

3D Printing Technology

3D printing technology provides various processes, depending on the area of application. The basis of all processes is a 3D CAD design to generate the geometric data for the printer.

Additive component production is very varied. To allow better differentiation, the production processes are splitted into 3 main groups:



Rapid Prototyping

Production of prototypes for product development

Rapid Tooling

Production of tool components, e.g. for injection moulding tools

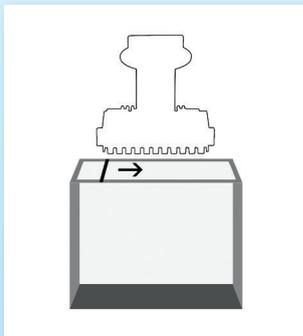
Rapid Manufacturing

Production of series parts

Selective laser sintering (SLS) is the production process currently used by NORWE, as this technology is ideal for prototypes and small series (rapid manufacturing). The powdered material is applied in layers and melted or sintered using a laser.

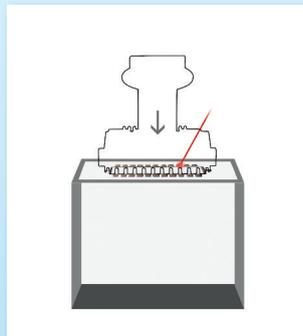
Selective laser sintering at NORWE

There are several advantages to using SLS for producing components for coilformers and boxes. The design is very accurate in every detail and various materials and colours are available. The SLS process produces components, which can be used directly without additional expenditure during printing, such as support structures. Care must however be taken to ensure that the designs are optimized for easy printing with a 3D printer in order to compensate height tolerances, for example.



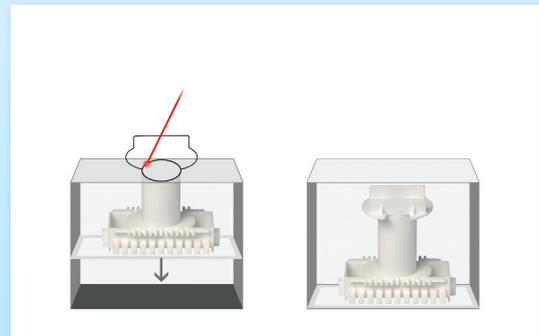
Step 1

Application of a thin powder layer, e.g. of polyamide 12 plastic.



Step 2

Melting the powder across the component cross section using a laser.



Step 3

The component descends step by step. During descent, additional layers of powder are applied until the component is complete.

© 03/2016 by NORWE GmbH

Warranties:
refer to Terms and Conditions of Sale

NORWE GmbH

Postfach 13 56
51691 Bergneustadt
Paulstraße 5, Pernze
51702 Bergneustadt
Deutschland
Telefon +49 (0) 27 63-807-0
Telefax +49 (0) 27 63-807-77
E-mail verkauf@norwe.de
Internet www.norwe.de
www.norwe.eu

NORWE Inc.

P.O. Box 25 11
North Canton, OH 44720-0511
United States of America
Telefon +1-330 497-8113
Telefax +1-330 305-0592
E-mail usa@norwe.com
Internet www.norwe.com



Valid version of
data sheet online

QR Online-Version