

SICAM now offers Cerakote applied coatings to further enhance our industry leading SHOTSHEEN® and VAPORSHEEN finishes in our quest to provide our customers with the highest quality 3D Printed Parts.

Cerakote is a Polymer-Ceramic Composite coating that can be applied to metals, plastics, polymers, and wood. Cerakote developed these coatings using state-of-the-art technology to perform both in laboratory settings and most importantly in real-world applications.

To apply a Cerakote finish, MJF parts will be run through our ShotSheen® process to prepare the surface, SLA parts are vapor honed prior to the Cerakote being applied, while FDM parts can be Vapor Smoothed prior to the Cerakote application.

WHAT IMPACT WILL APPLYING CERAKOTE HAVE TO MJF, SLA, and FMD PARTS

- **Enhanced Appearance**

Cerakote is available in a wide range of colors and finishes, allowing for customization and personalization of 3D printed parts.

- **How thick is the coating, will it affect my tolerances?**

The thickness when applied will range between 0.25 – 3 mils (1 Mil = 0.001), resulting in limited tolerance impact.

- **Will the coating prevent moisture absorption or provide chemical resistance?**

Due to its hydrophobic properties, it will prevent water absorption. 24 Hr. submersion in water, the part was + 0.03 grams, and with no discoloration. Similar 24 Hr. submersion test in acetone and diesel fuel yielded comparable results.

- **Besides appearance, will Cerakote enhance the physical properties of 3D printed parts?**

It will increase the heat stability of a part, reduce heat deflection, and provide excellent UV protection. Exposure to UV rays causes 3D printed parts to degrade rapidly and become brittle. Cerakote is highly resistant to wear, abrasion, and impact, which makes it an ideal coating for 3D printed parts that are subjected to heavy use or harsh conditions. The coating helps to protect the underlying material from damage, extending the lifespan of the part.

