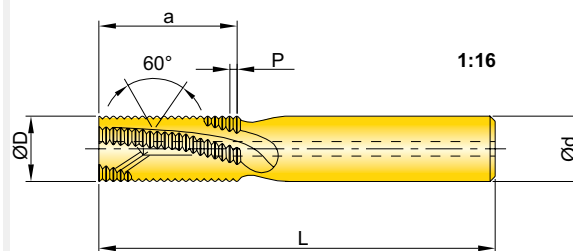
Designation	D	d	L	a	P	BSPT	Z	
46Y-28BT0RC140	7,8	8	64	14,1	28	RC1/8	3	✓
47Y-19BT1RC170	10	10	73	16,7	19	RC1/4 - 3/8	4	✓
47Y-14BT3RC260	16	16	101	26,3	14	RC1/2 - 7/8	5	✓
47Y-11BT3RC290	16	16	101	28,9	11	RC1 - 2	4	✓

SC BSPT-THREADING WITH INTERNAL COOLANT IN THE FLUTES

RAPID THREAD

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P

M

K

N_(K)

S_(M)

H_(P/K)

+

+

+

○

+

+ Preferred choice ○ Second choice



h6

Designation

D

d

L

a

P

NPT

Z



46Y-27NTT0RC110

7,6

8

64

10,8

27

1/8

3



47Y-18NTT1RC160

10

10

73

16,2

18

1/4 - 3/8

4



47Y-14NTT3RC230

15,5

16

101

22,7

14

1/2 - 3/4

4

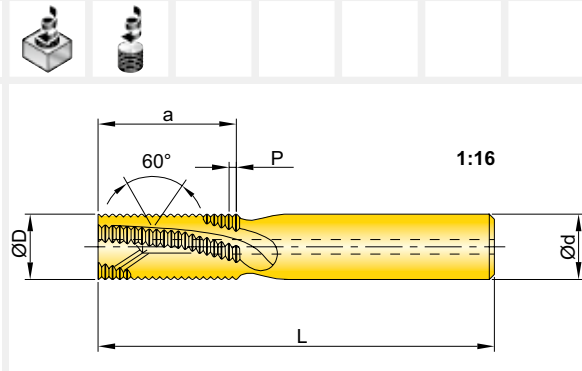


SC NPT-THREADING WITH INTERNAL COOLANT IN THE FLUTES

RAPID THREAD

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P
M
K
N_(K)
S_(M)
H_(PK)

+ Preferred choice
 ☐ Second choice



h6

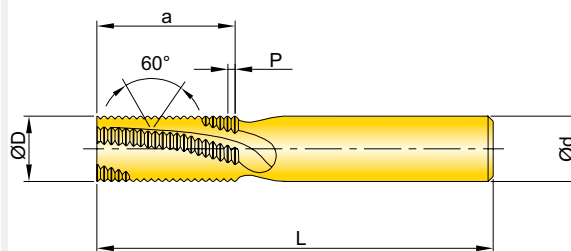
Designation	D	d	L	a	P	NPTF	Z	
46Y-27NFT0RC110	7,6	8	64	10,8	27	1/8	3	✓
47Y-18NFT1RC160	10	10	73	16,2	18	1/4 - 3/8	4	✓
47Y-14NFT3RC230	15,5	16	101	22,7	14	1/2 - 3/4	4	✓

SC NPTF-THREADING WITH INTERNAL COOLANT IN THE FLUTES

RAPID THREAD

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 6535 HA



Grade	P	M	K	N _(S)	S _(M)	H _(PK)
IN2005	+	+	+	○	+	



h6

⊕ Preferred choice ○ Second choice

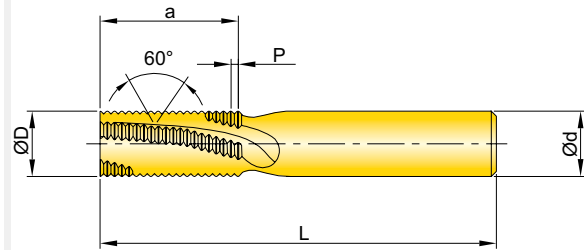
Designation	D	d	L	a	P	Std. pitch	Fine pitch. Ø	Z
46Y050IST7RA050	2,2	6	58	5,3	0,5	M3	≥ 4	3
46Y050IST7RA100	3,8	6	58	10,3	0,5	-	≥ 5	3
46Y070IST7RA070	3,1	6	58	7,4	0,7	M4	≥ 5	3
46Y075IST7RA100	4,5	6	58	10,1	0,75	-	≥ 6	3
46Y080IST7RA090	3,6	6	58	9,2	0,8	M5	≥ 6	3
46Y100IST7RA110	4	6	58	10,5	1	M6	≥ 7	3
46Y100IST7RA150	4	6	58	14,5	1	M6	≥ 7	3
46Y100IST7RA130	6	6	58	12,5	1	-	≥ 9	3
47Y100IST0RA170	8	8	64	16,5	1	-	≥ 10	4
46Y125IST7RA140	5	6	58	14,4	1,25	M8	≥ 10	3
46Y125IST7RA190	5	6	58	19,4	1,25	M8	≥ 10	3
46Y150IST0RA170	7	8	64	17,3	1,5	M10	≥ 12	3
46Y150IST0RA250	7	8	76	24,8	1,5	M10	≥ 12	3
47Y150IST1RA220	10	10	73	21,8	1,5	-	≥ 14	4
48Y150IST3RA340	16	16	105	33,8	1,5	-	≥ 20	6
46Y175IST0RA200	8	8	64	20,1	1,75	M12	≥ 14	3
46Y175IST0RA290	8	8	76	28,9	1,75	M12	≥ 14	3
46Y200IST1RA270	10	10	73	27	2	M16	≥ 17	3
46Y200IST1RA390	10	10	105	39	2	M16	≥ 17	3
47Y200IST2RA270	12	12	84	27	2	-	≥ 18	4
48Y200IST4RA410	20	20	105	41	2	-	≥ 26	6
47Y250ISU8RA340	14	14	84	33,8	2,5	M20	≥ 22	4
47Y250ISU8RA490	14	14	105	48,8	2,5	M20	≥ 22	4
46Y300IST3RA410	16	16	105	40,5	3	M24	≥ 25	3
46Y300IST3RA590	16	16	120	58,5	3	M24	≥ 25	3
47Y300IST4RA440	20	20	105	43,5	3	M27	≥ 28	4

SC ISO-THREADING INTERNAL

RAPID THREAD

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P	M	K	N _(K)	S _(M)	H _(P/K)
+	+	+	○	+	

⊕ Preferred choice ○ Second choice



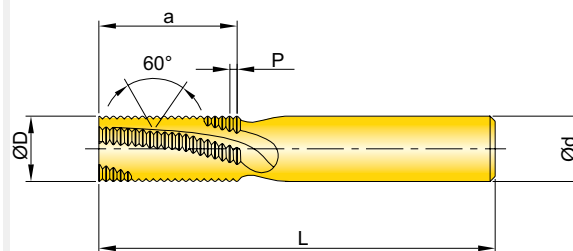
h6

Designation	D	d	L	a	P	Z
47Y100IST1RA170	10	10	73	16,5	1	4
47Y100IST2RA210	12	12	84	20,5	1	5
47Y150IST1RA160	10	10	73	15,8	1,5	4
47Y150IST2RA200	12	12	84	20,3	1,5	4
47Y175IST2RA200	12	12	84	20,1	1,75	4
46Y200IST1RA170	10	10	73	17	2	3
47Y200IST2RA210	12	12	84	21	2	4

