

Admaflex 130

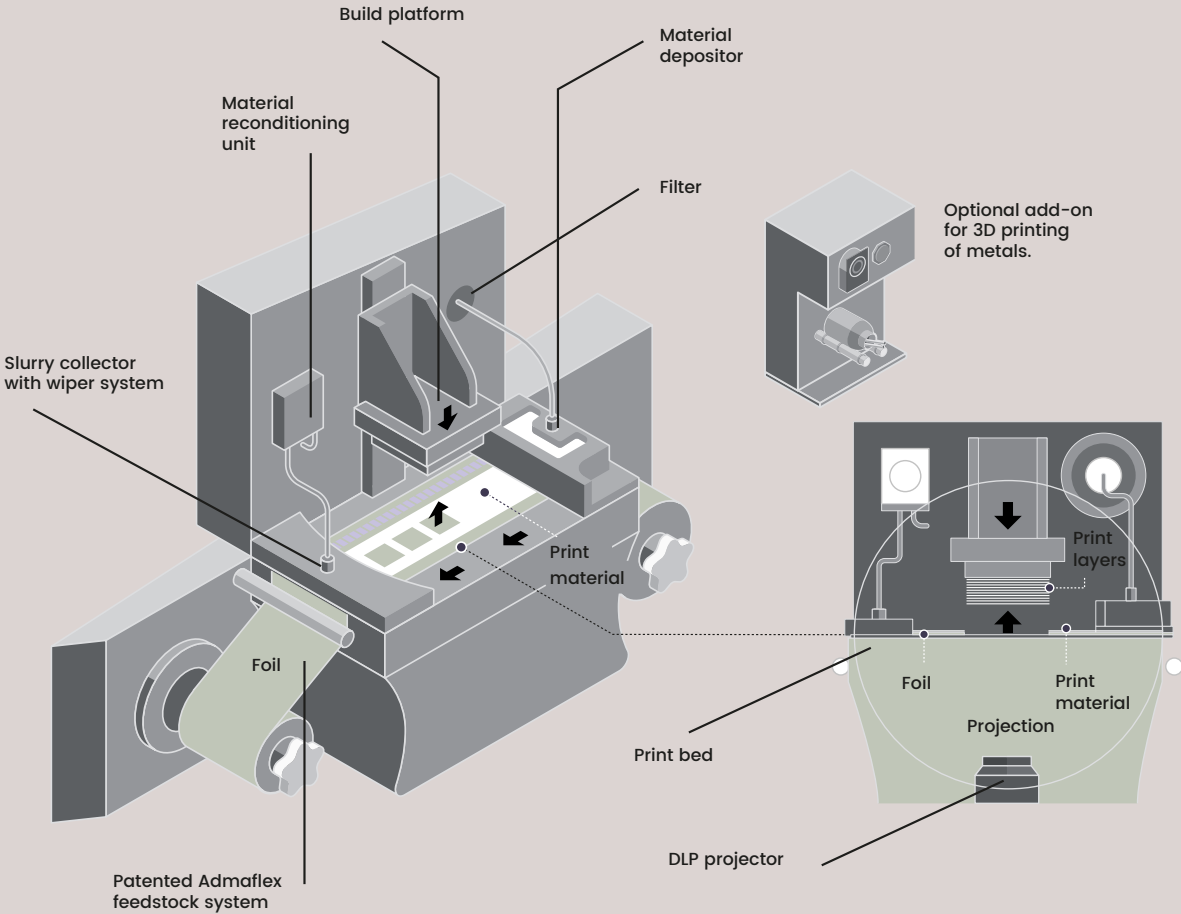
DLP 3D printer

Ceramic and metal 3D printing
for development and production



Design and Functions

The unique design and functions of the Admaflex Technology



Featuring the unique capability of 3D printing both advanced ceramics and metals on one machine. This technology is ideal for functional and aesthetical parts requiring complex geometries, high resolution, fine details, and smooth surface while benefiting from excellent material properties.



Features



Patented feedstock system

The Admaflex 130 is designed to effectively handle materials with high viscosity, normally associated with ceramic slurries, enabling high reliability and printing speeds. This innovative system also enables efficient feedstock management by reusing the excess material. A very small amount of slurry is sufficient to start printing, which makes the system ideal for research and 3D printing of precious materials.

