FUSED DEPOSITION MODELING

• Large Scale • High Temperature • Industrial Production

Printing Capability

Idealfor printing High Performance Polymers like PEI, PEEK, PEEK-CF, PEEK-GF, PEKK, PPSU and many others.

Large Scale Production

Filament auto-reloading function and build volume of **610 x 508 x 508 mm**.

Advanced Thermal Design

Uniform 300 °C(572 ℉) heated chamber, avoid warping and cracking.

High Precision & High Quality

Advanced control system with high precision screw guide.

AEROSPACE | AUTOMOTIVE | MEDICAL | OIL & GAS

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FUNMAT PRO 610HT effectively handles the tough requirements needed to print with high-performance thermoplastics, this machine unlocks industrial-grade, high-quality additive manufacturing capabilities. The FUNMAT PRO 610HT is capable of handling almost every high-performance thermoplastic material available on the market. It comes with a dual extruder that can reach 500 °C and a heated chamber of 300 °C for premium repeatability with your part designs.

Industry and Application Solutions

Aerospace

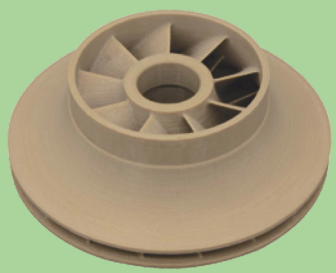
3D printing technology enables metal substitution of some aerospace products for shape verification of prototype, direct product manufacturing and mold making to meet "lighter, faster, lower cost, higher performance" design and manufacturing needs.

Sample name: Air Duct
Solution: This Air Duct is made to connect a filter housing (cubed side) and guide the air through a path into the final tubes. It is build out of PEI 9085 which has FST certificates for aerospace. Spare parts made by PEI 9085 can be used directly as a terminal component in the aviation industry.

Defense Industry

Based on the characteristics of the military industry which are research and development, single prototypes, small and medium batch, multi-variety and defense production. 3D printing solves the painful problems of high price and low efficiency of traditional processing and rapid production of spare parts druing regular maintenance, bringing high added value to on-demand manufacturing.

Sample Name: Turbine
Solution: This underwater turbine structure is complex, requiring high and low temperature resistance, anti-corrosion, and low water absorption. Still, traditional processing is more difficult. PEEK material can meet the demanding situation, while by 3D printing, users can significantly reduce costs and cycle time.



Medical

The rapid printing and flexible ability of 3D printing along with customization and personalized products offer significant advantages to the medical market. INTAMSYS FFF (Fused Filament Fabrication) solutions can print a wide range of polymers. These polymers' lightweight and biocompatible characteristics are ideal for many medical applications.

Sample name: Sternal bone repair implant
Solution: PEEK is biocompatible for medical implantation. It has a density similar to bone, and can be clearly imaged under X-ray for post-operative observation. 3D printing can be customized and processed on an individual patient basis.