RAPID THREAD SC ISO-THREADING EXTERNAL

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 6535 HA



Grade	P	M	K	N _(S)	S _(M)	H _(PK)
IN2005	+	+	+	○	+	



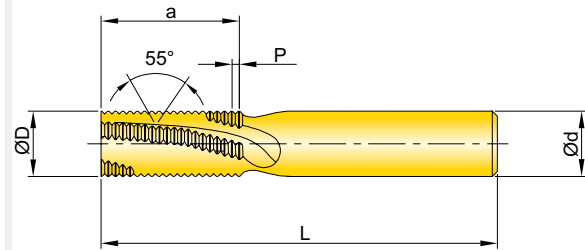
h6

⊕ Preferred choice ○ Second choice

Designation	D	d	L	a	P	UNC	UNF	UNEF	Z
46Y-40UNUERA060	2,5	6	58	6	40	5	-	-	3
46Y-32UNT7RA070	3,2	6	58	6,8	32	8	10	12	3
46Y-28UNT7RA110	4	6	58	11,3	28	-	1/4	-	3
46Y-28UNT7RA150	6	6	58	14,1	28	-	-	7/16 - 1/2	3
46Y-24UNT7RA150	5	6	58	14,3	24	-	5/16	-	3
46Y-24UNT0RA200	7	8	64	20,6	24	-	-	3/8 - 5/8	3
46Y-20UNT7RA120	4,5	6	58	12,1	20	1/4	-	-	3
46Y-20UNT0RA200	7	8	64	21	20	-	7/16 - 1/2	-	3
47Y-20UNT2RA270	12	12	84	27,3	20	-	-	3/4 - 1	5
46Y-18UNT7RA150	5	6	58	14,8	18	5/16	-	-	3
47Y-18UNT1RA260	10	10	73	26,1	18	-	9/16 - 5/8	1/8 - 1 5/8	4
46Y-16UNT7RA170	6	6	58	16,7	16	3/8	-	-	3
47Y-16UNT2RA300	12	12	84	31	16	-	3/4	-	4
46Y-14UNT0RA210	7	8	64	20,9	14	7/16	-	-	3
47Y-14UNT3RA370	15	16	105	37,2	14	-	7/8	-	5
46Y-13UNT0RA230	8	8	64	22,5	13	1/2	-	-	3
46Y-12UNT1RA270	10	10	73	26,5	12	9/16	-	-	3
47Y-12UNT3RA410	16	16	105	41,3	12	-	1 - 1 1/2	-	5
46Y-11UNT1RA290	10	10	73	28,9	11	5/8	-	-	3
46Y-10UNT2RA340	12	12	84	34,3	10	3/4	-	-	3
46Y-09UNT3RA380	15	16	105	38,1	9	7/8	-	-	3
46Y-08UNT3RA430	16	16	105	42,9	8	1	-	-	3
47Y-07UNT4RA450	20	20	105	45,3	7	1 1/8 - 1 1/4	-	-	4

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P

M

K

N_(K)

S_(M)

H_(P/K)

+

+

+

○

+

⊕ Preferred choice ○ Second choice



h6

Designation

D

d

L

a

P

BSP

Z

46Y-28BWT7RA100

6

6

58

9,5

28

G1/8

3

46Y-19BWT0RA140

8

8

64

14

19

G1/4 - 3/8

3

47Y-14BWT2RA190

12

12

84

19

14

G1/2 - 7/8

4

47Y-14BWT2RA260

12

12

84

26,3

14

G1/2 - 7/8

4

46Y-11BWT2RA240

12

12

84

24,2

11

G1-1 1/2

3

47Y-11BWT3RA380

16

16

105

38,1

11

G1-3

4

47Y-11BWT4RA470

20

20

105

47,3

11

G ≥ 1

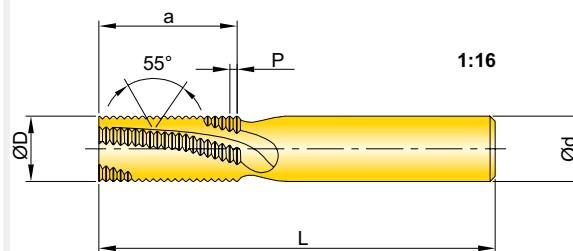
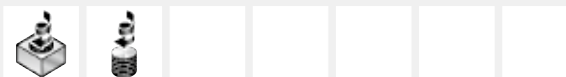
5

SC BSP-THREADING INTERNAL & EXTERNAL

RAPID THREAD

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P M K N_(K) S_(M) H_(PK)
+ + + ○ +

+ Preferred choice ○ Second choice



h6

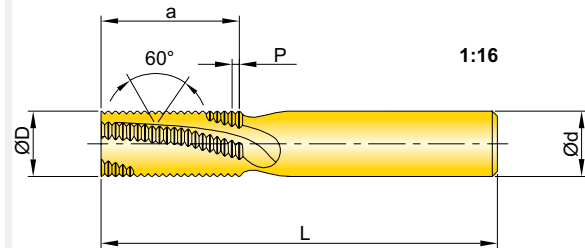
Designation

D d L a P BSPT Z

46Y-28BTT7RA090	6	6	58	9,5	28	RC1/8	3
46Y-19BTT0RA140	8	8	64	14	19	RC1/4 - 3/8	3
47Y-14BTT2RA190	12	12	84	19,1	14	RC1/2 - 7/8	4
47Y-11BTT3RA280	16	16	105	28,9	11	RC1 - 2	4

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P M K N_(K) S_(M) H_(P/K)

+ Preferred choice ○ Second choice



h6

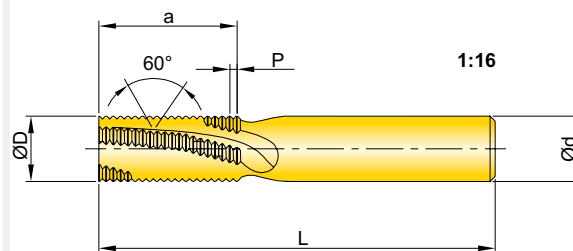
Designation	D	d	L	a	P	NPT	Z
46Y-27NTT7RA100	6	6	58	9,9	27	1/8	3
46Y-18NTT0RA150	8	8	64	14,8	18	1/4 - 3/8	3
47Y-14NTT2RA210	12	12	84	20,9	14	1/2 - 3/4	4
47Y-11NTT3RA280	16	16	105	27,6	11,5	1 - 2	4
47Y-08NTT4RA400	20	20	105	39,7	8	≥ 2 1/2	4

SC NPT-THREADING INTERNAL & EXTERNAL

RAPID THREAD

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P

M

K

N_(K)

S_(M)

H_(PK)

