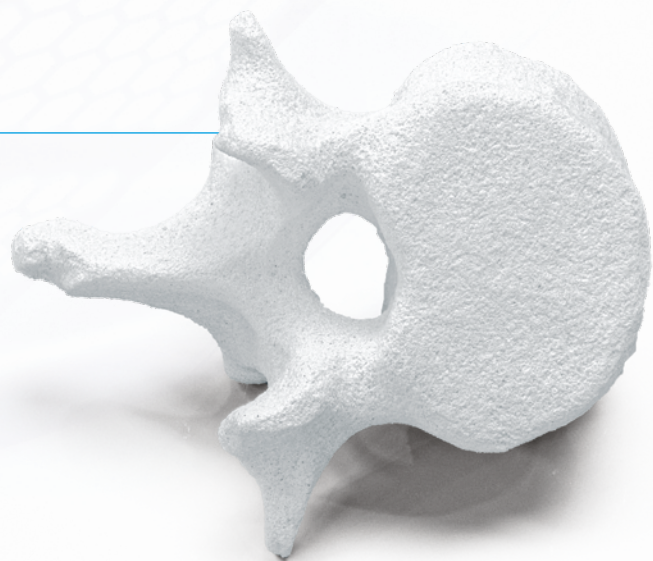


## NEXT-LEVEL ADDITIVE MANUFACTURING

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The promises of additive manufacturing are limitless. Printing entire assemblies and organic shapes without design constraints. No tooling requirements nor lead times. Fast, local production options. Our CONCR3DE proprietary binder jetting technology now offers you the tools to harness its full potential, with a cost-effective platform that goes above and beyond traditional production methods.

# CONCR3DE BINDER JETTING

Binder jetting 3D printing is based on two key elements: a powder and a binder. The powder can be stone, metal, ceramic, or other material you want to bond in powder form. The binder is a liquid, which acts as an adhesive between powder layers. Powder is spread across the build platform using a roller. Next, the print head accurately deposits the binder liquid to bind the powder. After each layer, the printed object is lowered on its build platform by the layer thickness. A new layer of powder is deposited, and the process repeats. Unbound powder remains in position surrounding the printed object.



## Preparation

Any print starts with a 3D model of the object or product, which can be included in a print job. Our NOAH software was specifically designed to optimize the use of CONCR3DE 3D printers and your experience. Through its intuitive interface, the software gives you full control over variables like layer height and print speed. Printed objects are self-supported and don't require additional structures.

## Printer hardware

The modular CONCR3DE printer range combines performance and versatility with exceptional scalability. Our hardware includes options for any application, from tiny prints for research purposes to printing entire product ranges or single parts that can measure up to 6 x 3 x 1 meters. It allows the use of multiple print heads and add-ons to print any powder-based material and binder type.

## Powders

The materials readily available for use on the CONCR3DE platform are numerous, and include stone, metal, ceramic, (bio)polymer options and more. Our accessible technology enables researchers to test and develop novel print material options. This results in the certified material options being rapidly expanded – for example with a range of high-tech applications as well as sustainable options, such as upcycling from waste streams, like marble sawdust.

## Binders

One of the specific CONCR3DE added values is found in our binder expertise. Our binders for stone materials do not include any plastics, glues nor resins. Other readily available options include aqueous, solvent and UV binders. Our team is happy to advise you on the optimal binder for your desired print material or application – and can even support you in creating new standards.

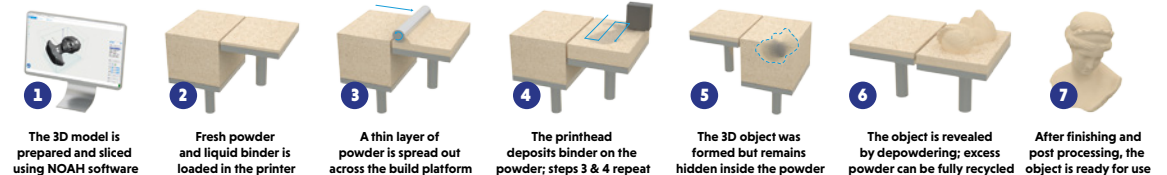
## Post processing

After printing is complete, the excess powder surrounding the object needs to be removed. Unused powder can be recycled for the next print job. Depending on the material used or application, additional steps -like coating for outdoor application or sintering for metals and ceramics- can be necessary. CONCR3DE offers add-ons to automate and accelerate all post processing steps.

## Your benefits

In summary, the CONCR3DE binder jetting technology offers significant benefits when compared to other additive manufacturing technologies as well as alternative binder jet 3D printers:

- Unprecedented scalability** – easily scale up without changing platform nor parameters
- High performance** – market-leading speed and accuracy levels for optimal results
- Material versatility** – combined hardware and chemical expertise enables using any material
- Sustainability** – zero waste, recycling of materials and true upcycling of waste streams
- Full accessibility** – CONCR3DE allows full control of all hardware and software settings
- Cost efficiency** – cost-per-part levels that can rival traditional production methods
- Expert support** – our team is ready to support your application every step of the way



## CONCR3DE

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