



CONCR3DE

YOUR 3D POWDERHOUSE

## REVOLUTIONIZING SUSTAINABLE METAL AND DIE CASTING

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.

[CONCR3DE.COM](https://concr3de.com)

# FOUNDRY & REFRACTORY

## Create complex geometries

Complex part consolidation is a game-changer, reducing costs and enhancing durability. CONCR3DE excels in printing intricate geometries into solid, homogeneous molds and cores with a precision of 60 microns, in a range of materials with exceptional, application-specific properties.

## Trusted material options

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

## Safe and Sustainable production

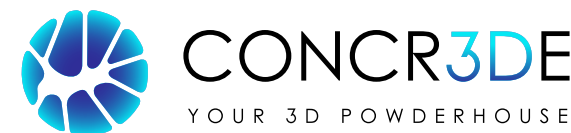
Our Inorganic Binder option reduces hazardous emissions by 80% and worker health risks by 70% - while enabling sand recycling without any waste. You can even provide your own sand or cement powder for us to work with, retaining full control over your manufacturing process.

## Scalable to fit your application

CONCR3DE empowers you to achieve remarkable results, by accelerating production and eliminating lead times while enabling prototypes, small series and incremental iterations. Reduce costs through part consolidation and embrace sustainability with optimized material usage.

**Armadillo Red (XL)** • This small-scale printer features all applicable add-ons for printing foundry and refractory materials. It includes integrated NOAH control software. 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 molds and cores per day.

**Elephant Red** • The applicability of any 3D printing technology is often determined by its maximum print dimensions. Upscaling brings massive cost advantages as well as a range of novel use cases. Elephant Red is a unique binder jetting production system that allows you to print objects up to 2 x 1 x 1 meters in size – without compromising on accuracy.



**Materials** • Armadillo Red and Elephant Red print a range readily available specialty 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 offers the material properties to print non-combustible molds, cores, and consumables. In addition to the trusted Phenol Binder, we offer safer and more sustainable alternatives with our Inorganic Binder option.

<a href="#">Foundry Quartz P</a>	Suitable for both ferrous and non-ferrous casting, with high dimensional stability.
<a href="#">Foundry Quartz I</a>	Sustainable, compostable, and safe, with reclaimable sand and SK33 refractoriness.
<a href="#">Foundry Cerabeads P</a>	Stable grain size material offering resistance to wear, crush, and thermal shock.
<a href="#">Foundry Cerabeads I</a>	Excellent fluidity, sustainable, compostable, and reclaimable with SK37 refractoriness.

## Refractory

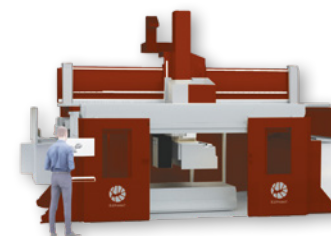
Using printed parts in for example kilns and ovens requires highly specific materials with high temperature resistance. CONCR3DE created a cement that combines the benefits of 3D printing with the required resilience.

<a href="#">CONCR3DE Refractory Cement</a>	Highly heat resistant material with large-scale firebox and glazed application options.
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**Application Optimization Service** • We aim to let you benefit from our many years of binder jetting experience. Whether you would like us to support the AM implementation process, aim to print with your own materials, would like to optimize part properties or process parameters like speed, or need to scale up print size and production volumes – we are here for you.

Interested in learning more? Detailed specifications of products and materials are available in our Product Leaflets - or visit our website at [concr3de.com](https://concr3de.com) for more information.

Are you ready to embrace the future of casting? Send us an email at [info@concr3de.com](mailto:info@concr3de.com) or call +31 (0)85 0606 171.



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Scheepsbouwweg 8 • 3089 JW Rotterdam • The Netherlands • +31 (0)85 0606 171 • [info@concr3de.com](mailto:info@concr3de.com) • [www.concr3de.com](https://www.concr3de.com)