

**SURFACE TREATMENTS**

Process Code	Process	Typical Name	Color	Thickness (Approx.)	Hardness	Process Temp
TPC-9-P	Chrome Plating	Chrome Plating	Silver	0.0005" - 0.001"	68-72 Rc	~ 140° F
TPC-9-MC	Micro Clad	Micro Clad	Matte	0.0003" - 0.0015"	72 Rc	~ 150° F
TPC-9-MCP	Micro Clad 100% Micro Polished	Micro Clad Plus	Silver-Gray	0.0003" - 0.0015"	72 Rc	~ 150° F
TPC-10-P	Ion Nitriding	Ion Nitriding	N/A	N/A	65-70 Rc	~ 975° F
TPC-11-P	Micro Plasma / Tungsten Carbide	Micro Plasma TC	Silver-Gray	0.0015" - 0.0025"	85-90 Rc	~ 150° F
TPC-15	Fluidized Bed Ferritic Nitrocarburizing (MicroBlue)	FNC MicroBlue	Blue-Gray	N/A	75+ Rc	700° F - 1200° F
TPC-15-P	Fluidized Bed Ferritic Nitrocarburizing (MicroBrite)	FNC MicroBrite	Blue-Gray	N/A	75+ Rc	700° F - 1200° F
TPC-15-N	Gas Ammonia Nitriding	Gas Nitriding	N/A	N/A	70+ Rc	925° F - 1050° F
TPC-17-P	NT Plus	TD	Silver	0.0001" - 0.0008"	90+ Rc	~ 1925° F
TPC-19-P	Duplex - MoWS2	MoWS2	N/A	0.5 - 1.0 μ	N/A	~ 100° F
TPC-57-P	Micro Plasma / Chrome-Tungsten Carbide	Micro Plasma CTC	Silver-Gray	0.0015" - 0.0025"	85-90 Rc	~ 150° F

**CVD COATINGS**

Process Code	Process	Typical Name	Color	Thickness (Approx.)	Hardness	Process Temp
TPC-5-P	Titanium Carbide	TiC	Silver-Gray	0.0003"	90 Rc	~ 1925° F
TPC-6-P	Titanium Nitride	TiN	Gold	0.0003"	85 Rc	~ 1925° F
TPC-13-P	Titanium Carbo-Nitride	TiCN	Blue-Gray	0.0003"	85 Rc	~ 1925° F
TPC-12-P	Micro Plasma / Chromium Carbide	TPC-12-P	Silver-Gray	0.0003"	85 Rc	~ 1500° F

**PVD COATINGS**

Process Code	Process	Typical Name	Color	Thickness (Approx.)	Hardness	Process Temp
TPC-7-P	Composite Titanium	TPC-7-P	Gold	0.0001"	85 Rc	~ 700° F
TPC-8-P	Titanium Nitride	TiN	Gold	0.0001"	85 Rc	~ 700° F
TPC-14-P	Titanium Aluminum Carbo-Nitride	TiAlCN	Copper	0.0002" - 0.0003"	85 Rc	~ 700° F
TPC-16-P	Chromium Nitride	CrN	Silver	0.0002" - 0.0003"	85 Rc	~ 700° F
TPC-18-P	Titanium Aluminum Nitride	TiAlN	Violet-Black	0.0001" - 0.0003"	80-90 Rc	~ 700° F



**MPD Welding, Inc.**  
**is compliant with the following Welding Certifications:**

**AWS D1.1 Structural Welding**  
**FCAW Unlimited Thickness**  
**GMAW & GSAW**

**AWS D-17.1 Aerospace**  
**Groups IIA, IIB, IIIA, IIIB, IV**

**MIL-STD-278 NAVSEA S9074-AR-GIB-010/278**  
**Class M Material: 1045, 1020, 4140, 8620**

**MPD Welding, Inc.**  
**is**  
**ISO 9001:2008 Certified**