# VIRTUAL FOUNDRY: DESKTOP 3D METAL PRINTING, TODAY

The Virtual Foundry, llc. is first to market with an inexpensive system for desktop 3D metal printing. The strategy leverages existing 3D printers and existing metal processing equipment to dramatically reduce the cost of metal 3D printing. The idea is simple, Filamet™ the core product patented by The Virtual Foundry, makes any existing 3D printer a metal 3D printer.

Installing a Virtual Foundry at your site creates a full cycle metal fabrication system that includes printing, debinding and sintering equipment, letting anyone 3D print pure metal parts in-house for prototyping and short-run manufacturing. An entry level Virtual Foundry can be installed and operating at a price point below $20,000. As an added bonus, a Virtual Foundry scales to capacities exceeding those of the closed architecture systems expecting to become available over the coming year.

A gear 3D printed

After 3 years of development with partners and customers in Aerospace, Petroleum, Injection Molding, Dentistry, Education and
Nuclear Energy, The Virtual Foundry is shipping turn-key debinding and sintering systems that work with existing 3D printers so any
shop can create pure metal in their existing 3D printing lab meant for plastics or set up a new metal lab at a fraction of the cost of any other 3D metal system.

The Virtual Foundry's flagship line of materials, called Filamet™, is compatible with FFF/FDM printers, the most common type of 3D printer. Expanding the capability of existing hardware makes your existing 3D printers much more valuable and versatile.

Another key advantage of Filamet™ is safety, the metal powders are bound in a food-safe thermoplastic polymer, making it far safer and much less expensive than existing laser-based metal 3D printing solutions. Metal powders are encapsulated within a binder during handling and printing. Therefore, unlike other metal printing technologies, no respirators or special handling equipment is required.

The Virtual Foundry Furnace

In the coming months The Virtual Foundry, llc. will begin announcing partnerships with key 3D printing hardware manufacturers. The quality produced by the highest performance industrial 3D printers carries directly through to the metal products created with The Virtual Foundry materials.

"OUR OPEN ARCHITECTURE STRATEGY DETACHES THE MATERIALS FROM THE PRINTING AND PROCESSING HARDWARE. THE RESULT IS THE POTENTIAL FOR HIGHER EQUIPMENT REDUNDANCY AND A MUCH LOWER NET COST" – BRADLEY WOODS, THE VIRTUAL FOUNDRY CEO

The Virtual Foundry.com currently stocks Stainless 316L, Copper, Bronze and Iron with 15+ more materials available by Special Order. They also develop custom solutions from nearly any material that can be sintered. So far the list includes everything from glass, to high performance ceramics like zirconium oxide. They will be rapidly expanding materials kept in standard inventory over the coming months, check back often.

The newest addition to the materials lineup is an iron infused filament that has the strongest ferromagnetic properties of any 3D printing material previously available. The high metal content Iron is fully sinterable for pure metal applications, but also finds applications directly off the print bed. The material is being used in electronics for experimenting with ad-hoc electromagnetic cores and other applications requiring a strong ferromagnetic reaction.

*Featured image shows Filamet™, Pure Stainless 316L printed on a Makerbot™ clone.*