



CONCR3DE
YOUR 3D POWDERHOUSE

ALTEM
TECHNOLOGIES



ARMADILLO BLUE

At CONCR3DE, we understand the right tools make light work. Our Armadillo Blue binder jetting 3D printer was specifically designed for 3D printing silicon carbide. It can be tuned to a range of industrial applications and comes with full training as well as support in post processing parts.

THE STANDARD FOR SISIC 3D PRINTING

Armadillo Blue is the cost-efficient production platform of choice to create high-quality products and parts in silicon carbide (SiC). This 3D printer is plug and play so you can get started right away. The printer comes with software, a depowdering station and support from our engineers. It is even possible to customize the materials and post processing to make them suitable for your application.

EXCEPTIONAL POWERHOUSE

VALIDATED MATERIALS • Armadillo Blue supports a fully validated silicon carbide material, developed in collaboration with our partner WZR. The Armadillo Blue is the first binder jetting machine in the world with this ready-made solution: you can start printing right away. Should you wish to tune the process and material properties to your requirements, we can support you with our experience.

MATERIAL CHARACTERISTICS

Product name	Silicon carbide (PC 1001 powder and BM 1001 binder)
Method of manufacture	Binder jetting (Armadillo Blue)
Chemistry	SiC + C + Si
Bending strength	> 150 MPa
Open porosity	< 0 %
Shrinkage	< 0 %
Density	2,8-3,09 g/cm ³

PRODUCTION AT SPEED • The Armadillo Blue is a true pow(d)erhouse. Binder jetting is known to be fast - with the Armadillo Blue you can print up to 35.000 cm³ of parts per day. Including siliconization and debinding the process from printing your model to having a finished part in your hand is less than 72 hours, meaning you can go full speed ahead every day of the week.

FULL PROCESS CONTROL

DESIGNED FOR CERAMICS • Armadillo Blue includes an integrated control station with our NOAH software pre-installed on optimized hardware. The software features predefined printing profiles for silicon carbide 3D printing. Use the software to optimize the amount of parts in your print, and view printing progress to optimize your workflow. The printer itself features integrated temperature control, an IR heater and automatic safety and cleaning procedures.

TECHNICAL SPECIFICATIONS

ARMADILLO BLUE

Print box dimensions	370 x 260 x 250 mm or 440 x 440 x 250 mm
Capacity	24.000 cm ³ / day
Printhead precision	400 DPI
Layer height	130 µm
Powder compatibility	PC1001 SiC powder
Binder compatibility	BC1001 SiC aqueous binder BM1001 SiC solvent binder BP1001 SiC phenolic binder
Power requirements	230 V
Dimensions	1.600 x 1.100 x 1.600 mm
Space requirements	2.400 x 2.000 x 2.200 mm
Weight	450 kg
Software	NOAH (included)

PARTNERSHIPS YOU CAN RELY ON • Our unique silicon carbide material was developed in collaboration with the one of the best companies in the ceramics industry: WZR. Our combined hardware and material knowhow made this material possible. The secret of the material's quality is in the design of the powder distribution in combination with the binder and post processing knowhow.



Learn more about Armadillo Blue on www.concr3de.com. Are you ready to discuss your application? Send us an email at info@concr3de.com or call +31 850 606 171.

Get in touch

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