Top Applications of the Desktop Metal Studio System

As we enter 2019, our teamer are eagerly awaiting our latest orders for the Desktop Metal Studio System +, a revolutionary, office friendly 3D metal printing system. The Studio System is Desktop Metal's complete end-to-end metal 3D printing solution, with only a power supply and WIFI connection required. It's up to ten times cheaper than comparable laser-based system and comes as a three part automated system that delivers a seamless workflow for printing complex metal parts in-house—from digital file to sintered part.

Thinking of investing? Check out the most popular applications of the Studio System+ below…

Functional Prototyping

Rapid prototyping has been one of the most popular applications of 3D printing due to the great range of thermoplastics available and with competitive qualities such as high tensile strength and chemical resistance.

The Desktop Metal Studio System is a game changer for functional prototyping. Whilst 3D printed plastic parts allow us to test form and fit, the Studio System enables you to produce functional prototypes quickly and iterate rapidly on the part design. Similar to injection moulding, the Studio System leverages bulk sintering to achieve high densities, with parts performing similar to wrought alloys. This makes the parts ideal for applications such as worm gears, connecting rods, brake callipers, and manifolds.

There's no need for tooling or costly and complex machining operations meaning lead times are eliminated and product development and time-to-market are accelerated significantly.

Jigs and Fixtures

Jigs and Fixtures are a key part of the manufacturing process, especially in mass production where balancing speed and quality is vital. If produced effectively, the jigs and fixtures ensure manufacturing and assembly processes are repeatable and reliable, whilst reducing cycle times and improving worker safety.

Metal parts printed with the Studio System increase the longevity of jigs and fixtures with superior strength and durability. The parts can also be post-processed after sintering to achieve critical dimensions.

Choosing the Studio System for jigs and fixtures will allow you to create quickly,

replace easily and iterate designs effectively; creating a true 21st century manufacturing workflow.

Tooling

With the limitations of traditional manufacturing processes, custom tooling applications that have parts with complex geometries are often very difficult or almost impossible to achieve. In addition, processes such as casting, injection moulding, and extrusion for small customized parts is a very limited option due to the high cost.

The Studio System is capable of building highly reliable, accurate, durable tools that outperform a plastic equivalent.

Low Volume Production

Got a need for low volume production? The Desktop Metal studio system brings additive manufacturing to the office, enabling quick, customised parts for low volume production. It's an end to end solution with the only requirement being a power supply and a Wifi connection.

Benefits include a reduction in lead time and the parts costs do not increase based on part complexity, allowing designers to focus on the function of the part rather than the limitations of traditional manufacturing.

So there you have the four most predominant applications of the Desktop Metal Studio System+. For more information of the Desktop Metal systems, contact our team on either 01782 916159 or info@tritech3d.co.uk

Your old 3D printer could be worth far more than you think!