



CONCR3DE  
YOUR 3D POWDERHOUSE

ALTEM  
TECHNOLOGIES

# ARMADILLO WHITE

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When developing new 3D printing materials and applications, you don't want hardware to be the limiting factor. When our founders experienced the restrictions of the tools available on the market, they founded CONCR3DE - and we developed our own. Armadillo White is a fully open binder jetting 3D printer that has both customizable hardware, an open material platform and accessible software.

# FOR RESEARCHERS, BY RESEARCHERS

Armadillo White was designed to help material researchers and scientists explore the full potential of additive manufacturing. This modular, accessible platform can use any available CONCR3DE powder or binder - but invites you to create new standards and novel applications. Every single setting, from speed to saturation and from the binder droplet size and shape to UV- or infrared curing options - Armadillo White gives you full control over the 3D printing process and results.

## FROM PROTOTYPING TO PRODUCTION

**REDUCTION INSERT** • The Reduction Insert is an add-on that shrinks the minimum print size. This means you can start printing with less than 1 liter of powder, reducing your waste, preparation time and costs. Once you progress, simply take it out to print full scale, all in one versatile printer.

**LABJET LFR BINDER SUPPLY** • When testing new binder and powder formulations, you want to start with small batches, with optimal stability and repeatability. The Labjet LFR Binder Supply allows you to insert small, measured volumes of binder with a syringe. This add-on is excellent for volatile or expensive binders.

**POWDER HANDLING** • Several add-ons improve your ability to manage fragile green-strength prints while they are curing and debinding. Our depowdering box allows you to fully remove the print bed, and our depowdering station allows you to keep dust under control while recycling powder.

## UNPRECEDENTED VERSATILITY

**INTEGRATED NOAH CONTROL** • Armadillo White includes an integrated control station with our custom and fully open NOAH software pre-installed on optimized hardware. NOAH offers full access to all parameters of the printing process and controls the add-ons.

**UV CURING** • For printing polymer or composite materials, the UV Curing add-on is indispensable. It adds the possibility to cure the material with a 395 nm (+/- 5) light engine with a typical radiation of 5,5 W/cm<sup>2</sup> and optical output power of 31 W, and UV power of 4,2 W/cm.

**INFRARED HEATER** • Certain powders require high temperature curing or bind faster at higher temperatures. The Infrared Heater is based on a powerful infrared curing lamp and allows you to control the print bed temperature. The Infrared Heater makes it possible to increase the temperature up to 80°C.

**LIMITLESS SOFTWARE PARAMETERS** • The Open version of NOAH software gives you full control over the printing process. Control layer heights, waveforms, printing speeds, spreading speed, ink supply pressures, cleaning cycles and much more. The only way to develop new materials and properties is if you have full control. NOAH gives you this full control, and what's more: CONCR3DE can help you along by sharing our experience, premade binders, and premade printing profiles to get you started..

**OTHER OPTIONS** • Looking for other integrated functionalities? Have a look at our In-Printer Add-On range or contact us if you have other wishes!

## TECHNICAL SPECIFICATIONS ARMADILLO WHITE

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Print box dimensions	370 x 260 x 250 mm or 440 x 440 x 250 mm
Capacity	48 liters/day
Printhead precision	400 DPI
Layer height	20 – 500 µm
Drop size variability	80-200 pL
Powder compatibility	Any, 500 gram batches
Binder compatibility	Aqueous, solvent, phenolic, inorganic, UV, particle-filled, from 50 ml
Connectivity	Ethernet (cable included)
Power requirements	230 V
Dimensions	1.700 x 1.200 x 1.600 mm
Space requirements	2.400 x 2.000 x 2.200 mm
Weight	450 kg
Software	NOAH (included)

Interested to learn more? Check out [www.concr3de.com](http://www.concr3de.com) for more information. Are you ready to discuss your project? Send us an email at [info@concr3de.com](mailto:info@concr3de.com) or call +31 (0)85 0606 171.

### Get in touch

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