

# AnoBlack SS

Providing a matte, black finish on hard-to-blacken substrates

**AnoBlack SS** is a blackening process for ductile & malleable iron, as well as difficult-to-blacken stainless steels. It imparts moderate corrosion resistance, which can be further enhanced by application of sealants and preservatives. Corrosion performance increases significantly with oiling or other sealing. **AnoBlack SS** is a non-reflective, matte black finish. It penetrates the metal surface to provide durable, adherent coating (won't peel or separate like plating can). The process has little or no dimensional change (typically well under 1 micron or about 5-10 millionths of an inch).

Because **AnoBlack SS** is a conversion coating, it can be just as easily applied to large intricate parts as it can be small, simple parts. Smaller parts can be processed in bulk using the **AnoBlack SS** process, making it more economical than other coatings.

Similar to all black conversion coatings, **AnoBlack SS** does result in a trace amount of black smut which can be removed by wiping or tumbling. As such, it is not recommended for clean-room environments, or invasive medical components without trialing.



Before (left) and after (right) **AnoBlack SS** finishing

## SPECIFICATIONS

- ❖ MIL-DTL-13924, Class 1 (for cast, ductile and malleable iron alloys)
- ❖ MIL-DTL-13924, Class 4 (for stainless steel alloys\*)

\* Austenitic stainless alloys including 304 and 316 are required to meet 96 hours salt spray resistance as a requirement of this spec callout

## TYPICAL APPLICATIONS

- ❖ Where a deep black finish is more appealing
- ❖ On critical tolerance parts that cannot accept a higher buildup as with plating or painting
- ❖ Hydraulic and pneumatic manifolds
- ❖ Optics and vision system components for reduced glare
- ❖ Firearm receivers, frames, barrels and triggers
- ❖ Aerospace hydraulics, bearings and transmission systems

## PHYSICAL PROPERTIES

Appearance **Smooth, matte black**

Thickness **Negligible**

Corrosion Resistance **Limited by base material**

Wear Resistance **Limited**

Temperature Resistance **>800° F**

Conductivity **Typically less than 1% reduction**

Hardness **5-6 on Moh scale**