



CONCR3DE revolutionizes foundry and refractory applications by reducing costs, speeding up production, and offering scalability through additive manufacturing. Our binder jetting process enables local production of complex shapes and is ideal for producing molds, cores, and consumables. Add our safer and more sustainable material options, and CONCR3DE is your partner in printing durable

objects for use in extreme conditions.

# FOUNDRY & REFRACTORY



# CREATE COMPLEX GEOMETRIES

Complex part consolidation is a game-changer, reducing costs and enhancing durability. CONCR3DE excels in crafting intricate geometries in a range of materials. Our highly accurate binder jetting technology enables designs with enhanced functionality and reduced weight.

### TRUSTED MATERIAL OPTIONS

CONCR3DE's technology opens new frontiers in foundry and refractory applications, particularly in fire-resistant, metal casting, and glass casting scenarios. Print material options include different sands and your choice of binder, including Phenol and Inorganic variants.

# SAFE AND SUSTAINABLE PRODUCTION

Our foundry Inorganic Binder option reduces hazardous emissions by 80% and worker health risks by 70% while enabling sand recycling and limiting waste. You can even provide your own sand or cement powder for us to work with, retaining full control over your manufacturing process.

## **PRODUCTS**

Our scalable platform empowers you to achieve remarkable results by accelerating design and production processes, eliminating lead times and facilitating incremental iterations. Say goodbye to assembly costs with our complex part consolidation and embrace sustainability through optimized material usage.

**ARMADILLO GRAY (XL)** • This small-scale printer features all applicable add-ons for printing stone-like materials. It includes integrated NOAH control and the Reduction Insert to allow for small prints. Create smaller parts or test shapes before printing full-scale objects or elements. The XL version offers double the production capacity, producing up to 96 liters of parts per day.

**HANDLING & POST PROCESSING •** CONCR3DE offers all the dedicated tools to allow a fast, clean, and dust-free workflow and make light work of post processing printed parts to reach their final state after printing.

MATERIALS • Armadillo Gray prints a range readily available application-specific materials. If you share your wishes, our team is ready to advise you on the material that meets your requirements.

### Foundry

Our range of foundry materials offer the material properties to print non-combustible molds, cores and consumables. In addition to the trusted Phenol system binders, we offer safer and more sustainable alternatives with our Inorganic binder option.

CONCR3DE Foundry Quartz P	Suitable for both ferrous and non-ferrous casting, with high dimensional stability.
CONCR3DE Foundry Quartz I	Sustainable, compostable and safe, with reclaimable sand and SK33 refractoriness.
CONCR3DE Foundry Cerabeads P	Stable grain size material offering resistant to wear, crush and thermal shock.
CONCR3DE Foundry Cerabeads I	Excellent fluidity, sustainable, compostable, and reclaimable with SK37 refractoriness.

### Refractory

Using printed parts in for example kilns and ovens requires highly specific materials with high temperature resistance. CONCR3DE created a cement that combines the benefits of 3D printing with the required resilience.

CONCR3DE Refractory Cement	Highly heat resistant material with large-scale firebox and glazed application options.
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**APPLICATION OPTIMIZATION SERVICE** • Benefit from our years of experience with our binder jetting technology. Whether you are looking for a reference print, or would like us to jointly optimize product or part properties, process parameters like print speed and materials use, or scale up part dimensions or production volume altogether in the best way possible – we are here for you.

Interested to learn more? Detailed specifications are available in our Product Leaflets or check out www.concr3de.com for more information.

Are you ready to discuss your application? Send us an email at info@concr3de.com or call +31 (0)85 0606 171.



### **CONCR3DE**

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