

90°

Perfect Angle Printing

YOUR ENTRY INTO METALLIC 3D LASER PRINTING.



ADDITIVE MANUFACTURING

driven by Kurtz Ersa

Additive manufacturing opens up huge opportunities for megatrends such as lightweight construction, electromobility and toolmaking, such as with conformal cooling channels. The Kurtz Ersa Alpha 140 3D metal printer combines innovative manufacturing technology with simple operation and low system costs. The Alpha 140 shows its strengths especially in small batch sizes, saving costly expenditure on tools.



The components produced on the Alpha 140 achieve strengths comparable to those of conventional "Laser

Powder Bed Fusion" machines and densities >99.5 %, but are up to 80 % more economical.





Greatest geometrical freedom for even the most complex components and structures.





BEST PRICE, BEST PERFORMANCE. PLUG'N PRODUCE.

The Kurtz Ersa Alpha 140 is the optimal solution for a tool-free production of metal parts and complex structures with the greatest geometric freedom, which can be reproduced quickly and cost-effectively. Thanks to the open system, the customer can independently set the process parameters in the slicer according to his individual requirements. A wide range of usable metal materials is thus available through the free variation of process parameters.

Kurtz Ersa Alpha 140 – plug'n produce with the best priceperformance ratio.



Technical Data Kurtz Ersa Alpha 140



Product Video Kurtz Ersa Alpha 140







Simple operation through intuitive human-machine interface incl. data preparation using own slicer.



The spindle-driven axis system enables high positioning accuracy and repeatability of the laser system.



Perfect Angle Printing – laser beam always hits at a 90° angle for best printing quality.



Series production of the Kurtz Ersa Alpha 140. Compact entry-level model for immediate use — plugʻn produce.



INTEGRATED NITROGEN GENERATOR

For the integrated nitrogen generator, compressed air from the customer's side is connected to the rear of the Alpha 140. In the nitrogen generator, nitrogen is generated from the connected compressed air via a membrane and used for the flooding or printing process. This means that no inert gas bottles need to be connected. The nitrogen circulates via a circulating pump from the pressure chamber via a filter back into the pressure chamber.

To compensate for losses, nitrogen is replenished over time.

Simple, process-safe and independent of an inert gas infrastructure!





INTEGRATED DEPOWDERING

The integrated depowdering enables the removal of non-fused powder directly in the 3D printer. With the integrated depowdering, this can be done comfortably with the cover closed. No personal protective equipment (PPE) is required during the powder removal process. Glove grips are mounted on the hood of the Alpha 140. Through these, the operator can depowder in the pressure chamber with the aid of an extraction lance. Ex-

tracted powder is collected in the powder collecting container. This powder can then be sieved and reused



Smart and sustainable!



Due to the extraction lance, no additional vacuum cleaner is required during depowdering. The extracted powder is collected in a collecting container, so that it can be sieved and reused afterwards.



The operator can depowder the print job inside the closed printer through integrated gloves and without having to wear any other PPE.

SOUND EXPERTISE OF OVER 20 YEARS IN THE FIELD OF ADDITIVE MANUFACTURING.

The close association of Laser Melting Innovations GmbH, the Aachen Center for Additive Manufacturing, RWTH Aachen University, the Fraunhofer Institute for Laser Technology and Kurtz Ersa ensures a broad-based consulting approach as well as training courses.

Please feel free to ask for your individual live demo in one of the Kurtz Ersa application centres, we are looking forward to your call!



Distribution and support via Kurtz Ersa

The Alpha 140 is marketed directly through Kurtz Ersa's worldwide distribution network. This means that a worldwide 24-hour service is available.

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Kurtz Ersa AM Website



Kurtz Ersa AM on YouTube

