

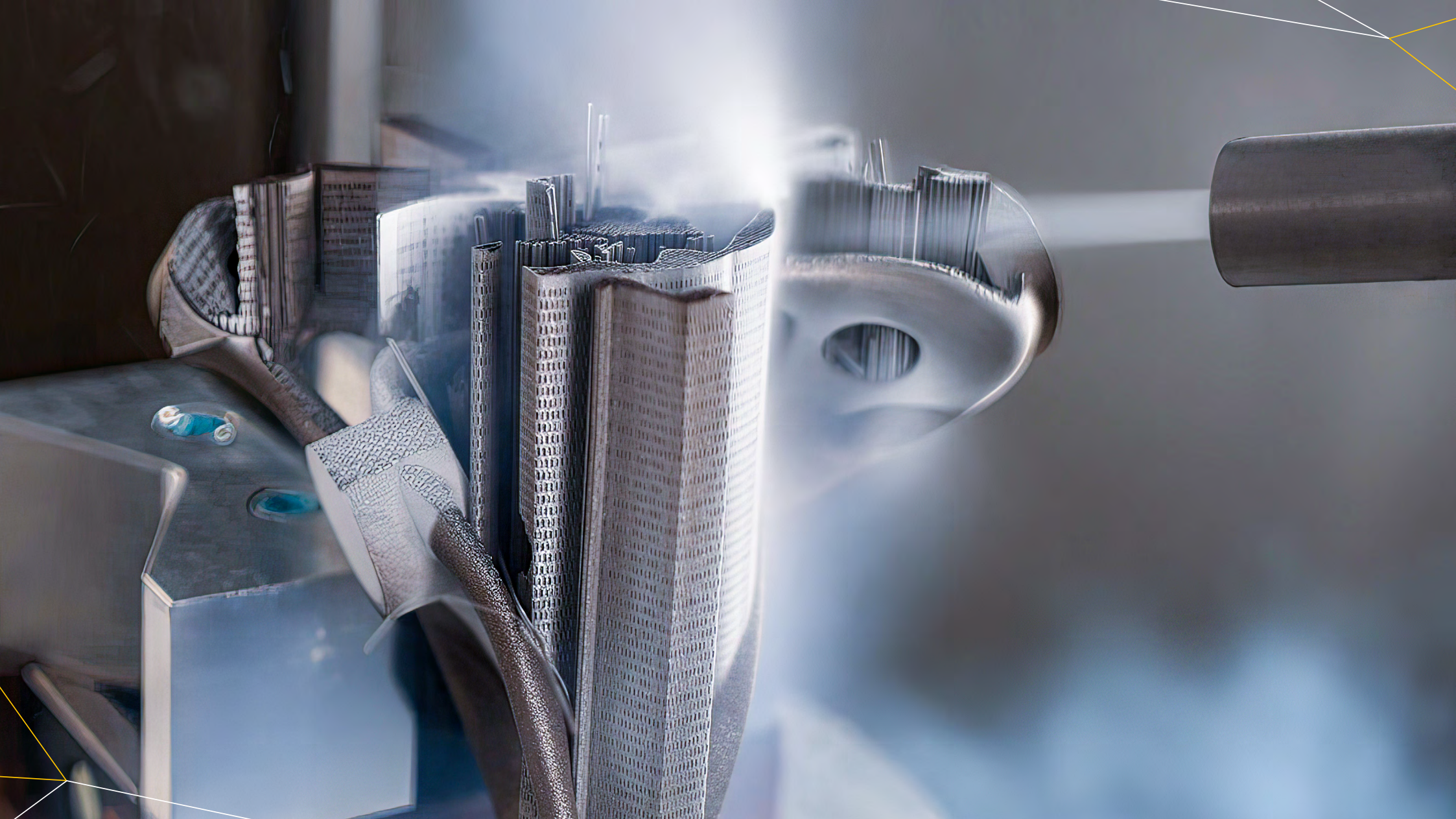
+ SUPPORTBLASTER 320-HA

Removing supports semi-automatically
with dry ice blasting

Our innovative dry ice-based blasting process removes support structures from additively manufactured metal components quickly, reliably and efficiently. This optimises your processes and sets new standards in terms of the quality and speed of finishing.

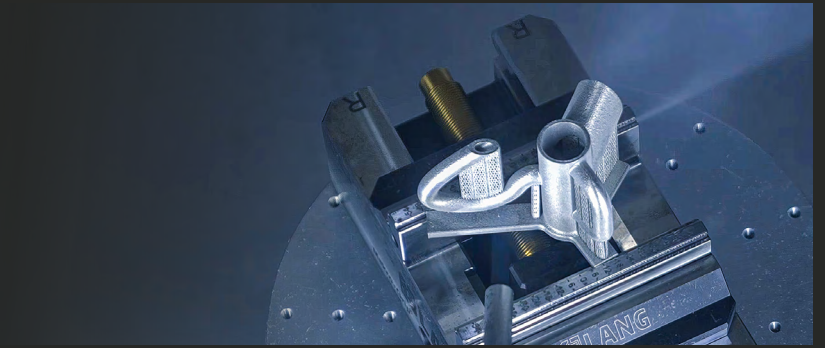


toolcraft



+ Efficiently removing supports by machine

Manually removing support structures with a hammer and chisel is time-consuming, difficult to reproduce and comes with the risk of negatively affecting the quality of the component. We guarantee that your additively manufactured metal components are finished in a reliable process that saves time and does not damage the material. Our innovative dry-ice blasting process makes it possible to remove support structures quickly, reliably and precisely. This process sets new standards in additive manufacturing.