+

+

+

○

+

+ Preferred choice ○ Second choice



h6

Designation

D

d

L

a

P

NPTF

Z

46Y-27NFT7RA100

6

6

58

9,9

27

1/8

3

46Y-18NFT0RA150

8

8

64

14,8

18

1/4 - 3/8

3

47Y-14NFT2RA210

12

12

84

20,9

14

1/2 - 3/4

4

47Y-11NFT3RA280

16

16

105

27,6

11,5

1 - 2

4

47Y-08NFT4RA400

20

20

105

39,7

8

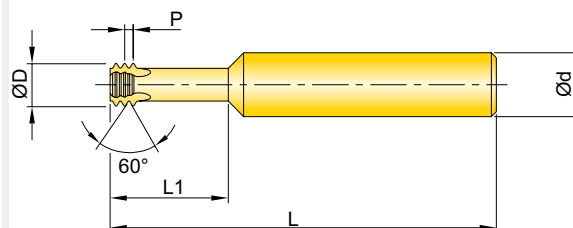
≥ 2 1/2

4

RAPID THREAD SC NPTF-THREADING INTERNAL & EXTERNAL

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2005

P	M	K	N _(K)	S _(M)	H _(PK)
+	+	+	○	+	

⊕ Preferred choice ○ Second choice



h6

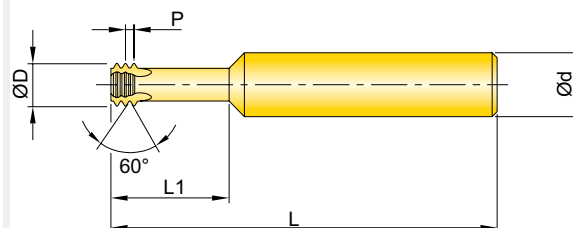
Designation	D	d	L	L1	P	Std. pitch	Z
46Y030IST9RM040	1,05	3	39	4	0,3	M1,4	3
46Y035IST9RM050	1,2	3	39	5	0,35	M1,6	3
46Y040IST7RM050	1,55	6	58	4,5	0,4	M2	3
46Y040IST9RM060	1,55	3	39	6	0,4	M2	3
46Y045IST7RM050	1,65	6	58	5	0,45	M2,2	3
46Y045IST7RM060	1,95	6	58	5,5	0,45	M2,5	3
46Y045IST7RM080	1,95	6	58	7,5	0,45	M2,5	3
46Y050IST7RM070	2,35	6	58	6,5	0,5	M3	3
46Y050IST7RM100	2,35	6	58	9,5	0,5	M3	3
46Y060IST7RM080	2,75	6	58	7,5	0,6	M3,5	3
46Y070IST7RM090	3,1	6	58	9	0,7	M4	3
46Y070IST7RM130	3,1	6	58	12,5	0,7	M4	3
46Y080IST7RM130	3,8	6	58	12,5	0,8	M5	3
46Y080IST7RM160	3,8	6	58	16	0,8	M5	3
46Y100IST7RM140	4,65	6	58	14	1	M6	3
46Y100IST7RM200	4,65	6	58	20	1	M6	3
46Y125IST7RM200	5,95	6	58	18	1,25	M8	3
46Y125IST7RM240	5,95	6	58	24	1,25	M8	3
46Y150IST0RM230	7,8	8	64	23	1,5	M10	3
46Y175IST1RM260	9	10	73	26	1,75	M12	3
47Y200IST2RM350	11,8	12	84	35	2	M16	4
47Y250IST3RM430	15	16	105	43	2,5	M20	5

SC ISO-THREADING SHORT INTERNAL (RIGHT VERSION)

RAPID THREAD

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 6535 HA



Grade	P	M	K	N _(K)	S _(M)	H _(PK)
IN2005	+	+	+	○	+	

+ Preferred choice ○ Second choice

h6

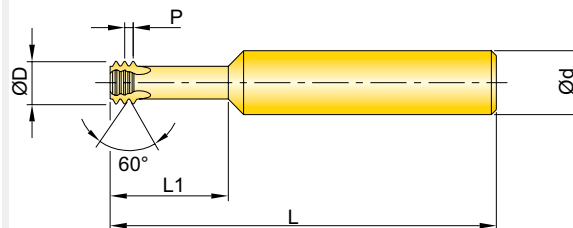
Designation	D	d	L	L1	P	UNC	UNF	Z
46Y-80UNT7RM040	1,15	6	58	4	80	-	0	3
46Y-72UNT7RM040	1,45	6	58	3,7	72	-	1	3
46Y-64UNT7RM040	1,4	6	58	3,8	64	1	2	3
46Y-56UNT7RM040	1,65	6	58	4,4	56	2	3	3
46Y-48UNT7RM050	1,9	6	58	5,2	48	3	4	3
46Y-40UNT7RM060	2,1	6	58	6,3	40	4	-	3
46Y-40UNT7RM070	2,45	6	58	7	40	5	6	3
46Y-40UNT7RM100	2,45	6	58	9,6	40	5	6	3
46Y-36UNT7RM090	3,3	6	58	9	36	-	8	3
46Y-32UNT7RM070	2,55	6	58	7,1	32	6	-	3
46Y-32UNT7RM100	3,2	6	58	9,5	32	8	-	3
46Y-32UNT7RM130	3,2	6	58	12,5	32	8	-	3
46Y-32UNT7RM110	3,7	6	58	10,5	32	-	10	3
46Y-32UNT7RM150	3,7	6	58	15	32	-	10	3
46Y-28UNT7RM150	5	6	58	14,5	28	-	1/4	3
46Y-28UNT7RM190	5	6	58	19	28	-	1/4	3
46Y-24UNT7RM110	3,5	6	58	10,6	24	10	12	3
46Y-24UNT0RM170	6,6	8	64	17	24	-	5/16 3/8	3
46Y-24UNT0RM240	6,6	8	64	24	24	-	5/16 3/8	3
46Y-20UNT7RM140	4,75	6	58	14	20	1/4	-	3
46Y-20UNT0RM250	8	8	64	25	20	-	7/16	3
46Y-20UNT7RM190	4,75	6	58	19	20	1/4	-	3
46Y-18UNT7RM170	6	6	58	17	18	5/16	-	3
47Y-18UNT2RM350	12	12	84	35	18	-	5/8	4
46Y-18UNT7RM230	6	6	58	23	18	5/16	-	3
46Y-16UNT0RM220	6,7	8	64	22	16	3/8	-	3
46Y-14UNT0RM250	7,7	8	64	25	14	7/16	-	3
46Y-13UNT1RM280	9,2	10	73	27,5	13	1/2	-	3
46Y-12UNT2RM320	10,5	12	84	31,5	12	9/16	-	3
46Y-11UNT2RM350	11,4	12	84	34,5	11	5/8	-	3
47Y-10UNT3RM420	14,4	16	105	41,5	10	3/4	-	4

SC UN-THREADING SHORT INTERNAL (RIGHT VERSION)

RAPID THREAD

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2006

P M K N_(K) S_(M) H_(PK)

+ Preferred choice ○ Second choice



h6



Designation	D	d	L	L1	P	Std. pitch	Z
46Y040IST7LM050	1,55	6	58	4,5	0,4	M2	3
46Y045IST7LM050	1,65	6	58	5	0,45	M2,2	3
46Y045IST7LM060	1,95	6	58	5,5	0,45	M2,5	3
46Y045IST7LM080	1,95	6	58	7,5	0,45	M2,5	3
46Y050IST7LM070	2,35	6	58	6,5	0,5	M3	3
46Y050IST7LM100	2,35	6	58	9,5	0,5	M3	3
46Y060IST7LM080	2,75	6	58	7,5	0,6	M3,5	3
46Y070IST7LM090	3,1	6	58	9	0,7	M4	3
46Y070IST7LM130	3,1	6	58	12,5	0,7	M4	3
46Y080IST7LM130	3,8	6	58	12,5	0,8	M5	3
46Y080IST7LM160	3,8	6	58	16	0,8	M5	3
46Y100IST7LM140	4,65	6	58	14	1	M6	3
46Y100IST7LM200	4,65	6	58	20	1	M6	3
46Y125IST7LM180	5,95	6	58	18	1,25	M8	3
46Y125IST7LM240	5,95	6	58	24	1,25	M8	3
46Y150IST0LM230	7,8	8	64	23	1,5	M10	3
46Y175IST1LM260	9	10	73	26	1,75	M12	3

