



SERIES PRODUCTION

3D-PRINTED AIR TRANSFER TUBES OF ABS

Gerald Paschinger Prototypen & Maschinenbau e.U. has been using HAGE3D machines for contract manufacturing for several years now. The family business, based in Haag in the state of Lower Austria, is a specialist in the manufacture of tools, components, fixtures and prototypes. The company uses a divergent range of technologies including CAD design, CNC milling and turning, 3D measurement, laser engraving and 3D printing.

The company was founded during the economic crisis in 2009. Due to its ongoing development and openness to technology, the company has been able to adapt quickly to market demands and to grow and expand sustainably. The company currently operates eight CNC machines and six 3D printers, including the HAGE3D 84L model. The 84L has been in use for around a year and has become the obvious frontrunner in terms of reliable manufacturing.

WHY DID YOU OPT FOR A HAGE3D MACHINE?

The decision to opt for a HAGE3D machine was largely because of the size of the component. The high degree of customer orientation as well as 'Made in Austria' were also important reasons for opting for the HAGE3D 84L. The industrial 3D printer is used to produce design prototypes, functional prototypes, fixtures, pre-series components and end-use parts. When it comes to materials, Paschinger typically uses ASA, PET-G, PC, PA6 and PC-ABS. 3D printing offers a clear cost benefit over injection moulding, with the latter overly expensive and uneconomical for small series in particular.

Gerald Paschinger with a 3D-printed air transfer tube in front of the HAGE3D 140L

(SMALL) SERIES PRODUCTION OF AIR TRANSFER TUBES

One of these small series is also the air transfer tube. The tube, which is made of two parts and bonded, has been ordered as a run of eleven units for the moment, with another 30 to follow by the end of the year. A finished tube comprises two parts. Each part takes up a print area of approx. 271 x 492 x 280 mm (X, Y, Z).

Completion of the tube took around 19 hours. Both parts are made of black ABS and require no support material, thus there is no material wear. The fully bonded tube weighs 728 g and has a length of 440 mm.



HAGE3D