

ADMAFLEX 130

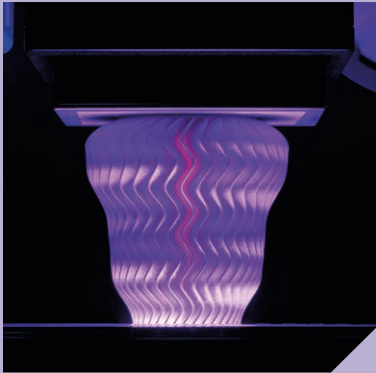
Experience printing high dense ceramics in an exceptional way

The ADMAFLEX 130 is suited for precision printing of fully dense (>99%) technical ceramic components. The advanced patented ADMAFLEX technology enables printing at speeds up to 20-25 mm p/hour, while an innovative material reconditioning system minimizes waste to none. The integrated DLP light engine allows for large surface printing while maintaining precision and resolution, to produce even the smallest sized features in full detail. Through an adaptive touchscreen the user has layer-to-layer control and the system's protective housing fully optimizes the 3D printing process of ceramics.



ADMAFLEX 130

Freedom of design, complex shaping & high functionality



Specifications

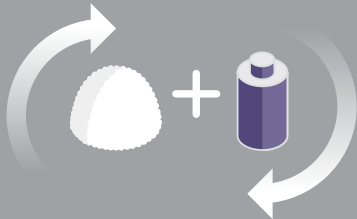
Printing technology	DLP
Net printing building volume before sintering ¹	50 µm – 96 x 54 x 120 mm
Resolution	1920 x 1080 px—full HD
Layer thickness	25 – 100 µm
Materials	- Aluminum oxide - Zirconium oxide - Silicon dioxide
Final product density ²	> 99%
Machine dimensions	575 x 880 x 1760 mm
Weight	approx. 300 kg
Ideal working temperature	22 ± 2°C
Relative humidity	< 40%
Power requirements	110 / 230 V
File compatibility	SLC

1. During sintering products shrink 25-35%, equal in x, y and z direction.

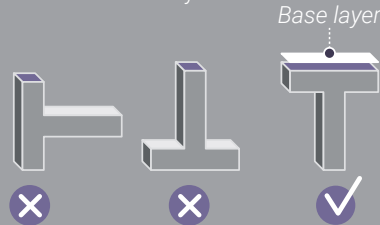
2. For Alumina and Zirconia

ADMAFLEX process

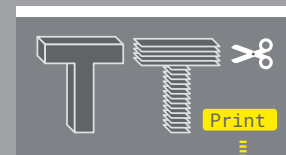
1 Powder is mixed with photosensitive resin.



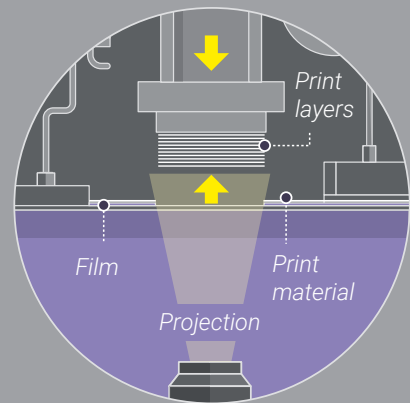
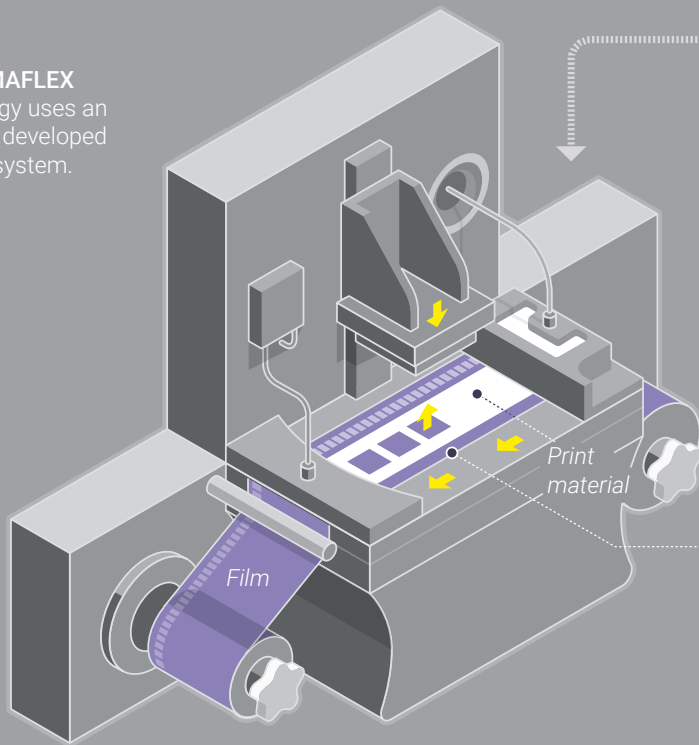
2 Determine printing direction and apply support structure if and where necessary.



Product slicing and submission to the printer.

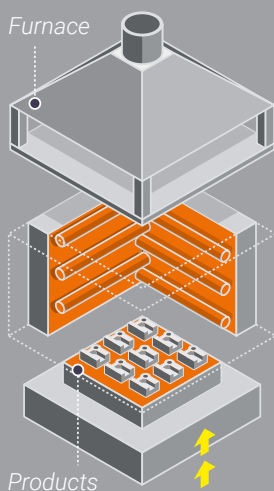


3 The ADMAFLEX technology uses an in-house developed printing system.

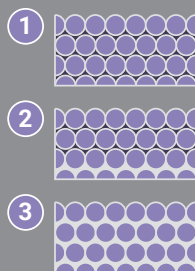


Each layer gets projected, with subsequent material curing.

4 During debinding all the polymers will be burned.

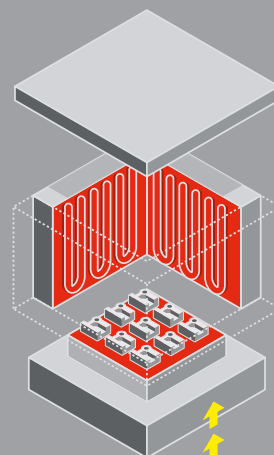


The debinding process

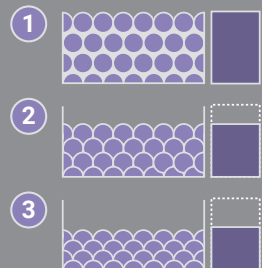


A powder structure remains.

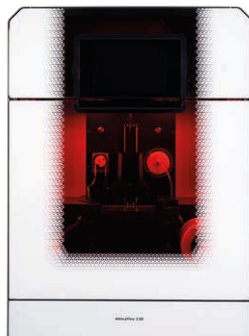
5 During sintering product will reach its final density.



The sintering process



The atoms in the materials diffuse across the boundaries of the particles, fusing them together and creating one solid piece.



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