Working principle

Our innovative process uses accelerated dry ice to loosen support structures directly at the point of connection, significantly reducing the machining time.

Efficiency & quality

- + Reproducible results
- + Careful machining without mechanically overloading sensitive components
- + Consistent quality without damaging the surface structure
- + Avoids removing material
- + Cleaning effect avoids particle carryover
- + Efficiency is increased thanks to time savings of up to 80 % per component – even more for some components

Safety at work & ergonomics

- + Ergonomic to use, with joystick and foot switch control
- + Closed working chamber with extraction prevents metal particles being released
- + Avoids risk of injury from sharp edges of component and chips
- + Significantly less physical strain compared with conventional methods such as hammer, chisel and pliers

Flexible single-part & series production

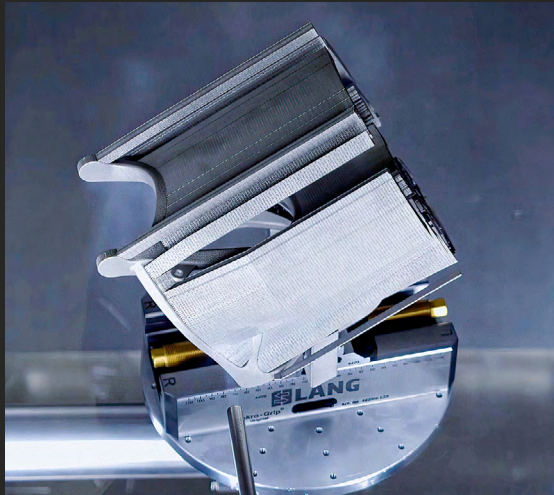
- + Easy to handle without programming
- + Intuitive user interface
- + Versatile clamping options for a wide range of component geometries
- + Teach-in function for process automation
- + Automation is possible through robot integration

Technical data

- + Cabin footprint: 1,500 mm x 2,000 mm x 3,500 mm
- + Footprint for peripherals approx.: 1,800 mm x 2,000 mm
- + Internal cabin dimensions: 800 mm x 1,490 mm x 2,000 mm
- + Clamping surface: 280 mm diameter (variably adjustable)
- + Turntable: endlessly rotatable and swivelling, height-adjustable
- + Machining table load capacity: ~16 kg

+ Step by step for optimised support removal

Manually removing supports on this component for the aerospace industry takes around 60 minutes. It also comes with a risk of damage, particularly with delicate geometries. In contrast, the supports can be removed by machine in less than 20 minutes without the risk of deforming or damaging the titanium landing gear strut, making the process faster and more reliable overall.



Initial state of the component to be machined



Removing the supports



Final status of the machined component

+ Removing supports manually and mechanically – direct comparison

Taking the machining of a metal demonstrator component as an example swiftly demonstrates the many advantages of semi-automatically removing supports with the ice blasting process compared with the conventional manual procedure.



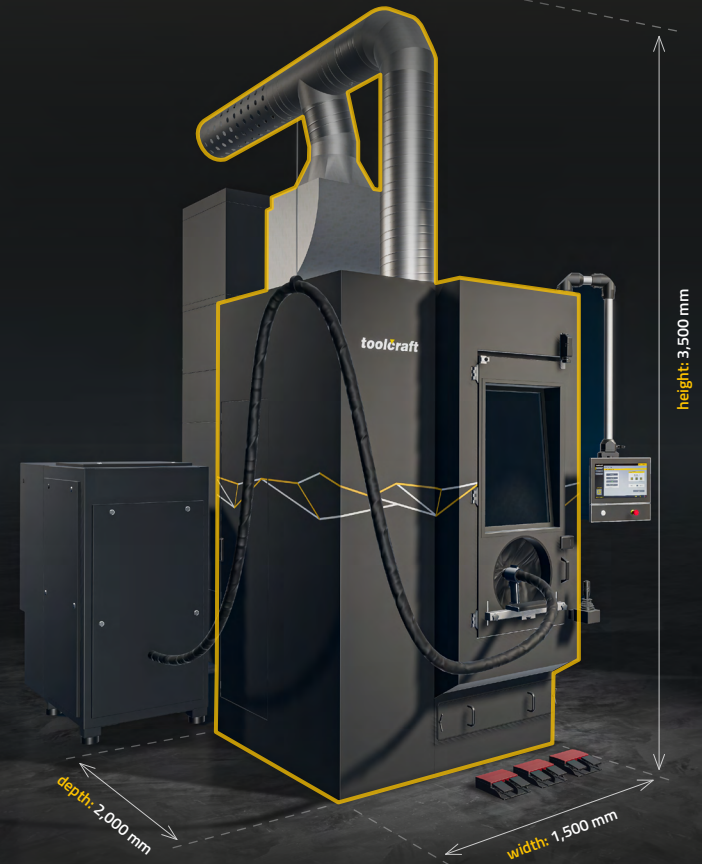
Manually removing supports

In this case, removing the supports manually takes about 10 minutes. However, this conventional process requires a lot of care, particularly with thin-walled geometries.



Removing supports by machine

Removing the support structures by machine takes about 3 minutes. This process not only ensures machining is fast, but also prevents deformation of the component.





See more in the video

Discover the benefits of our
SupportBlaster 320-HA for yourself

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