



CONCR3DE
YOUR 3D POWDERHOUSE

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ARMADILLO GREEN

Turn waste into products with Armadillo Green. This 3D bioprinter enables you to print sawdust and other natural biomaterials in any shape. Armadillo Green was designed for use with our food safe Bio Binder and offers a waste-free production process.



SUSTAINABLE PRODUCTION REINVENTED

Armadillo Green is a 3D bioprinter designed to print environmentally friendly, natural materials. It was designed for CONCR3DE's unique biodegradable Bio Binder to print with all kinds of sawdust - even the sawdust from your own workshop or factory. With the Armadillo Green printer you can give your bio-based waste materials a second life in an entirely new shape.

FROM WASTE TO RICHES

MATERIAL OPTIONS • Armadillo Green and our proprietary Bio Binder can be used to create all kinds of products. Think of applications like furniture, home decor, interior design and more. But that's not all - Bio Binder can even be used to create custom water soluble tooling and molds.

BIO BINDER • CONCR3DE's Bio Binder is an environmentally friendly material that is food safe and fully biodegradable. By using a naturally occurring polymer, Bio Binder enables printing any powder-based biomaterial with our Armadillo Green printer.

UPCYCLING • CONCR3DE is dedicated to upcycling bio-based waste materials. You can now create value, in the form of functional printed products, from material streams that were previously deemed worthless - or even expensive to dispose of.

READY FOR SERIAL PRODUCTION

INTEGRATED NOAH CONTROL • Armadillo Green is conveniently operated using our NOAH software. Running on integrated, optimized hardware and featuring an intuitive user interface, NOAH offers full access to all parameters of the printing process and any add-ons installed on the printer.

EXTRA LARGE (OPTIONAL) • This add-on increases the Armadillo printing dimensions to 440 x 440 x 250 mm, with a daily production capacity of up to 96 liters. It adds the options to perform prototyping and serial production runs on a single printer, without further investments.

DEPOWDERING STATION (OPTIONAL) • Our Depowdering Station offers a clean chamber to easily depowder prints, with a rotating platform to reach in the tiniest nooks and crannies. Its integrated air compressor and industrial vacuum remove even the finest of powder residue, speeding up the depowdering process and keeping your infrastructure clean.

TECHNICAL SPECIFICATIONS	ARMADILLO GREEN	ARMADILLO GREEN XL
Print box dimensions	370 x 260 x 250 mm	440 x 440 x 250 mm
Print capacity	48 liters/day	96 liters/day
Print speed	42 mm/hour	42 mm/hour
Printhead precision	400 DPI	400 DPI
Layer height	300 µm	300 µm
Powder compatibility	PB & PF range powders	PB & PF range powders
Binder compatibility	BB range binders	BB range binders
Power requirements	2 x 230 V	2 x 230 V
Dimensions	1.600 x 1.200 x 1.600 mm	2.300 x 1.250 x 1.900 mm
Space requirements	2.400 x 2.000 x 2.200 mm	3.100 x 2.200 x 2.500 mm
Weight	450 kg	550 kg
Connectivity	Ethernet (cable included)	Ethernet (cable included)
Software	NOAH Production (included)	NOAH Production (included)



Interested to learn more? Check out www.concr3de.com for more information. Are you ready to discuss your sustainable production or natural waste stream upcycling project? Send us an email at info@concr3de.com or call +31 (0)85 0606 171.



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NEW STANDARD IN SUSTAINABLE PRODUCT DESIGN

Sustainable product design includes using natural (waste) materials to create value. CONCR3DE's Armadillo Green makes it possible to 3D print unique wooden products from sawdust waste. We do not add any harmful chemicals in the production process - with zero residual waste.

PRODUCT DESIGN

Imagine using worthless biomass waste streams and to directly create functional end-use products. With CONCR3DE, you can repurpose and upcycle sawdust, turning waste into value with your designs. The possibilities for creating complex, detailed shapes and scaling up to full-size production are endless. This makes the combination of our Armadillo Green 3D printer and our biodegradable, non-toxic Bio Binder a unique platform for sustainable product design. Together with our partners at Marvel Labs, we aim to push the boundaries of 3D printing natural waste materials.

TRUSTED MATERIAL, NOVEL SHAPES

Our binder jetting technology enables creating wooden design options that used to be impossible to create, very labor-intensive or unaffordable - with ease. Bring any complex shape to life and even personalize end-use products, all with the trusted look and feel of actual wood.

SCALED FOR THE REAL WORLD

Depending on your products, we have the 3D printer to match your dimensional requirements. With options ranging from small to extra large, CONCR3DE supports printing sustainable furniture, product packaging, and much more - as well as scaling up to cost-effective serial production runs.

ZERO WASTE & RECYCLING

CONCR3DE Wood consists of sawdust, often available as an existing biomass waste stream, and our sustainable and biodegradable Bio Binder. As our printing process itself does not produce any waste and unused sawdust is fully recycled for the next print, this is the definition of upcycling.

PRODUCTS

CONCR3DE offers an integral production process that includes both printing and post processing. This allows you to bring your design vision to life, creating value in bio-based materials that were previously regarded as waste. Underline your commitment to people and planet by taking the next leap in sustainable product design and production.

ARMADILLO GREEN (XL) • Armadillo Green was designed to advance the use of natural and entirely safe materials without any harmful compounds in additive manufacturing. This is the printer of choice to benefit from our environmentally friendly Bio Binder. The XL printer version allows printing objects up to 440 x 440 x 250 centimeters in size, doubling daily print capacity.

R&D SERVICE • Do you have a biomass waste stream that you would like to turn into real products? Chances are that if the biomass exists in (or can be changed into) powder form, CONCR3DE can print it. Our engineers are ready to explore the options.

MATERIALS • Our open platform technology allows printing any powder-based material. Our unique Bio Binder enables sustainable 3D printing. We expect the number of bio-based materials options to be expanded soon.

CONCR3DE Wood

Sustainable, compostable and safe, with reclaimable sand and SK33 refractoriness.



MARVEL

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Would you like to learn more about our product design options? Detailed specifications are available in our Product Leaflets, or check out www.concr3de.com for more information. Are you ready to discuss your requirements? Send us an email at info@concr3de.com or call +31 (0)85 0606 171.

Get in touch

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