

# InduPlast

PLASTICOS DE INGENIERIA

SPECIALITS IN PLASTIC MACHINING



# 3D ADDITIVE PRINTING

The definitive solution for your projects

## Adapting solutions since 2004

For more than 3 years, we have been developing 3D additive printing by fusión tasks, with the HP JET FUSION printer.

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Thanks to the success of this tool, together with traditional machining services, manufacturing demand has increased.

For this reason, we have extended the technological processes.

### Trajectory

2004

- Machining Processes
- Technical advice

2017

Fusion additive printing processes with the 3D HP JET FUSION are starting to replace traditional manufacturing techniques in the majority of industrial sectors.

- Capability to produce a batch of parts in a single printing
- High profitability due to the reasonable cost and time
- Manufacture in PA12 (very versatile raw material)
- Post-Production processes for the optimisation of finishes

Technical characteristics for HP JET FUSION additive printing by fusion

274 x 370 x 380 mm  
Layer height: 0.08 mm  
Tolerances:  $\pm 0.3$  (with a lower limit of  $\pm 0.3$  mm)

2020

- Machining processes
- Extension of 3D printing technologies
- 3D Scanning
- Technical advice
- Account manager with customised service

## ► 2020

We are incorporating 3 new manufacturing lines in 3D printing

SLA (LFS)	FFF	FFF + CF
Stereolithography	Fused Filament Fabrication	Fused Filament Fabrication + Continuous Filament Fabrication
145 x 145 x 185 mm Layer height: 25 – 300 µm XY Resolution: 25 µm	330 x 240 x 300 mm Layer height: 0.06 – 0.2 mm Tolerances: ± 0.2 mm	330 x 270 x 200 mm Layer height: 0.05 – 0.25 mm Tolerances = ± 0.08 mm

# SLA Stereolithography



Laser technology that uses basic materials and technical resins sensitive to UV light. A rapid prototyping solution, it offers a high degree of accuracy, excellent final appearance and good surface quality. Recommended for visual parts.

#### APPLICATIONS:

- Prototyping
- Immediately functional parts

Machine:  
FORMLAB3



# FDM/ FFF Fused deposition modelling

The conversion of filaments into industrial quality parts with good properties.



Very durable standardised materials are used with this technique, adding stability to their mechanical properties over time and quality to the parts.

Thermoplastic materials for production processes that are used in FDM are adequate for detailed functional prototypes, durable manufacturing tools and small part volumes.

## MATERIALS:

PLA, HTPLA, TPU, FLEX, ABS, PET, ASA, PC, PP, PA, PAHT, ETC.

# FFF+CF / FDM with fibres

## Material filament printing with fibre filler.

This printer is also designed for printing those types of materials that already have glass, carbon, Kevlar fibre filler, etc



### Examples

Polyamide+33% carbon fibre Flame retardant (FR) materials

- PA FR
- PA+33%CF FR

Electrically conductive materials:  
Graphite

The result of this process is a visible improvement of the mechanical properties, which can sometimes equal those of aluminium 6061 T6, at a lower weight.



# 3D Scanning

NEW PROCESS

With this very innovative process, we offer the unique opportunity to transform a model with dimensions of up to 300 x 300 x 350 cm into a technical design, to then be manufactured by machining or 3D printing.



It is used to validate already manufactured parts, to design components attached to the sample, to design tools for

their manufacture, to recover the design of the component and even to improve the model part (reverse engineering).



▲ 3D Scanning of human figure



# 3D Scanning

Maximum dimensions: 300 x

300 x 350 cm

Operating Modes:

Handheld HD Scan

0,05 mm

Handheld Rapid Scan

0,1 mm

Fixed Scan

0,04 mm

Files:



STL, STEP, IGES, PART (Solidworks, Solidedge)

## 3D Scanning

OBJECT

Scanning

Mash Manipulation

CAD generation

(.stl)

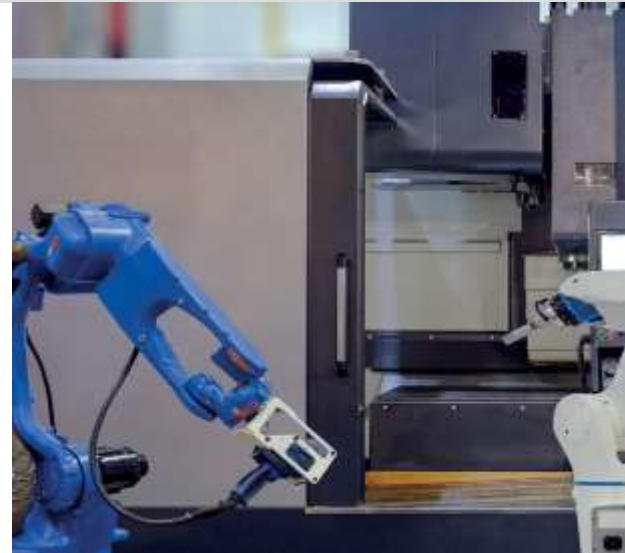
(.iges/.step)

Reverse engineering

Obtaining drawings

Additive manufacture

Traditional manufacture



# InduPlast

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## 3D ADITIVE PRINTING

Plastic machining  
3D additive printing  
Customised technical advice



Ask us  
For information



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