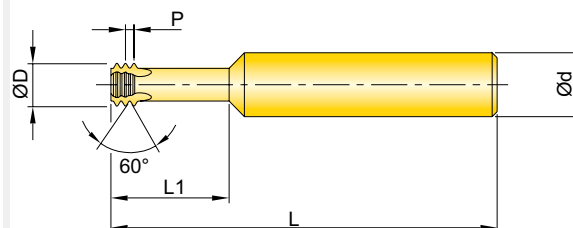
for hard milling

SC ISO-THREADING SHORT INTERNAL (LEFT VERSION)

RAPID THREAD

DRILLS/THREAD MILLING

ADAPTION ACC. TO DIN 6535 HA



Grade

IN2006

P

M

K

N_(K)

S_(M)

H_(PK)

+

+

+

+

+

+



h6



+ Preferred choice ○ Second choice

Designation

D

d

L

L1

P

UNC

UNF

Z

46Y-80UNT7LM040

1,15

6

58

4

80

-

0

3

46Y-72UNT7LM040

1,45

6

58

3,7

72

-

1

3

46Y-64UNT7LM040

1,4

6

58

3,8

64

1

2

3

46Y-56UNT7LM040

1,65

6

58

4,4

56

2

3

3

46Y-48UNT7LM050

1,9

6

58

5,2

48

3

4

3

46Y-40UNT7LM060

2,1

6

58

6,3

40

4

-

3

46Y-40UNT7LM070

2,45

6

58

7

40

5

6

3

46Y-40UNT7LM100

2,45

6

58

9,6

40

5

6

3

46Y-36UNT7LM090

3,3

6

58

9

36

-

8

3

46Y-32UNT7LM070

2,55

6

58

7,1

32

6

-

3

46Y-32UNT7LM100

3,2

6

58

9,5

32

8

-

3

46Y-32UNT7LM130

3,2

6

58

12,5

32

8

-

3

46Y-32UNT7LM110

3,7

6

58

10,5

32

-

10

3

46Y-32UNT7LM150

3,7

6

58

15

32

-

10

3

46Y-28UNT7LM110

4,2

6

58

11

28

-

12

3

46Y-28UNT7LM150

5

6

58

14,5

28

-

1/4

3

46Y-28UNT7LM190

5

6

58

19

28

-

1/4

3

46Y-24UNT7LM110

3,5

6

58

10,6

24

10

12

-

3

46Y-24UNT0LM170

6,6

8

64

17

24

-

5/16

3

46Y-24UNT0LM240

6,6

8

64

24

24

-

5/16

3

46Y-20UNT7LM140

4,75

6

58

14

20

1/4

-

3

46Y-20UNT7LM190

4,75

6

58

19

20

1/4

-

3

46Y-18UNT7LM170

6

6

58

17

18

5/16

-

3

47Y-18UNT2LM350

12

12

84

35

18

-

5/8

4

46Y-18UNT7LM230

6

6

58

23

18

5/16

-

3

46Y-16UNT0LM220

6,7

8

64

22

16

3/8

-

3

46Y-14UNT0LM250

7,7

8

64

25

14

7/16

-

3

46Y-13UNT1LM280

9,2

10

73

27,5

13

1/2

-

3

for hard milling

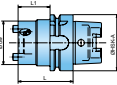
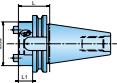
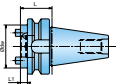
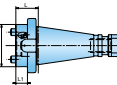
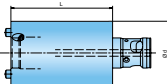
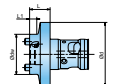
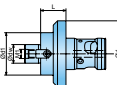
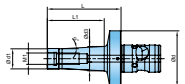
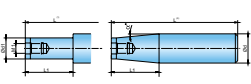
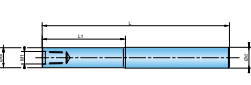
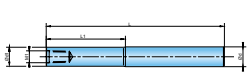
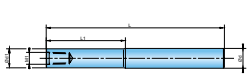
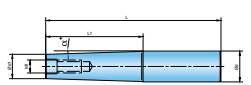
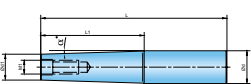
SC UN-THREADING SHORT INTERNAL (LEFT VERSION)

RAPID THREAD

DRILLS/THREAD MILLING

NOTES

TOOL HOLDERS AND ADAPTORS

	Adaptions	Code	Page
	HSKA50..A100-Modular 40/50	INNDFIT	298
	DIN69871 A40...A50-Modular 40/50	INNDFIT	299
	MAS-BT40...50-Modular 40/50	INNDFIT	300
	DIN2080 A40...A50-Modular 40/50	INNDFIT	301
	Modular 40/50 (Extension)	INNDFIT	302
	Modular 50/40 (Reducer)	INNDFIT	303
	Modular 40/50 Shell Type	INNDFIT	304
	Screw-In Type	INNDFIT	305
	Steel Extension Cylindrical/Conical (Screw Type)		306
	Heavy Metal Extension - cylindrical		307
	Solid Carbide Extension - Cylindrical (Screw Type)		308
	Extension with vibration Damping (Screw Type)		309
	Heavy Metal Extension - tapered		310
	Carbide Extension - Conical (Screw Type)		311

Subject to printing error or technical changes.

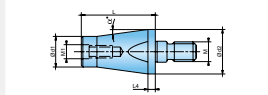
[illegible]

Extension

Code

Page

312

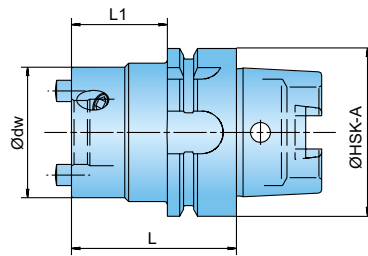


Reducer (Screw Type)

313

Subject to printing error or technical changes.

TOOL HOLDERS AND ADAPTORS



Designation	MOD1	dw	L	L1	HSK-A	IK	kg
HSKA50Z4SA060	40	49	60	34	50	✓	0,67
HSKA63Z4SA062	40	49	62	35	63	✓	1,04
HSKA63Z4SB062	40	61	62	38	63	✓	1,19
HSKA80Z4SA068	40	49	68	42	80	✓	1,54
HSKA80Z5SA080	50	78	80	54	80	✓	2,41
HSKA100Z4SA080	40	49	80	42	100	✓	2,80
HSKA100Z4SB080	40	61	80	50	100	✓	2,97
HSKA100Z5SA080	50	78	80	50	100	✓	3,50

INNOFIT HSKA50...A100-MODULAR 40/50

SPARE PARTS

①



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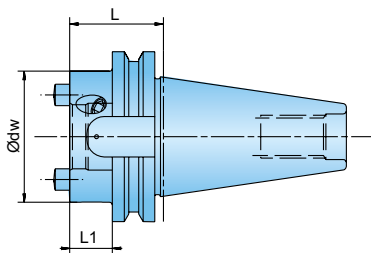
②



page 303

① = Screw ② = Wrench

TOOL HOLDERS AND ADAPTORS



Designation	MOD1	dw	L	L1	SK		
69871A40Z4SA035	40	49	35	15	40	✓	0,90
69871A50Z4SA035	40	49	35	13	50	✓	2,71
69871A50Z4SB035	40	61	35	15	50	✓	2,85
69871A50Z5SA035	50	78	35	15	50	✓	2,80



INNOFIT DIN69871 A40...A50-MODULAR 40/50

SPARE PARTS

① 

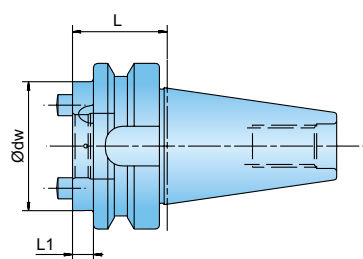
② 

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page 303

① = Screw ② = Wrench

TOOL HOLDERS AND ADAPTORS



Designation	MOD1	dw	L	L1	BT		
BT40Z4SA035	40	49	35	7	40	✓	0,95
BT50Z4SA045	40	49	45	6	50	✓	3,57
BT50Z5SA045	50	78	45	6	50	✓	3,42

