

Discover the real  
**LARGE FORMAT 3D PRINTING**  
**+ POST-PROCESSING**

# Super Discovery 3D Printer

WORKSTATION

**All in one solution**

High performance · Reliability · Cost savings



  
**SUPER  
DISCOVERY**  
3Dprinter  
WORKSTATION

discovery3dprinter.com

 **DISCOVERY**  
3Dprinter  
www.discovery3dprinter.com

 **CNC** bárcenas  
www.cncbarcenas.com

# 3D Printing + Postprocessing

The perfect combination between large format industrial 3D printing and post-processing system by milling



3D Printing



Postprocessing



- > **More production and speed.**
- > **Significant cost reduction.**
- > **Self-leveling bed that automatically compensates for small unevennesses during printing.**
- > **Robust and precise CNC technology for postprocessing.**

It meets the production needs of a large number of large parts and prototypes. It **works by directly extruding the pellet**, which lowers the cost per piece manufactured, **increasing production and reducing costs significantly**. Thanks to its built-in **postprocessing** system, you can print and post-process the parts on the same machine. The process is simple and fast. Its special structure allows to have the entire production volume, as it includes printing and machining in the same axis. It is possible to use it as a CNC milling machine for the production of 2D and 3D milled parts. A robust and precise machine with high performance.



#### 100% Made in Spain

100% designed, developed and manufactured in the facilities of CNC Bárcenas.



#### Use of Pellet

The Super Discovery 3D Workstation works with direct pellet extrusion technology.



#### Materials

It allows to use any thermoplastic such as ABS, ABS CF, PC CF, PPE CF, 3D850, ASA...



#### Universal

Automatic pellet feeder there is no limitation on the quantity of material or therefore in the weight of the pieces.



#### Table

Fully closed chamber and warm bed (up to 125°) with SELF-LEVELING for the most demanding materials.



#### Extruder

400° extruder.



#### Milling Motor

High frequency brushless motor with air-cooled ceramic bearings.

- ER32 tool holder from 1 to 20 mm.
- 4,500 to 18,000 rpm, with adjustable speed from the machine control panel.

Able to perform large postprocessing work, as well as cuts, carvings or 3D engravings in plastics, resins, foams, wood and many other materials.



#### Customized Work Area

Factory configuration is 1300x2500x1000 mm, but can be customized for any need of the big industry.



#### Software

Comfortable program with network access for easy and simple operation.



Some customers of our 3D printing technology

AIRBUS



EM&E  
ESCRIBANO MECHANICAL & ENGINEERING



SICNOVA



KU LEUVEN



STADLER



tesco



HITACHI ABB



B/S/H/



Wind turbine blade mold.  
1700 x 520 x 330 mm.  
\*Printed by BTU (Brandenburg  
University of Technology  
Cottbus-Senftenberg).



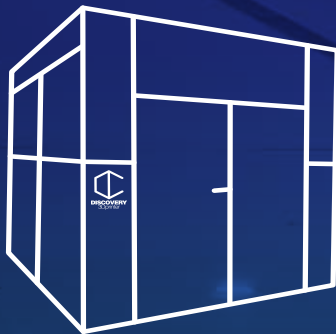
Hull prototype  
USV-Trimarán.  
600 x 900 mm.  
\*Printed by CEU.  
(University Cardenal Herrera)



Real-size car tires.  
ABS CF. Ø 440 mm.



Tram bumper.  
1690 x 530 x 220 mm.  
\*Printed by CAF according to norm EN45545 R1.



technical specifications

# Super Discovery 3D Printer

WORKSTATION

## Productivity in 3D printing

Technology: Pellet.  
Work load Up to 12 kg/hour.  
Max. extrusion temperature 400°.  
Speed up to 200 mm/s.  
Layer thickness (minimum) 0,5 mm.

## CNC milling motor

Air-cooled ER32 manual tool change.  
Resolution: +/- 0.05 mm.  
Maximum speed:  
In air: 20 meters / min.  
In work: 15 meters / min.

## Dimensions printer

4000x4000x4000  
(+hopper & electrical cabin)

## Printing volume

(XYZ) 1300x2500x1000 mm.  
Can be customized.

## Servodrivers on all axes.

**Weight** 4000 Kg.

**Cabin** Closed.

**Table** Heated up 125° with SELF-LEVELING.

**Power Supply** 400 v.

**SW** Open-source printing profiles  
+ Software CNC.

**Network** Ethernet.

**CE Mark** Yes.

**Warranty** Warranty policy on the website.



INDUSTRIAL STANDARD  
CLASSIFICATION CODE  
08-A-284-13020079

CONTACT US FOR MORE INFORMATION AND  
WE WILL STUDY YOUR CASE CUSTOMIZED

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