



Black Chrome

MIL-C-14538C]

Black Chrome is a semi hard, non-reflective, abrasion-resistant, heat and corrosion resistant coating (approximately .0002" thick). The Black Chrome finish can be rendered very lustrous for consumer decoarative applications; and clear coated for a functional use. The Black Chrome process has poor throwing power; and conforming anodes are necessary for coverage on intricate shapes. This coating is applied after heat treating and all mechanical operations are performed.

The Black Chrome surface may be waxed or oiled to darken the surface. Coating provides limited corrosion protection, but added protection can be obtained by specifying underplate such as nickel or copper.

The coating color is a dull dark gray, approaching black; and becomes (black) pearl-like when polished. It shall approximate color plate 37038 of Fed. Std. No. 595. Steel parts with Rockwell hardness in excess of Rc 40 shall be stress relieved prior to plating by baking one hour or more at 300° F to 500° F and baked after plating 375 F° ± 25 F° for 3 hours minimum for induced hydrogen embrittlement relief.

Applications include:

Plumbing fixtures; Firearms (over hard chrome); Laser usage components; Neuclear sighting gauges; light absorption components.