ARMADILLO BLUE

At CONCR3DE, we understand the right tools make light work. Our Armadillo Blue binder jetting 3D printer was specifically designed for industry and high-tech production applications. This is the printer to manufacture parts in high-density Alumina 92%, infiltratable Silicon Carbide, as well as other ceramics and metals.

INDUSTRY & HIGH-TECH PRODUCTION

CONCR3DE
YOUR 3D POWDERHOUSE

Armadillo Blue comes with validated material and sintering guidelines, ready for production of complex parts at unprecedented scale. This 3D printer enables just-in-time and highly cost-efficient serial parts production in technical materials. Based on CONCR3DE's high-precision binder jetting platofrm, it features all hardware add-ons to print ceramics and metals. The print box dimensions allow combining multiple parts in a single run.

EXCEPTIONAL POWERHOUSE

UNIQUE MATERIALS • Armadillo Blue supports a range of fully validated technical ceramics and metals. Alumina 92% was developed in collaboration with our partners WZR and Nabaltec - both world leaders in ceramics. Our particle-filled binder results in the exceptional material density that sets Alumina 92% apart from other options. This printer also supports production in Silicon Carbide. Additional validated materials are to be released. If you are looking use Armadillo Blue to print a specific compound, our experienced team is at your service to advise and support.

PRODUCTION AT SPEED • Binder jetting is known to be fast - but Armadillo Blue takes the cake. The XL-version increases the daily production capacity to 48 liters of parts. Including the necessary sintering, the full process from 3D printing to having the finished part in hand takes less than 72 hours - which means you can run continuous serial parts production every day of the week.

FULL PROCESS CONTROL

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 enables heating the print bed up to 80°C. The Infrared Heater can be conveniently managed through our NOAH software.

INTEGRATED NOAH CONTROL • Armadillo Blue includes an integrated control station with our NOAH software pre-installed on optimized hardware. NOAH features predefined printing profiles for validated materials. You can optimize the number of parts in your production run and view its progress to optimize your workflow. This printer features automated safety and cleaning procedures.

DEPOWDERING BOX • This tool has identical dimensions to the Armadillo Blue print box. It enables convenient removal of an entire print for post processing without the need to depowder in its green state. The Depowdering Box is a great fit with fragile parts that require sintering, such as ceramics. It is compatible with mechanical lifting tools, such as forklifts or hoists.

TECHNICAL SPECIFICATIONS	ARMADILLO BLUE	ARMADILLO BLUE XL
Print box dimensions	370 x 260 x 250 mm	440 x 440 x 250 mm
Print capacity	24 liters/day	48 liters/day
Print speed	7,2 mm/hour	7,2 mm/hour
Printhead precision	400 DPI	400 DPI
Layer height	100-150 µm	100-150 µm
Powder compatibility	PC & PM range ceramic and metal powders	PC & PM range ceramic and metal powders
Binder compatibility	BC & BM range binders	BC & BM range binders
Power requirements	2 x 230 V	2 x 230 V
Dimensions	1.600 x 1.100 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)

WZR ceramic solutions

Nabaltec

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.