

Diamonize-Nano-TM150 is a hard uniform coating with a low coefficient of friction and good wear properties. This technology has potential opportunities in numerous industries for countless advanced applications. These unique properties are inherent in materials sized in the range of 150 nanometers. Diamonize-Nano can be applied to all ferrous & most non-ferrous metals. Uniformity & accuracy of this deposit is maintained within +/- .0001. It provides good wear properties and uniform deposits on the most complex shapes. This is a leading technology of co-deposition with diamond particles co-deposited in a nickel or cobalt phosphorus coating.

User Benefits

- High hardness
- Exceptional wear resistance
- Applicability to all metals and alloys
- Unique surface characteristics
- Enhanced thermal transfer
- Excellent corrosion resistance
- Coverage of entire or selected surfaces
- Conformity to all shapes and sizes, including non line-of-sight applications

Industries & Applications

Aerospace/Aircraft: Jet Engine Parts, Vanes

Locomotive Parts: Bushings, Break Calipers, Gears & Pistons

Metal Processing: Rollers, Dies

Department of Defense: Gun Parts, Bushings, Slides

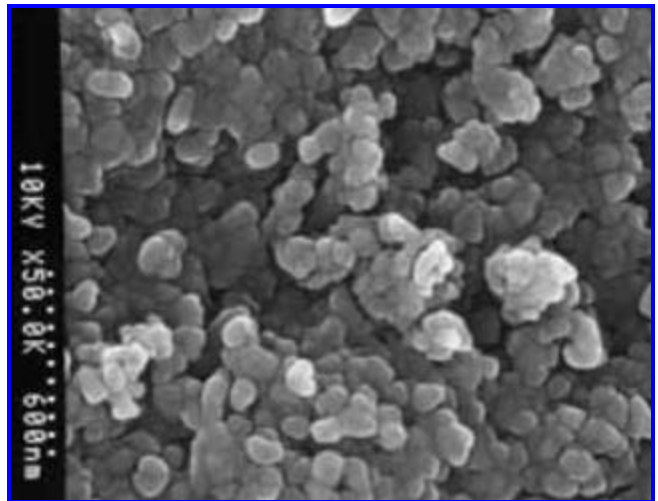
Textile: Rolls

Injection Molding: Release, Tooling, Increase Mold Life

Oil & Gas/Bushings: Shafts for Drilling, Pump Parts

Glass Manufacturing: Shoots, Slides, Molds & Forming Equipment

DOD: Sliding or Rubbing Wear



Taber abrasion test results from Diamonize-Nano-TM150 vs. Hard chrome plating.

(Lower numbers indicate better wear)

.0013	Wear Index	Diamonize-Nano
.0400	Wear Index	Hard Chrome Plating

Yarnline Abrasive Wear Test (Abrasive Yarnline under constant tension drawn across the sample at a constant speed & force: Diamonize-Nano-TM150, Flame Spray Aluminum Oxide and Hard Chrome) (Lower numbers indicate better wear)

3.2	Wear Index	Diamonize-Nano-TM150
173.6	Wear Index	Flame Spray Aluminum Oxide
3478.8	Wear Index	Hard Chrome Plating

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