Zinc Phosphate

This process provides a micro-crystalline Zinc Phosphate coating on ferrous metals. Zinc tends to be relatively uniform and corrosion resistant. When combined with a black pre-dip prior to Zinc Phosphating, the finish will be matte black in appearance. Zinc is used in applications, which require reduced light reflection, or for appearance characteristics. Zinc is used extensively on fasteners with excellent results. It can be used as a base coat for painting and is applied at 160°F-200°F. It is a porous surface that can absorb and maintain a post application of oil or wax.

Finish Properties

Zinc Phosphate is used in applications that require reduced light reflection, appearance characteristics, as a base coat for solid film lubricants and paint. Coating weight thickness are in the range of 1500 – 2500 mg/sq.ft. (.0002" to .0006"). Zinc Phosphate meets Military Specification MIL-DTL-16232G Type Z, Classes 1, 2, 3 and 4, MIL-STD-171 and many more military, commercial, aerospace and automotive specifications.

Some Common Uses

Fasteners, firearms, retaining rings, bearings, gears, shafts, bushings, springs, slides, pins, high torque screws, nuts, chain links, washers, stamping, castings, forgings, motor parts, and hydraulic pumps.