

NEW

INNOTOOL

LOOK FORWARD



TRI FEED

HIGH FEED MILL PW06D10 / PW06E01

- Very smooth insert geometry •*
- 3-edged insert •*
- 2 different insert geometries in 4 different carbide grades •*
- Available as shell-type and screw-in type milling cutters •*
- Tool diameter 16 - 52 mm •*

■ **TRI FEED** HIGH FEED MILL PW06D10 / PW06E01

■ **Product Description**

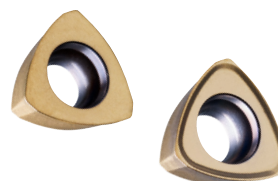
New high feed milling cutter for rough milling in diameter range Ø 16 - 52 mm.

Different insert geometries for machining of steel, cast iron and materials of material groups M (stainless steel), S (heat resistant and titanium alloys) and hardened materials of material group H up to 54 HRC.

The new series will be available as screw-in type mills with diameter range Ø16 - Ø42 and as shell-type mills in diameters Ø32 - Ø52.

■ **Application Range**

Face and contour milling in mechanical engineering, mould and die industry as well as aerospace industry.



■ **Technical Features**

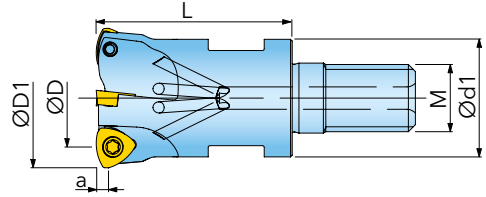
- 3-edged inserts for cutting depths up to 0.8 mm.
- Different geometries for stable and unstable conditions. Neutral and positive geometries in 4 different carbide grades covering a wide range of different applications enable the max. cutting volume to be achieved, even for difficult applications.
- An O.D. wiper on each insert corner allows secured axial step over and maintains application at 90° shoulders without any problem.
- The programming radius is R2.0.
- For details of the recommended cutting data, please refer to the manual 'Cutting Data for Milling and Boring Tools'.

■ **Advantages**

- Smooth cutting, axially positive mounting position
- Cutting depths up to 0.8 mm
- 3-edged insert
- 2 different insert geometries in 4 different carbide grades
- Available as shell-type and screw-in type milling cutters
- Tool diameter range Ø16 - Ø52 mm
- O.D. wiper to maintain application at 90° shoulders



SCREW-IN TYPE ADAPTION



Designation	D	D1	d1	L	a	M	Z			
PW.016.001	7,4	16	13	25	0,8	8	2	14,4	✓	0,02
PW.020.001	11,4	20	18	30	0,8	10	3	5,9	✓	0,05
PW.025.001	16,4	25	21	35	0,8	12	4	5,3	✓	0,09
PW.030.001	21,4	30	29	43	0,8	16	5	3,5	✓	0,20
PW.032.001	23,4	32	29	43	0,8	16	5	3,1	✓	0,22
PW.035.001	26,4	35	29	43	0,8	16	6	2,2	✓	0,23
PW.040.001	31,4	40	29	43	0,8	16	6	2,1	✓	0,27
PW.042.001	33,4	42	29	43	0,8	16	7	1,6	✓	0,28

Programming radius 2mm

WCNT060205FR-FL			WCNW060205TR								
Designation	fz(min/max)	Design	Grade	IN2504	IN2505	IN2530	IN4035				
WCNT060205FR-FL	0,50/1,00	positive geometry									
WCNW060205TR	0,60/1,10	neutral geometry									

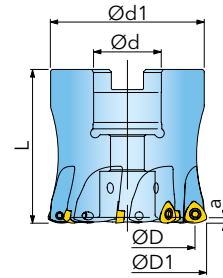
● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS		
	SM25-054-00 (1,1Nm)	DS-T08S

① = Insert screw ② = Screw driver

TRI FEED HIGH FEED MILL PW06D10

ADAPTION ACC. TO DIN 8030



Designation	D	D1	d	d1	L	a	Z			
PW.032.002	23,4	32	16	30	40	0,8	5	3,1	✓	0,15
PW.035.002	26,4	35	16	30	40	0,8	6	2,2	✓	0,17
PW.040.002	31,4	40	22	38	40	0,8	6	2,1	✓	0,23
PW.042.002	33,4	42	22	38	40	0,8	7	1,6	✓	0,24
PW.050.001	41,4	50	22	45	50	0,8	8	1,3	✓	0,52
PW.052.001	43,4	52	22	40	50	0,8	8	1,2	✓	0,56

Programming radius 2mm

WCNT060205FR-FL			WCNW060205TR								
Designation	fz(min/max)	Design	Grade	IN2504	IN2505	IN2530	IN4035				
WCNT060205FR-FL	0,50/1,00	positive geometry									
WCNW060205TR	0,60/1,10	neutral geometry									

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS		
	SM25-054-00 (1,1Nm) DS-T08S	

① = Insert screw ② = Screw driver

Inserts



insert:

WCNT060205FR-FL WCNW060205TR

max. cutting depth:

ap = 0.8 mm **ap = 0.8 mm**

programming radius:

2 mm **2 mm**

Recommended Cutting Data

material	cutting speed Vc [m/min]				recommended cutting depth ap [mm]	feed per tooth fz [mm]
	1st choice dry machining resp. wear resistant carbide		1st choice wet machining resp. tough carbide			
unalloyed steel	IN2505	160-220	IN2530	130-180	0.5-0.8	0.5-1.0
alloyed steel 800 N/mm ²	IN2505	140-200	IN2530	110-160	0.5-0.8	0.5-1.0
alloyed steel 1100 N/mm ²	IN2505	120-180	IN2530	100-150	0.5-0.8	0.5-1.0
stainless steel	IN2530/IN4035	90-150	IN2530/IN4035	80-130	0.5-0.8	0.5-0.9
gray cast iron	IN2505	160-250	IN2530	140-200	0.5-0.8	0.5-1.1
nodular cast iron	IN2505	140-200	IN2530	120-170	0.5-0.8	0.5-1.1
aluminum	-	-	-	-	-	-
high temperature alloys	-	-	IN4035	50-70	0.5-0.7	0.5-0.9
titanium alloys	-	-	IN4035	30-40	0.5-0.7	0.5-0.9
hard machining < 54 HRC	IN2504	60-100	-	-	0.3-0.6	0.5-0.7
hard machining < 63 HRC	-	-	-	-	-	-

Tips

- The worse the material machinability, the smaller the tool engagement should be chosen.
- The smaller the cutting tool diameter, the higher the cutting speed can be.
- Approaching feed rate should be reduced by 30%.
- 3-edged insert

Ramping Angle and Circular Interpolation

tool diameter [mm]	max. ramp. angle [°]	min. bore dia. [mm]	max. ap/rev. [mm]	max. bore dia. [mm]
16	14.4	19.8	0.7	32.0
20	5.9	27.6	0.7	40.0
25	5.3	37.6	0.7	50.0
30	3.5	47.6	0.7	60.0
32	3.1	51.6	0.7	64.0
35	2.2	57.6	0.7	70.0
40	2.1	67.6	0.7	80.0
42	1.6	71.6	0.7	84.0
50	1.3	87.6	0.7	100.0
52	1.2	91.6	0.7	104.0

General Information

Inserts WCNT0602_ / WCNW0602_

Insert screw:

SM25-054-00

Torque:

1.1 Nm

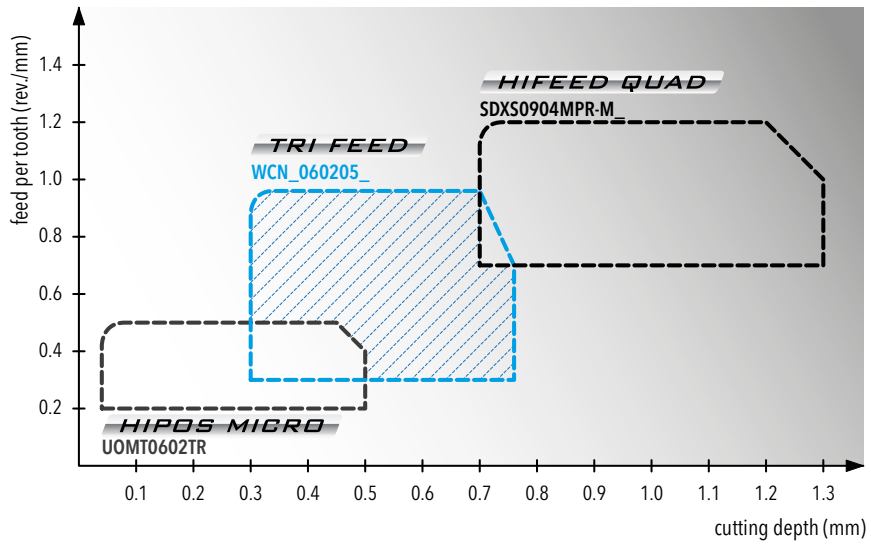
Torque wrench:

DTN011S with bit DS-T08TB

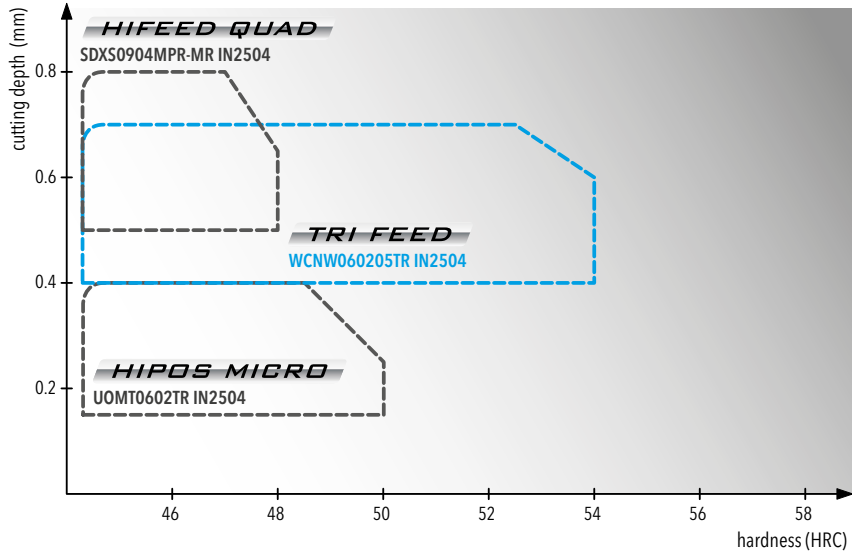
Successful machining results depend on many factors, so cutting data recommendations can only be a rough guideline. Therefore in any case of doubt do not hesitate to contact your INNOTOOL partner.

Application Range

Cutting depth/feed per tooth



Hard milling



Residual Material and Programming Radius

Please use a corner radius of 2 mm in your NC-program when machining 3D-contours.

The maximum allowance will then be up to 0.42 mm.