Benefits

- High throughput
- A clean workplace and no material waste
- Quick and easy material switch
- Working with a broad viscosity range

Metal add-on

The Admaflex 130 3D printer has a patented feedstock system for printing metals and other heavy powders. The add-on overcomes the saddling problem of higher density materials. This puts the Admaflex 130 as the world's first DLP 3D printer to print metals.

Benefits

- Ceramic and metal printing on one machine
- Delivering metal products with full density and no residual stresses
- Providing aesthetical metal products with high-resolution thanks to the DLP technology

Open platform

The Admaflex 130 is an open system that provides full control of the printing process. The software features the ability to customize parameters, enabling layer-to-layer control before and during the printing process. It opens up the opportunity to use different materials, and the flexibility to develop new ones. A standard software feature is the "multi-part printing", that enables you to control light exposure settings for each part and layer.

Benefits

Research and development freedom
Open to the use of your own and other materials
Increased efficiency.



Modular concept

The Admaflex 130 printer was designed with a modular concept, to accommodate all future developments. You can also choose the resolution and building volume that meet your needs.

Benefits

Custom to your needs and budget
Access to future upgrades
Best value for money



In-process monitoring system add-on

The in-process quality monitoring is an excellent feature for full traceability of the printing process. These software and hardware components monitor temperature, humidity and foil usage. It also has a dual camera system for real-time video capture, and time-lapse recording. This allows the user for example to partially stop printing a defected product to allow the successful finalization of the remaining parts.

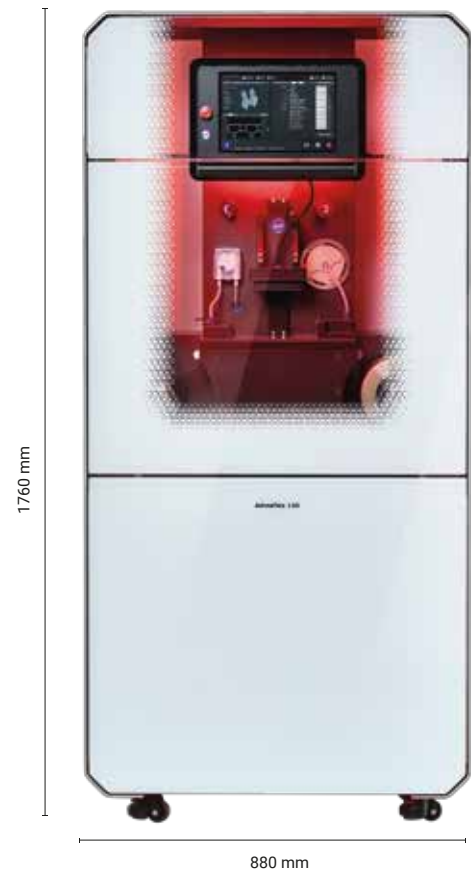
Benefits

Receive warnings and pause the print automatically when a problem is detected
Documented proof of the printing process
Increased throughput



Specifications

Technology	DLP
Printing build volume (X,Y,Z) with full HD light engine	96 x 54 x 110 mm 3.78 x 2.13 x 4.33 inch (50 µm) *Optional increase of Z stage, up to 396 mm 15.59 inch
Printing build volume (X,Y,Z) with WQXGA light engine	90 x 56 x 110 mm 3.54 x 2.20 x 4.33 inch (35 µm) 160 x 100 x 110 mm 6.30 x 3.94 x 4.33 inch (62.5 µm) *Optional increase of Z stage, up to 396 mm 15.59 inch
Layer thickness	10 - 200 µm
Build speed	Up to 300 layers per hour
Machine dimension (WxHxD)	880 x 1760 x 575 mm 34.65 x 69.29 x 22.64 inch
Weight	ca. 300 kg 660 lbs
Required working temperature	22 +/- 2°C
Required working humidity	< 40%
Connectivity	Ethernet, USB
Power requirements	110 / 230 V
File compatibility	SLC, STL
Final product density	Technical ceramics > 98.5% - 99.8%* Metals > 99%* *depending on sintering curve





ADMATEC

Hamsterkoog 7 1822 CD Alkmaar The Netherlands
info@admateceurope.com www.admateceurope.com