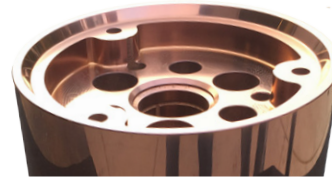


Forming and Molding Portfolio



		Main Properties	Micro Hardness HV 0,025	Friction Coeff	Max Service Temp. °C	Color
TiN	TiN	tough & multi purpose	2300	0,5	600	gold
	TiN HP	higher toughness & hardness	2700	0,5	750	brown
TiCN	TiCN G	very hard & tough	3400	0,3	450	grey
	TiCN	hard & very tough	3100	0,3	450	pink
CrN	CrN Arc	tough & chemical inert	2000	0,4	700	metal silver
	CrN Mag	smooth & corrosion resistant	1800	0,3	700	metal silver
	CrNOx	higher hardness, corrosion resistant & tough	2400	0,3	700	metal silver
AlTiN / AlCrN based	AlTiN	ductile & uniform abrasive wear	2800	0,5	700	aubergine
	HotForm	hot hardness & oxidation resistance, anti sticking	3100	0,5	900	grey
	MpC Form	tough, low friction & high oxidation resistance	3500	0,3	800	pink
	DeepDraw	better heat resistance, hardness, low stress	2500	0,5	800	metal silver
	AluCast	high heat resistance, low thermal conductivity & crack propagation	3800	0,5	> 1100	brown
Duplex	Duplex Mold	brilliance & increased hardness, lower roughness	up to 1400	0,6	580	metal silver
DLC based	Cr/DLC	low friction & chemical inert	2200	0,1	350	anthracite
	Cr/CrN/DLC	Cr/DLC + corrosion resistance & better hardness	2200	0,1	350	anthracite
All coatings optional as DUPLEX COATING		hot appl.--> improved thermal fatigue, hot hardness cold appl.--> improved mechanical fatigue, compressive resistance				