INNOFIT MAS-BT40...50-MODULAR 40/50

SPARE PARTS

①

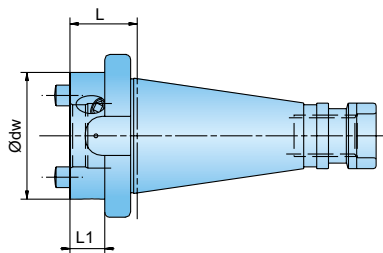
②

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page 303

① = Screw ② = Wrench

TOOL HOLDERS AND ADAPTORS



Designation	MOD1	dw	L	L1	SK		
2080A40Z4SA025	40	49	25	12	40	✓	0,82
2080A50Z4SA035	40	49	35	19	50	✓	2,78
2080A50Z5SA035	50	78	35	19	50	✓	2,95

INNEFIT DIN2080 A40...A50-MODULAR 40/50

SPARE PARTS

① 

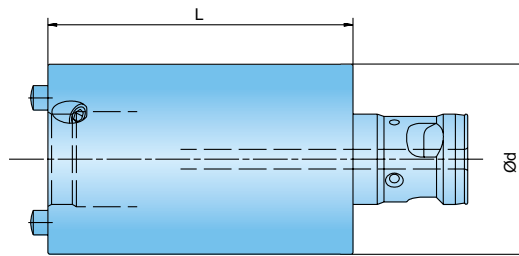
② 

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page 303

① = Screw ② = Wrench

TOOL HOLDERS AND ADAPTORS



Designation	MOD1	d	L	MOD	IK	kg
Z4Z4SA050	40	49	50	40	✓	0,68
Z4Z4SA075	40	49	75	40	✓	1,04
Z4Z4SA100	40	49	100	40	✓	1,39
Z4Z4SB050	40	61	50	40	✓	1,05
Z4Z4SB075	40	61	75	40	✓	1,61
Z4Z4SB100	40	61	100	40	✓	2,17
Z4Z4SB125	40	61	125	40	✓	2,73
Z5Z5SA075	50	78	75	50	✓	2,65
Z5Z5SA100	50	78	100	50	✓	3,57
Z5Z5SA125	50	78	125	50	✓	4,29

SPARE PARTS

①



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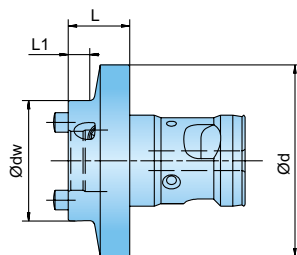
②



page 303

① = Screw ② = Wrench

TOOL HOLDERS AND ADAPTORS



Designation	MOD1	d	dw	L	L1	MOD	IK	kg
Z5Z4SA025	40	78	49	25	9	50	✓	0,85
Z5Z4SA050	40	78	49	50	34	50	✓	1,20
Z5Z4SA075	40	78	49	75	59	50	✓	1,55
Z5Z4SA100	40	78	49	100	84	50	✓	1,88
Z5Z4SB025	40	78	61	25	9	50	✓	0,92
Z5Z4SB050	40	78	61	50	34	50	✓	1,48
Z5Z4SB075	40	78	61	75	59	50	✓	2,04
Z5Z4SB100	40	78	61	100	84	50	✓	2,60

SPARE PARTS

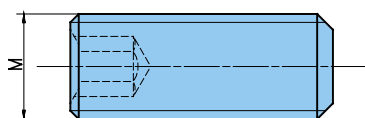


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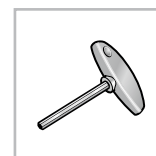
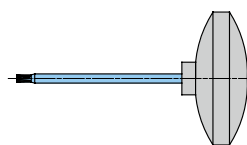
page 303

① = Screw ② = Wrench

SPARE PARTS



DIN 913



Item no.

for
MOD M

Screw

SA080-21 (17Nm)

40 8x1

SA100-45 (27Nm)

50 10x1

Wrench

DS-H04T

40

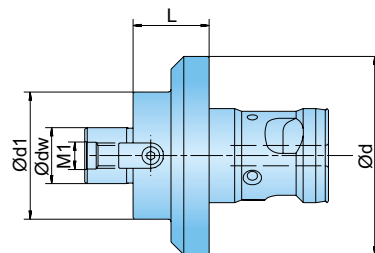
DS-H05T

50

MODULAR 50/40 (REDUCER) / SPARE PARTS

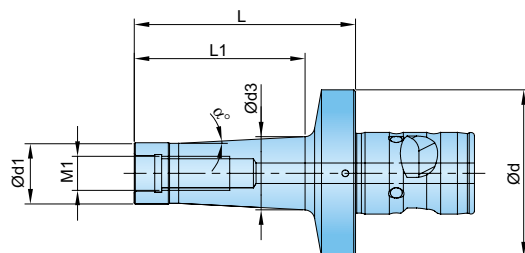
INNOFIT

TOOL HOLDERS AND ADAPTORS



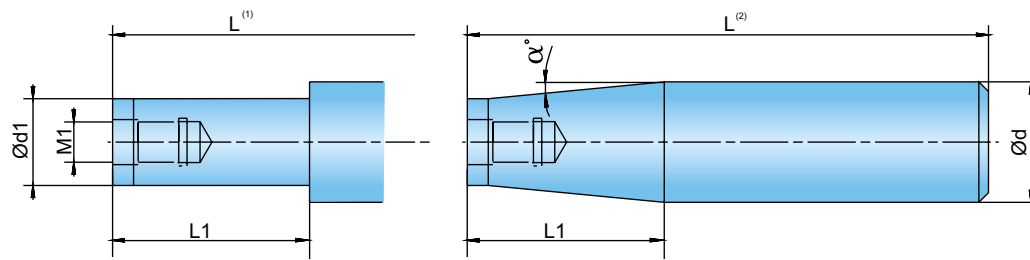
Designation	d	dw	d1	L	M1	MOD	IK	kg
Z4SM16SA023	49	16	36	23	8	40	✓	0,38
Z4SM22SA016	49	22	49	16	10	40	✓	0,39
Z4SM27SA020	49	27	60	20	12	40	✓	0,60
Z4SM16SB023	61	16	61	16	10	40	✓	0,42
Z4SM22SB016	61	22	61	16	10	40	✓	0,46
Z4SM27SB020	61	27	61	20	12	40	✓	0,57
Z5SM22SA030	78	22	50	30	10	50	✓	1,14
Z5SM27SA030	78	27	60	30	12	50	✓	1,26
Z5SM32SA030	78	32	78	30	16	50	✓	1,57
Z5SM40SA030	78	40	88	30	20	50	✓	1,94

