

## FLEXIBLE SUPPORT TO MEET YOUR NEEDS

With CONCR3DE, you can benefit from our years of experience through our services focused on joint development, process optimization or co-production. Whether you are looking for a unique research or prototyping platform, industrial or high-tech complex functional parts production or printing large-scale architectural designs: CONCR3DE is your 3D Powderhouse.

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# SERVICES & MAINTENANCE

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.

#### Services

CONCR3DE strives to offer you the best specific support to help you accelerate your research efforts, optimize variables like print speed, accuracy, and mechanical properties, or streamline your production process. Several services are available, depending on your experience with 3D printing, specific objectives, or application.

#### **R&D** Service

Our open binder jetting 3D printing platform enables researchers to print previously unimaginable novel materials and binders into complex shapes with full scalability. Our team adds years of experience and a wealth of knowledge, both in hardware, software, process, and materials, to any scientific discovery process. We love to collaborate and facilitate your research.

#### **Binder Development Service**

Each binder has unique properties in rheology, density and consistency, resulting in different behavior when jetted. Using a drop watcher, CONCR3DE can visualize and characterize the binder droplets exiting the print head. By means of this service, we can control and adjust drop size, speed and shape to ensure printing quality and stability.

#### **Application Optimization Service**

Every time we identify a match between your application, material properties and our printer's abilities, our team is ready to fine-tune the print process and its results to your objectives. Whether your case aims for cost-effective production in terms of speed and accuracy or large-scale complex parts with specific properties - this service aims to let you reap the full benefits of our products.

#### **Co-Production Service**

Once your CONCR3DE large-scale 3D printing production ecosystem is installed and ready for steady output, CONCR3DE can continue to add value. If desired, we can forward third-party production requests we receive in your area, effectively providing you with local leads. Our team is ready and able to support you with material or project advice and pre-production testing - we are here for you.

#### Maintenance

Maintaining your 3D printers is essential to ensure optimal performance, especially when working with fine and abrasive powders. CONCR3DE includes a basic operator training with every printer installation, which includes a maintenance advice. Based on your process requirements and throughput, we offer customized preventative maintenance and/or service level agreements to ensure the best possible maintenance and support.

The below parts and products are available for maintenance purposes.

Product	Description	Replace	Packaging
Service station wipers	Rubber wipers	Every 2 months*	10 pcs
Print head cleaning liquid	Low pH cleaning liquid for flushing and cleaning		1 liter
Print head dust free wipes	For maintaining print head, to be used with print head		600 pcs
	cleaning liquid or demi water		
Print head replacement	Print head replacement	Every 2 years*	lpc

\*Replacement interval depends on use; typical values using certified CONCR3DE binders are shown.

### **CONCR3DE**

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