

WE PRINT HIGH PRECISE 3D PARTS WITH INKJET

3D PRINTING

High precision multi material jetting opens up new opportunities for 3D printing in various industries. Mixing materials voxel by voxel for advanced optics, 3D electronics or microsystems technology. The n.jet 3D is an open platform for 3D printing gives you full control of your 3D printing process.

Select one or more materials from our material partners or use your own

material. We'll help you select the right printhead and post processing and provide you with an integrated, industrial solution for production of 3D parts.

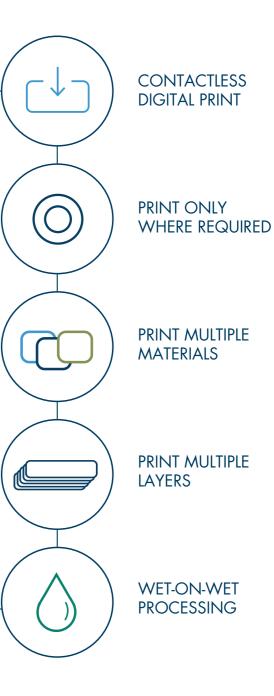
Advantages of Inkjet Printing

Inkjet is a non-contact, digital printing technology which creates fine structures of 30 microns and below. The fully digital non-contact printing enables wet-on-wet processing without the need for masks or screens.

Inkjet is used to replace established subtractive process sequences and reduces waste and energy consumption, which makes electronics production more economical and ecological.

6





MAIN FEATURES

- Multi material jetting
- High viscosity jetting •
- Supports all major printheads •
- Drop watch & drop formation analysis
- Full access to all jetting parameters
- Open slicer interface •
- Optional inert atmosphere •

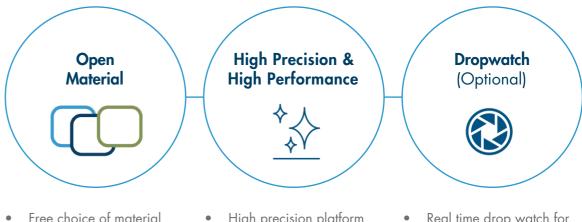
CUSTOMIZED PROCESSES

- Customized process for outstanding 3D printed parts
- Custom selection and number of printheads
- UV-pinning and curing lamps that best match material
- Supports Xaar, Konica-Minolta, FujiFilm and Ricoh print heads
- Process scale-up support from experienced Notion process engineers

Example optical lenses

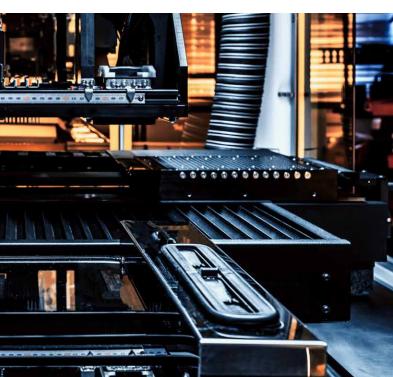
The production of optical lenses with an n.jet 3D system is much more cost-effective than the production of lenses in conventional manufacturing processes. The additive manufacturing process saves more than 30 production steps and reduces scrap by up to 90%.

OPEN PLATFORM



- Free choice of material from pre-qualified suppliers
- UV-curables , hotmelts, nanomaterials, ...
- Extended processing window for Xaar high laydown process
- Integration of client materials
- yields best quality 3D parts • On demand, large number
 - 3D build times

- High precision platform
 - of printheads lead to short
- Real time drop watch for inkjet printheads droplets
- Measurement of drop • volume, speed, etc.



PROCESS DEVELOPMENT

Process development helps optimize various parameters such as

- Ink formulation,
- Printhead selection,
- Substrate choice,
- Substrate preparation,
- Printing speed, and
- Image resolution.

By systematically adjusting these parameters, process development can enhance the **printing quality, efficiency, and reliability of inkjet printing**.

This is particularly important for industrial applications, where consistent and high-quality printing is required for mass production. Additionally, process development can help **minimize the environmental impact of inkjet printing** by reducing ink and energy consumption and waste generation.

Collaboration Network

Our collaboration with leading printhead manufacturers and material providers continuously extends the process range of inkjet in 3D printing. Jetting materials that never have been jetted before are used to print parts with final part properties that set new standards in material jetting. Become a part of our open network to realize your 3D printing application.

Xaar's high laydown jetting allows to print materials at viscosities 5 times higher than the formerly generally accepted limit for inkjet printing. BASF uses this extended process window to develop new jetting materials that improve final part properties. Both partners are stretching the limits of 3D inkjet printing of precision parts on Notion's n.jet 3D platform.

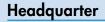


X + Y









Notion Systems GmbH Carl-Benz-Straße 22a 68723 Schwetzingen G E R M A N Y

№ +49 6202 57877-0
№ +49 6202 57877-9

sales@notion-systems.com www.notion-systems.com







THE FUTURE OF ADDITIVE MANUFACTURING

