










Medthin Biocompatible Coating Products

Coating Name	Coating	Hardness (HV 0.05) a	Adhesion (N) b	Oxidation Temperature (°C/°F)	Friction Coefficient c	Thickness	Surface Roughness (Ra μm) d	Color	
Medthin-Gold	TiN	2900 ± 200	70	500°C 950°F	0.6	2 to 4	0.2	Gold	
Medthin-Cor	ZrN	2800 ± 200	70	600°C 1150°F	0.6	2 to 4	0.2	Light gold	
Medthin-Bronze	TiAlN	2600 ± 400	60	800°C 1450°F	0.7	2 to 4	0.4	Bronze	
Medthin-Edge	AlTiN	4500 ± 500	80	>800°C 1450°F	0.1	2 to 4	0.15	Black	
Medthin-Silver	CrN	2500 ± 400	70	700°C 1300°F	0.5	2 to 10	0.2	Silver	
Medthin-MoST	Ti + MoS ₂	1500	90	450°C 850°F	0.01	1 to 2	0.02	Silver/grey	
Medthin-Tetrabond	ta-C	8000	50	500°C 950°F	0.1	1 to 2	0.02	Black	
Medthin-Diamond	a-C:H	4000	30–50	300°C 570°F	0.05	2 to 3	0.05	Anthracite to black	
Medthin-Nanotex	Textured titanium	265 ± 35	N/A	650°C 1200°F	N/A	10 to 12	1.0 ± 0.1	Green/turquoise	

a = Vickers hardness test at 50gf load.

b = measured by adhesion scratch test.

c = dry, measured between 100 Cr6 ball and coated substrate.

d = measured by Dektak surface profilometer in micrometers.