



## Coating Application Chart

Industry	Challenge	Component to be Coated	Plasma-Tec Solution
Pump	Resist cavitation Resist hard surfaces	Copper alloy parts Pump seals	Aluminum bronze Chromium oxide
Process	Thermal barrier Resist molten iron Resist molten zinc	Brazing/heat-treat fixture Continuous casting mold Galvanizing dip tanks	Zirconium oxide Molybdenum Tungsten
Machine Repair	Resist abrasion Hard bearing surfaces Salvage of steel parts	Grinder spindle seal area Bearing journals Various	Aluminum-titanium dioxide Low carbon steel Nickel chromium
Marine	Resist corrosion Abrasive grain wear	Surfaces exposed to saltwater Propeller shaft bearing	Pure aluminum Titanium dioxide
Automotive	Resist fretting Resist particle erosion Resist corrosive gases Oxidizing atmospheres	Differential ring gears Exhaust valve seats Piston heads Exhaust mufflers	Molybdenum Fused nickel-cobalt Nickel chromium Nickel chromium
Oil	Resist corrosion Abrasive grain wear Abrasive grain wear	Dump valve plug and seat Sucker rod couplings Slush pump piston rods	Fused nickel-chromium Fused nickel-cobalt Fused tungsten carbide
Printing	Abrasive grain wear Resist abrasion/corrosion	Ink transfer rolls Printing press cylinder	Aluminum-titanium dioxide Stainless steel
Textile	Resist fiber and thread Thread guides	Rotor motor bearing fit Loom motor rotor	White aluminum oxide Nickel aluminide
Diesel Engines	Resist cavitation Resist heat corrosion Abrasive grain wear	Piston head Cylinder liner	Fused nickel-chromium 316 stainless steel High carbon-iron-molybdenum
Gage	Resist hard surfaces	Plug gages	Tungsten carbide
Electronics	Resist abrasion Electrical conductivity Dielectric coating EMI/RFI shielding Radio frequency shield	Magnetic tape heads Electrical contacts Heater tube insulation Electronic enclosures Instrument nuts	White aluminum oxide Copper Aluminum oxide-titanium Zinc Copper