

# AnoBlack Cr

## Durable, Deep Black Coating for Critical Optical Components

**AnoBlack Cr** is Anoplate's proprietary black chrome deposit. **AnoBlack Cr** deposits a deep, matte black that is proven to reduce glint and glare in your critical optical components.

One of the first applications for **AnoBlack Cr** was coating the optical heads of ophthalmoscopes, providing a low-reflection light-path for the lens assembly and a durable, appealing black coating on the outside that would take the abuse of day-to-day use in the doctor's office. Since then, Anoplate's **AnoBlack Cr** coating has been specified by name on various spaceflight, defense and medical device drawings.

### DESIGN CONSIDERATIONS

- ❖ There are no controllable thickness ranges for **AnoBlack Cr**, however Anoplate's experience is that the coating typically adds 0.0002-0.0003" of thickness per surface. On most substrates, a underplate of nickel is required which adds additional thickness.
- ❖ If directed **AnoBlack Cr** can be supplied with a light oil to improve the aesthetic look and corrosion performance
- ❖ **AnoBlack Cr** has a natural knap on the surface. If desired, Anoplate can remove the knap by brushing the part afterward to expose the adherent black coating underneath.

### SPECIFICATIONS

- ❖ MIL-C-14538
- ❖ MIL-DTL-14538
- ❖ Various customer-developed specifications

### TYPICAL APPLICATIONS

- ❖ Avionic fasteners and controls
- ❖ Optical light sinks for spaceflight instruments
- ❖ Medical diagnostic instruments
- ❖ Military night sights
- ❖ Control buttons and nobs

### PHYSICAL PROPERTIES

- ❖ Good wear resistance
- ❖ Thermal Cycling – Up to 900°F
- ❖ Optical Absorbance – 0.98
- ❖ Emissivity – 0.05

### COMPATIBLE MATERIALS

- ❖ Steel
- ❖ Stainless Steel
- ❖ Inconel, Monel, Invar, Covar
- ❖ Aluminum
- ❖ Brass & Copper

