

# Figure 4<sup>®</sup> Technology

Productive and cost-effective 3D printing solutions for digital production



## New Levels of Speed and Production Capability

Figure 4<sup>®</sup> delivers ultra-fast additive manufacturing technology with systems that offer the expandable capacity to meet your present and future needs. With access to a range of innovative materials, Figure 4 enables tool-less alternatives to traditional injection molding or urethane casting processes with direct digital production of precision plastic parts, as well as same-day rapid prototyping.

### Fast Turnaround



Achieve same-day functional prototyping and low volume production, with ultra-high speeds. Figure 4 offers quality and accuracy with industrial-grade durability and service, and 3D Connect<sup>®</sup> for proactive and preventative support.

### Ease of Use

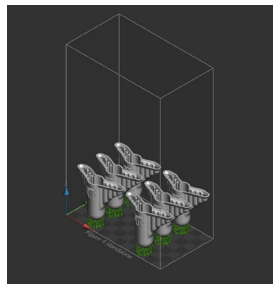
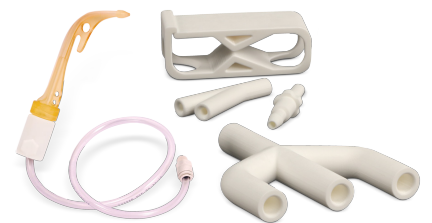


Figure 4 includes 3D Sprint<sup>®</sup>, an easy-to-use advanced print management software. Streamline your file-to-part workflow, from preparing and optimizing CAD data to managing the additive manufacturing process.

### Production-Grade Materials



Create parts that combine high resolution with exceptional surface quality and mechanical properties from a variety of robust, production-grade and biocompatible-capable materials.

# Plasma Spray Shielding Tools

Eliminate manual processes for shielding plasma spray by producing accurate, biocompatible-capable tools with Figure 4 technology

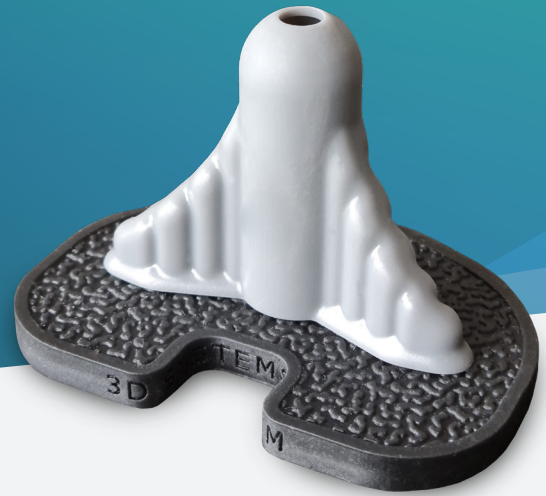


Figure 4 technology enables the production of plasma spray coating tools capable of protecting and masking medical implants during coating and sandblasting processes. Current applications include hip cup hole protection and tibial tray pivot protection.

In a test process, Figure 4 Rigid White, Figure 4 Rigid Gray, and Figure 4 Tough 65C Black materials were used to make tools to mask hip cups during sandblasting, titanium coating, and shot peening. Part features remained preserved following sandblasting, no cracks were observed, and the thread was intact after screw removal.

In a separate assessment of Figure 4 Rigid Gray material to mask sandblasting, titanium coating, and shot peening on tibial trays, the masks shielded all metal coating, and no cracks due to thermal shock were observed.

Count on Figure 4 solutions to deliver increased repeatability, throughput and productivity through a digital workflow.

## CHALLENGES WITH TRADITIONAL METHODS

- Manual work associated with protection and finishing
- Need for biocompatible-capable materials
- High tooling costs for custom devices or small series

## ADVANTAGES OF 3D PRINTING

- Small series customization with no tooling
- Digital processes for manual work reduction
- Finish and part quality improvement
- Biocompatible-capable materials

## Figure 4 Materials for Plasma Spray Shielding

### FIGURE 4 RIGID WHITE

This biocompatible-capable material provides a smooth surface finish and long-lasting, clean white color.

### FIGURE 4 TOUGH 65C BLACK

Black plastic with a good combination of impact strength, elongation, and tensile strength.

### FIGURE 4 RIGID GRAY

High contrast gray plastic with balanced thermal and mechanical properties.

### FIGURE 4 HI-TEMP 300-AMB

High heat resistance for testing and use in high heat environments.

NOTE: Not all products and materials are available in all countries - please consult your local sales representative for availability.

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