TOOL HOLDERS AND ADAPTORS



Designation	d	d1	d3	L	L1	α	M1	MOD		
Z4MOD08SK065	49	13	17	65	50	3°	8	40	✓	0,32
Z4MOD08SK115	49	13	22	115	100	3°	8	40	✓	0,43
Z4MOD08SK165	49	13	27	165	150	3°	8	40	✓	0,61
Z4MOD10SK065	49	18	22	65	50	3°	10	40	✓	0,36
Z4MOD10SK115	49	18	27	115	100	3°	10	40	✓	0,54
Z4MOD10SK165	49	18	32	165	150	3°	10	40	✓	0,80
Z4MOD12SK065	49	21	25	65	50	3°	12	40	✓	0,40
Z4MOD12SK115	49	21	30	115	100	3°	12	40	✓	0,63
Z4MOD12SK165	49	21	36	165	150	3°	12	40	✓	0,95
Z4MOD08SF065	61	13	17	65	50	3°	8	40	✓	0,41
Z4MOD08SF115	61	13	22	115	100	3°	8	40	✓	0,51
Z4MOD08SF165	61	13	27	165	150	3°	8	40	✓	0,69
Z4MOD10SF065	61	18	22	65	50	3°	10	40	✓	0,45
Z4MOD10SF115	61	18	27	115	100	3°	10	40	✓	0,63
Z4MOD10SF165	61	18	32	165	150	3°	10	40	✓	0,88
Z4MOD12SF065	61	21	25	65	50	3°	12	40	✓	0,49
Z4MOD12SF115	61	21	30	115	100	3°	12	40	✓	0,71
Z4MOD12SF165	61	21	36	165	150	3°	12	40	✓	1,03
Z4MOD16SF065	61	29	33	65	50	3°	16	40	✓	0,60
Z4MOD16SF115	61	29	38	115	100	3°	16	40	✓	0,98
Z4MOD16SF165	61	29	43	165	150	3°	16	40	✓	1,50
Z4MOD16SB070	61	29	29	70	50	-	16	40	✓	0,62
Z4MOD16SB095	61	29	29	95	75	-	16	40	✓	0,74
Z4MOD16SB120	61	29	29	120	100	-	16	40	✓	0,86

TOOL HOLDERS AND ADAPTORS

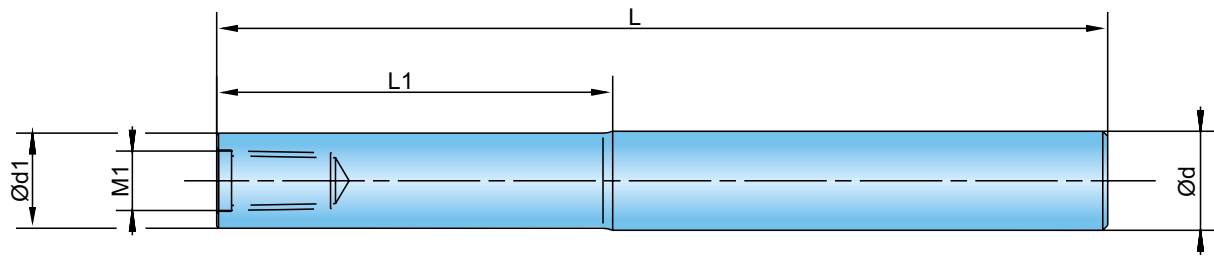


Designation	d	d1	L	L1	α	M1		
SM06-L60-C10 ¹⁾	10	9,8	60	20	-	6	✓	0,05
SM06-L105-C12 ²⁾	12	9,8	105	60	1,2°	6	✓	0,09
SM06-L125-C16 ²⁾	16	9,8	125	60	3,3°	6	✓	0,10
SM08-L73-C16 ¹⁾	16	13	73	25	-	8	✓	0,11
SM08-L128-C16 ²⁾	16	13	128	80	0,9°	8	✓	0,18
SM08-L170-C20 ²⁾	20	13	170	67	3,3°	8	✓	0,35
SM10-L80-C20 ¹⁾	20	18	80	30	-	10	✓	0,18
SM10-L130-C20 ²⁾	20	18	130	80	0,6°	10	✓	0,27
SM10-L200-C25 ²⁾	25	19	200	57	3,3°	10	✓	0,45
SM12-L86-C25 ²⁾	25	21	86	30	5,1°	12	✓	0,20
SM12-L200-C32 ²⁾	32	21	200	78	4,4°	12	✓	0,60
SM16-L95-C32 ²⁾	32	29	95	35	1,7°	16	✓	0,54
SM16-L230-C32 ²⁾	32	29	230	50	1,8°	16	✓	0,60

¹⁾Cylindrical; ²⁾Conical

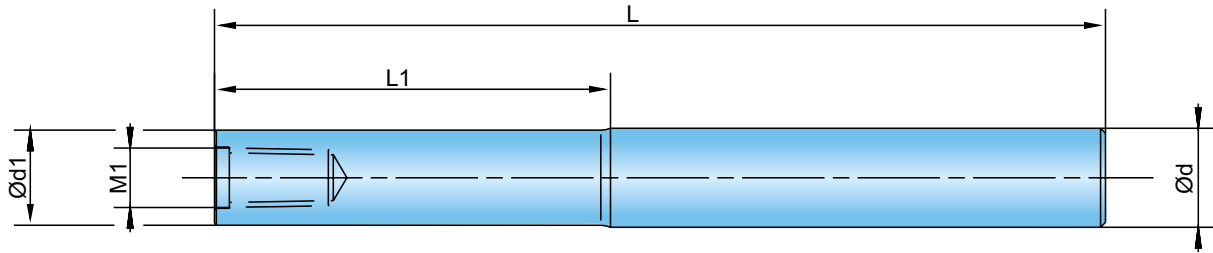
STEEL EXTENSION CYLINDRICAL/CONICAL (SCREW TYPE)

TOOL HOLDERS AND ADAPTORS



Designation	d	d1	L	L1	M1
S016MOD08HA040	16	13	88	40	8
S016MOD08HA060	16	13	108	60	8
S016MOD08HA080	16	13	128	80	8
S016MOD08HA100	16	13	148	100	8

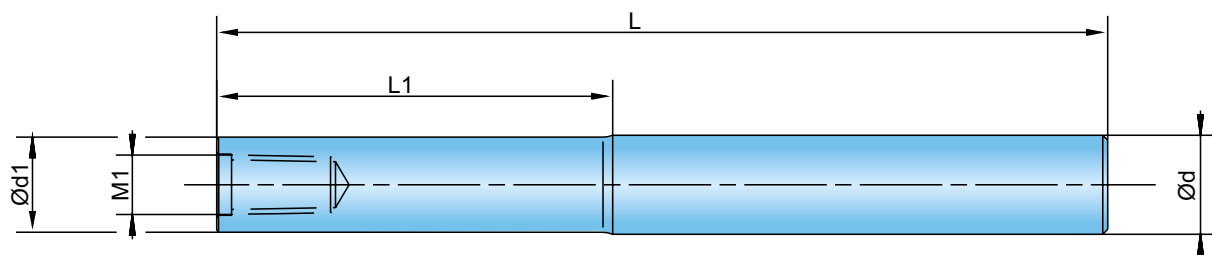
TOOL HOLDERS AND ADAPTORS



Designation	d	d1	L	L1	M1	IK
S010MOD06CA024	10	-	80	-	6	✓
S010MOD06CA031	10	9,8	80	31	6	✓
S010MOD06CA060	10	9,8	110	60	6	✓
S010MOD06CA080	10	9,8	130	80	6	✓
S010MOD06CA100	10	9,8	150	100	6	✓
S012MOD06CA030	12	-	80	-	6	✓
S012MOD06CA031	12	11	80	31	6	✓
S012MOD06CA100-03	12	11	150	100	6	✓
S012MOD06CA040	12	11,8	88	40	6	✓
S012MOD06CA060	12	11,8	108	60	6	✓
S012MOD06CA080	12	11,8	128	80	6	✓
S012MOD06CA100	12	11,8	148	100	6	✓
S014MOD08CA024	14	-	80	-	8	✓
S016MOD08CA055	16	14,4	120	55	8	✓
S016MOD08CA135	16	14,4	200	135	8	✓
S018MOD10CA040	18	-	200	-	10	✓
S019MOD10CA040	19	18	200	135	10	✓
S020MOD10CA055	20	18	120	55	10	✓
S020MOD10CA135	20	18	200	135	10	✓
S025MOD12CA060	25	22,5	125	60	12	✓
S025MOD12CA080	25	22,5	145	80	12	✓
S025MOD12CA100	25	22,5	165	100	12	✓
S025MOD12CA157	25	22,5	250	157	12	✓
S025MOD12CA207	25	22,5	300	207	12	✓
S032MOD16CA207	32	28,6	300	207	16	✓

