



APPREVIATED LISTING OF COMMONLY USED COATINGS

All Data is nominal and should not be used in firm design work but rather on a comparative basis. Tensile bond strength determined by ASTM method C633-79 modified. All of these materials can be applied to almost any substrate.

COATING DESIGNATION	MATERIAL	HARDNESS	TENSILE BOND STRENGTH PSI	MAXIMUM OPERATING TEMP (F°)	PRINCIPLE FEATURES
UNILLOY (PURE METALS)					
CEA-110	Aluminum	Rh 40	4,500	400	Good corrosion resistance, heat & electric conductor
CPC-112	Copper	Rh 38	7,000	500	Good electric conductor. RFI/EMI shielding
CMM-117	Molybdenum	Rc 40	8,000	1800	Primarily bond coat. Hard wear resistant
CMN-121	Nickel	Rh 58	8,000	1000	Used where dense nickel required
CEZ-126	Zinc	Rh 20	3,000	400	Good atmospheric & freshwater corrosion EMI/RFI shielding
CPT-135	Tantalum	Ra 70	4,000	550	Excellent acid corrosion resistance
MIRALLOY (ALLOYS)					
CMC-205	Stellite 6*-type Formulation	Rc 48	10,000	1500	Good resistance to wear
CEF-215	Aluminum Bronze	Rn 15 58	3,000	500	High Tensile, low shrink, dense, wear resistant
CEF-225	80 Carbon Steel	Rc 38	4,000	600	Hard, low shrink, wear resistant & low cost
CMN-231	Hastelloy C**-type Formulation	Rc 39	10,000	1400	Excellent corrosion resistance
CEF-233	304 Stainless Steel	Rc 24	8,000	1200	Build up repair for corrosion
CEF-238	316 Stainless Steel	Rc 24	8,000	1300	Build up repair for corrosion
CPN-239	Monel-type Formulation	Rc 42	6,000	1300	Good resistance to sea water corrosion
CEF-244	420 Stainless Steel	Rc 33	8,000	1200	Good wear resistance, dimensional restoration
CMN-248	Nickel / Aluminum	Rn 15 41	9,900	800	Good resistance to oxidation at high temp
CMN-251	Nickel / Chrome / Boron	Rc 50	4,500	800	Good wear resistance - particle erosion & cavitation high/low temp
CPN-256	Nickel / Chrome / Aluminum	Rh 85	9,500	900	Good wear resistance, dimensional restoration, bond coat
CMN-259	Ni Chrome	Rc 36	10,000	1800	High temp corrosion in non-sulphurous atmosphere, bond coat
CMC-283	Cobalt / Molybdenum / Chrome	Rc 56	9,000	2000	High temp corrosion, erosion, abrasion, fretting, self lubricating
WEARALLOY (CARBIDES)					
CMC-422	Chrome Carbide / Ni Chrome	Rc 64	10,000+	1800	Good resistance abrasion, erosion & fretting wear
CMW-445	Tungsten Carbide / 9% Cobalt	Rc 72	10,000+	1000	Excellent wear resistance
CMW-450	Tungsten Carbide / 12% Cobalt	Rc 71	10,000+	1000	Excellent wear & improved shock resistance
CMW-460	Tungsten Carbide / 17% Cobalt	Rc 70	10,000+	1000	Excellent wear & improved shock resistance
CMW-463	Tungsten Carbide / Chrome Carbide / Nickel	Rc 70	8,000+	1400	Excellent wear & improved corrosion resistance
CMW-475	Tungsten Carbide / Cobalt / Chrome	Rc 69	10,000+	1000	Good wear & corrosion resistance
CERMEX (CERAMICS)					
CPA-601	Aluminum Oxide	Rc 70	9,000	1800	High dielectric strength & low temperature wear
CPT-610	Titanium Dioxide	Rc 53	6,600	1000	Hard, dense, wear resistant by abrasive grains
CPC-616	Chrome Oxide	Rc 71	9,000	1300	Resistant particle abrasion, erosion & cavitation
CPZ-640	Zirconium Dioxide	Rc 30	6,500	2400	High temperature thermal barrier
CPZ-660	Yttria Stabilized Zirconia	Rc 30	6,500	2200	High temperature thermal barrier & wear
CPZ-670	Magnesia Stabilized Zirconia	Rc 25	7,500	1800	High temperature wear by particle erosion, thermal shock
CPA-701	Alumina / Titania	Rc 60	8,000	1300	Resistant to low temperature abrasion, fretting & particle erosion



APPLICATIONS BY INDUSTRY

ABBREVIATED LISTING

CHEMICAL

Augers
Catalytic Crackers
Centrifuges
Compressor Parts
Concentrators
Evaporators
Fan Parts
Nozzles
Precipitators
Pump Parts
Rolls

FOOD

Bread Slicing Guides
Canning Spindles
Perforator Blades
Wear Plates / Bars

MARINE

Hulls
Piping
Pump Parts
Propeller Shafts
Rudder Parts
Superstructures
Tanks

PETROLEUM

Compressor Rods
Gate Valves
Mechanical Seals
Pump Plungers
Rotor Shafts
Valve Balls

PLASTICS

Dicers / Bed Knives
Extruder Screws
Injector Screws
Pelletizers
Rolls
Slitter Blades

PRINTING

Anilox Rolls
Blanket Rolls
Ink Rolls
Journals

PULP & PAPER

Corrugated Rolls
Dryer Rolls
Mixing Rotors
Pump Parts
Pressure Rolls

POWER GENERATION

Air Foils
Boiler Tubes
Clinker Shafts
Crusher Rolls
Eductors
Fan Blades
I.D. Fan Housings
Nozzles
Piston Rods
Pump Parts
Strainers
Turbine Parts
Valve Parts

TEXTILES

Crimper Rolls
Draw Rolls
Finish Applicator Rolls
Friction Discs
Guide Pins
Guide Rolls
Pump Plates
Separator Rolls
Staple Draw Rolls
Take Up Rolls

WIRE / STRIP / SHEET

Billy Rolls
Bridle Rolls
Capstans
Delivery Rolls
Journals
Mandrels
Roller Guides
Sheaves