

THERMAL SPRAY WIRE

Polymet Alloy	Description	Specifications		Competitor's Equivalents		Nominal Composition											Rockwell Hardness	Diameter 1/16" 1.6mm 1/8" 3.2mm	Available Forms		Applications		
		GE	Pratt & Whitney	TAF	Metco & Other	Co	Fe	Cr	W	Mo	Al	Si	Mn	Sn	Ti	Cu			B	C		Other	Solid Sintered
IRON BASE HARDFACING ALLOYS																							
P♦Met 50	Fe Al			35MXC		BAL															✓		Bond Coat, Anti-skid, Traction rolls
P♦Met 223	LCr Carbide			98MXC		BAL	26.0		0.8									1.70			✓		Good Corrosion & Wear, Machinable
P♦Met 225	Cr Carbide					BAL	23.0			1.6	1.6	2.0						5.50			✓		Abrasion Resistance, Sand Pipes
P♦Met 226	HCr Carbide		8222			BAL	28.0			1.0	1.0	2.0						5.00			✓		Abrasion Resistance, Aggregate Handling
P♦Met 272	Fe Cr B Si		Armacor-M	95MXC		BAL	29.0			1.4	1.7							3.7			✓		Abrasion Resistance, Rolls, Boiler Tubes
P♦Met 285	Van Carbide					BAL		6.0		1.5	1.0							4.0	16.0V		✓		Abrasion Resistance, Exhaust Fan blades
P♦Met 296	Fe Cr Ni B		Armacor 16	96MXC		BAL	23.0			2.0	1.0				2.0	2.5					✓		Abrasion Resistance, Boiler Tubes
P♦Met 297	Tung Carbide		Duocor	97MXC		BAL	13.0			1.0	1.0					2.0			26.0 WC; 6.0 TiC		✓		Abrasion Resistance, Rolls, Boiler Tubes
COPPER BASE ALLOYS																							
P♦Met 590	Al Bronze		Sprabronze AA	10T						7.0	0.4										✓		Housings, Bearings, Shafts, Bond Coats
P♦Met 599	Copper			05T								0.7									✓		High Conductivity, Electrical Components
ALUMINUM BASE ALLOYS																							
P♦Met 688	Al 12Si		PWA 36935	01A		0.8*				BAL	12.0	0.15*									✓		Turbine Engine, Dimensional Buildup
P♦Met 692	Al 6Si			01S	Metco SF	0.8*				BAL	5.2	0.05*									✓		Turbine Engine, Dimensional Buildup
P♦Met 699	Aluminum		Metco Al	01T						99.5											✓		Corrosion Resistance, Electric Conductivity
IRON BASE ALLOYS																							
P♦Met 709	LC Steel			30T		BAL															✓		Economical, Bearings, Seating Surfaces
P♦Met 710	304 SS			80T		BAL	19.0				1.0*	2.0*									✓		Corrosion Resistance, Print Rolls, Restoration
P♦Met 714	HC Steel			38T		BAL					0.3	0.7									✓		Low Shrink, Shafts, Housings, Pistons, Fans
P♦Met 720	420 SS			60T	Metcoloy 2	BAL	13.0				1.0*	1.0*									✓		Wear Resistance, Machine Elements
P♦Met 723	18 5 SS			55T	Metcoloy 5	BAL	18.0				1.0*	8.8									✓		Thick Coatings, Rams, Rollers
P♦Met 730	316 SS			88T	Metcoloy 1	BAL	17.0				1.0*	2.0*									✓		Corrosion Resistance, Shafts, Print Rolls
P♦Met 731	Fe Al Cr Si		Alcro			BAL	23.5				5.3	0.7	0.45*								✓		Boiler Tubes, Dimension Restoration
NICKEL & MOLYBDENUM BASE ALLOYS																							
P♦Met 806	Nickel			06T		99.0															✓		Corrosion Resistance, Impellers, Sleeves
P♦Met 818	Inconel 718	B50TF202		78T	8718	BAL	1.0*	17.0	19.0		0.35*	0.35*		0.9		0.15*					✓		Oxidation Resistance, Turbine Engines
P♦Met 821	Ni 20Cr			06C		BAL	20.0				1.0	2.5*									✓		Oxidation Resistance, Machinable Coatings
P♦Met 860	Inconel 625			71T	8625	BAL	1.0*	5.0*	21.5		0.5*	0.5*		0.4*							✓		Oxidation Resistance, Corrosion, Digestors
P♦Met 862	Ni Cr Si B					BAL	3.5	15.5			4.0				3.0						✓		Wear & Corrosion, Molds, Plungers
P♦Met 876	C276			77T	8276	BAL	0.12*	3.0*	20.0		0.5*	3.0		0.75*	0.3*						✓		Resistance to Reducing/Oxidizing Corrosives
P♦Met 884	Ni 20Al			79B	405	BAL															✓		Bond Coats
P♦Met 885	Ni 5Al	B50TF56		75B	8400	BAL					5.0										✓		Bond Coat, Turbine Engine Part Buildup
P♦Met 886	Ni Cr Al	B50TF119		73MXC	8443	BAL					7.0										✓		Oxidation Resistance, High Temp. bond coats
P♦Met 887	Ni Cr Al Y			76MXC		BAL	22.0				10.0								1.0Y		✓		Oxidation Resistance, Ceramic Undercoat
P♦Met 888	Ni Mo Al			74MXC	8447	BAL					5.5										✓		Wear Resistance, Buildup of Steels
P♦Met 889	Ni Cr Ti			45CT		BAL	43.5							0.7							✓		Corrosion Resistance, Boiler Tubes
P♦Met 890	Ni Cr CrC					BAL	32.0														✓		Excellent Corrosion & Wear, Boilers
P♦Met 896	Ni W Carbide					BAL	2.0	4.5	31.0		1.0								1.0V		✓		Economical, Piston Rings, Shafts
P♦Met 899	Molybdenum		Sprabond	13T		BAL	2.0		99.5										0.15*0		✓		Corrosion & wear, piston rings
OTHER ALLOYS																							
P♦Met 542	Babbitt			04T	Sprababbitt							90.0				3.0			7.0 Sb		✓		Bearings

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