SOLID CARBIDE EXTENSION - CYLINDRICAL (SCREW TYPE)

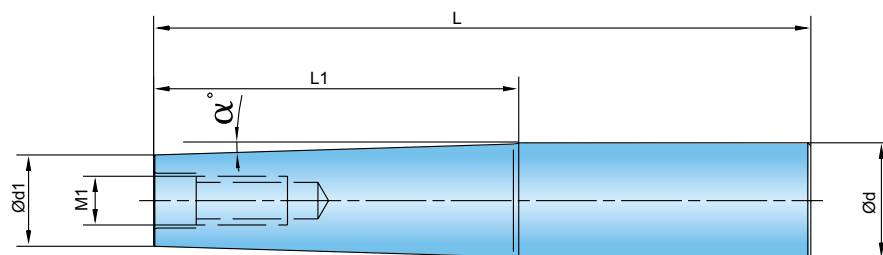
TOOL HOLDERS AND ADAPTORS



Designation	d	d1	L	L1	M1	
S012MOD06VA020	12	11	70	20	6	✓
S012MOD06VA070	12	11	120	70	6	✓
S016MOD08VA006	16	14,5	70	6	8	✓
S016MOD08VA056	16	14,5	120	56	8	✓
S020MOD10VA006	20	18	64	6	10	✓
S020MOD10VA024	20	18	89	24	10	✓
S020MOD10VA070	20	18	130	70	10	✓
S020MOD10VA125	20	18	180	125	10	✓
S025MOD12VA015	25	22,6	81	15	12	✓
S025MOD12VA045	25	22,6	111	45	12	✓
S025MOD12VA110	25	22,6	180	110	12	✓
S025MOD12VA155	25	22,6	220	155	12	✓
S032MOD16VA014	32	29,4	103	14	16	✓
S032MOD16VA090	32	29,4	160	90	16	✓
S032MOD16VA108	32	29,4	200	108	16	✓
S032MOD16VA159	32	29,4	250	159	16	✓
S032MOD16VA207	32	30	300	207	16	✓

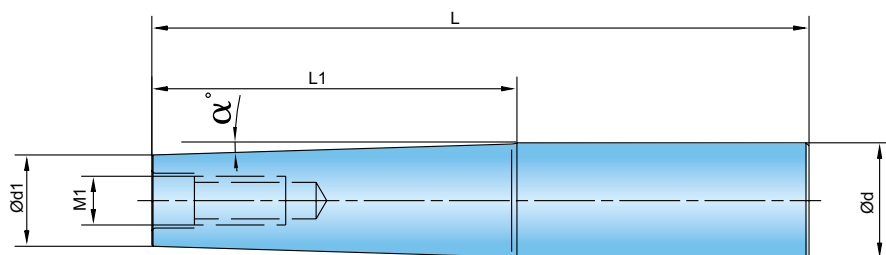
EXTENSION WITH VIBRATION DAMPING (SREW TYPE)

TOOL HOLDERS AND ADAPTORS



Designation	d	d1	L	L1	α	M1
S016MOD08HK040	16	13	88	40	2°	8
S016MOD08HK060	16	13	108	60	1,4°	8
S016MOD08HK080	16	13	128	80	1°	8
S016MOD08HK100	16	13	148	100	0,8°	8
S016MOD08HK120	16	13	168	120	0,7°	8
S020MOD10HK040	20	18	90	40	1,4°	10
S020MOD10HK060	20	18	110	60	0,9°	10
S020MOD10HK080	20	18	130	80	0,7°	10
S020MOD10HK100	20	18	150	100	0,55°	10
S020MOD10HK120	20	18	170	120	0,45°	10

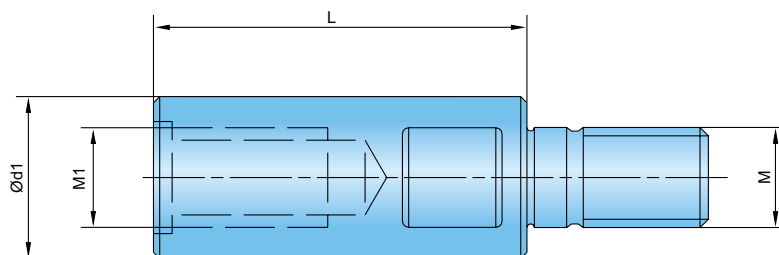
TOOL HOLDERS AND ADAPTORS



Designation	d	d1	L	L1	α	M1	
S016MOD08CK040	16	13	88	40	1,9°	8	✓
S016MOD08CK060	16	13	108	60	1,3°	8	✓
S016MOD08CK080	16	13	128	80	0,95°	8	✓
S016MOD08CK100	16	13	148	100	0,8°	8	✓
S016MOD08CK120	16	13	168	120	0,65°	8	✓
S020MOD10CK040	20	18	90	40	1,2°	10	✓
S020MOD10CK060	20	18	110	60	0,8°	10	✓
S020MOD10CK080	20	18	130	80	0,6°	10	✓
S020MOD10CK100	20	18	150	100	0,5°	10	✓
S020MOD10CK120	20	18	170	120	0,4°	10	✓

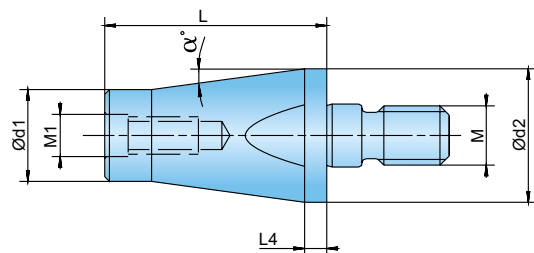
CARBIDE EXTENSION - CONICAL (SCREW TYPE)

TOOL HOLDERS AND ADAPTORS



Designation	d1	L	M	M1	IK
CABM06M06-C	9,8	25	6	6	✓
CABM08M08-C	13	30	8	8	✓
CABM10M10-C	18	35	10	10	✓
CABM12M12-C	21	40	12	12	✓
CABM16M16-C	29	40	16	16	✓

TOOL HOLDERS AND ADAPTORS



Designation	d1	d2	L	L4	α	M	M1		 kg
CABM06M08	9,7	13	30	4	5,7°	8	6	✓	0,08
CABM08M10	13	18	40	5	5,2°	10	8	✓	0,08
CABM10M12	18	21	45	7	2,5°	12	10	✓	0,10
CABM12M16	21	29	50	6	6,3°	16	12	✓	0,20

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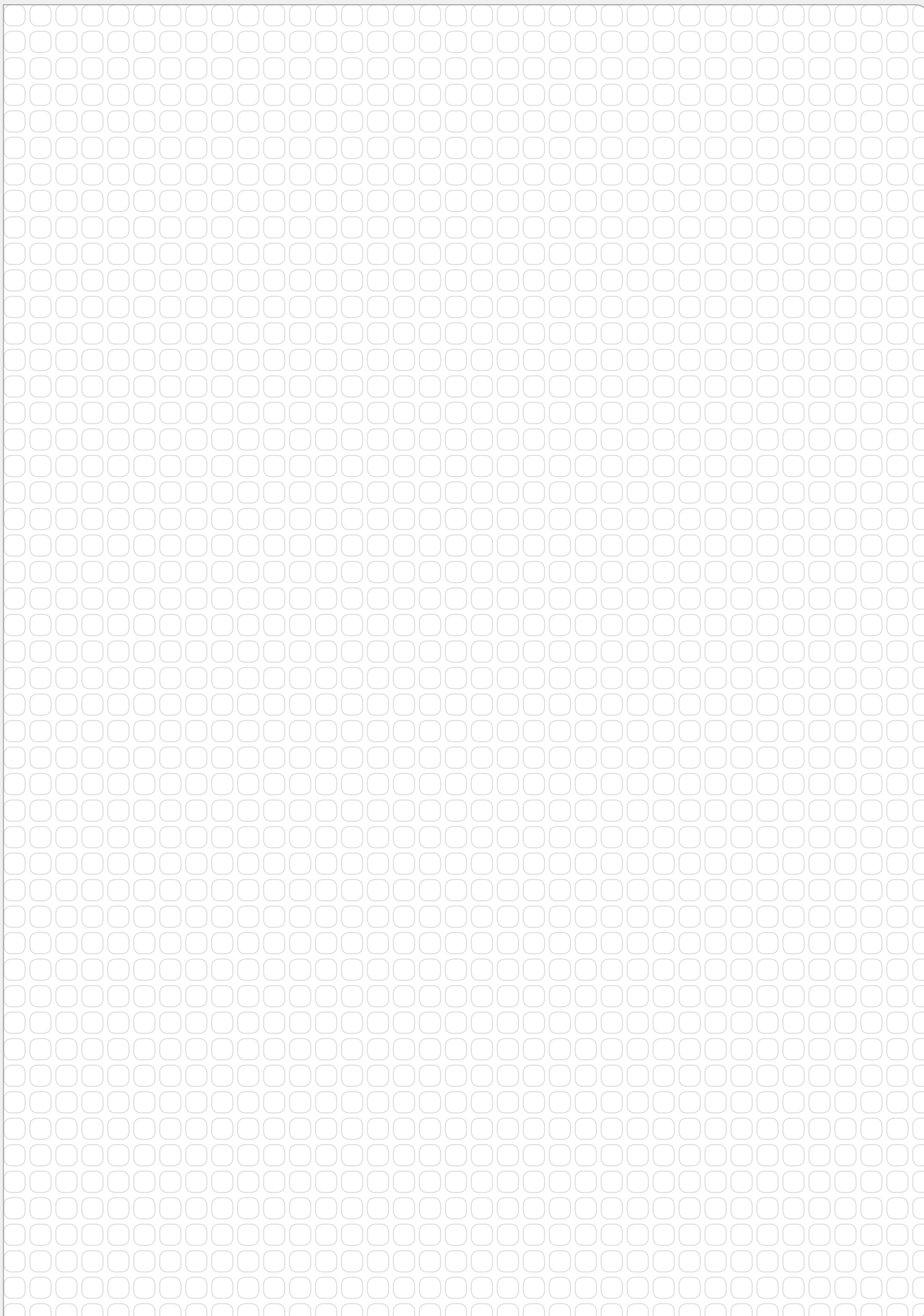
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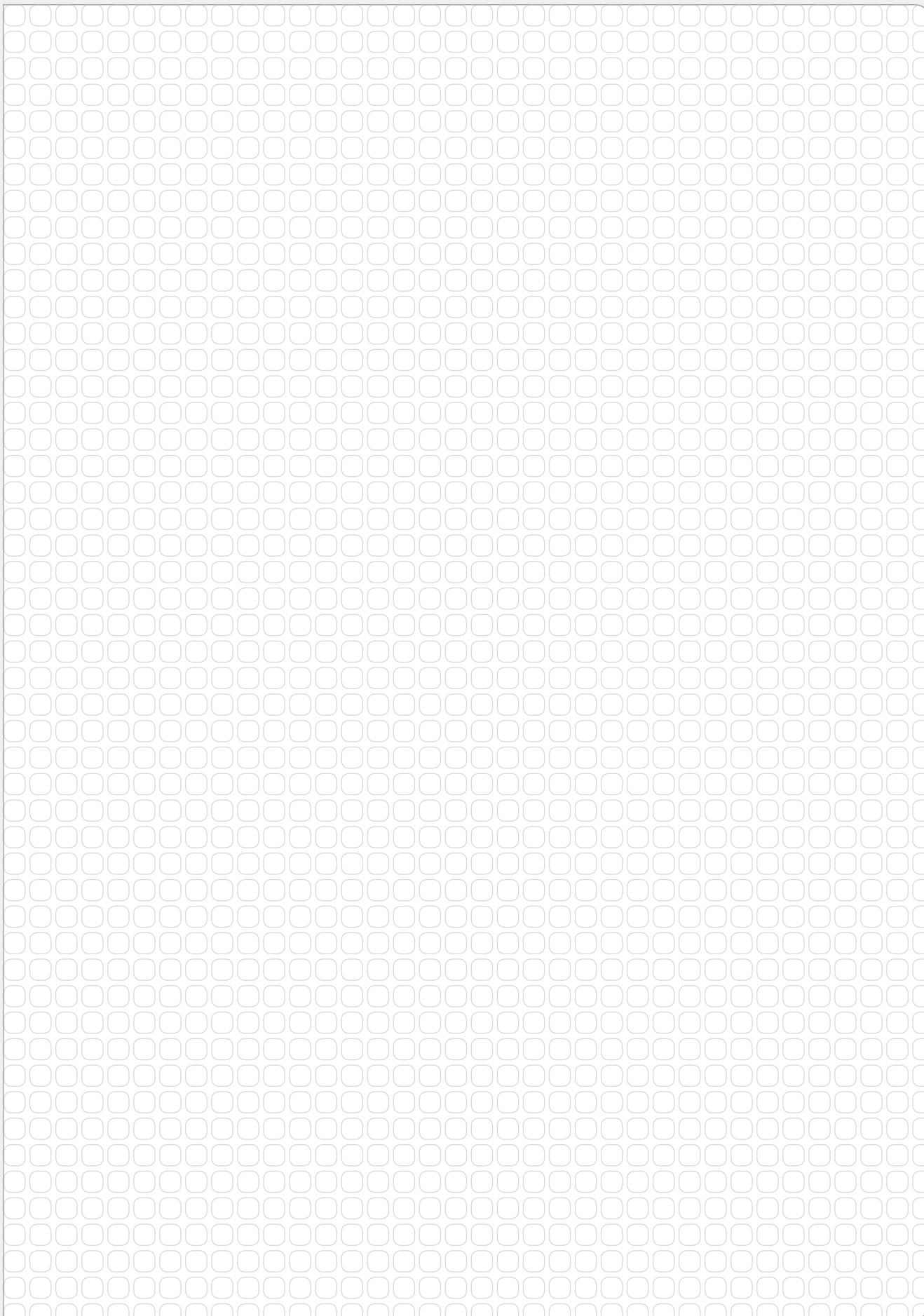
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INNOTOOL

INNOTOOL, which stands for „Innovative Tooling“, is a market leader in indexable milling products.

The high shear geometry design of cutter body and inserts ensures that Innotool performs very well on low powered machines and often the cutting data can be increased considerably due to the soft cutting action.

The range of standard tooling has increased to now also contain a full range of tools for die & mould machining, as well as a range of indexable insert short hole drills.

In addition to the complete range of standard end mills, square shoulder mills, helical end mills, side and face mills and die and mould tooling, INNOTOOL can offer an excellent and fast service for special solutions.

We look forward to being of service.







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