

THERMAL SPRAY WIRES

Pure Metals

Product Name	Chemical Composition	Product ID	Available Sizes	Comparable Products	Comparable Specifications	Hardness and Bond Strength	Typical Characteristics and Applications
HA101	Aluminum Al 99.5	10101	1/16", 1/8" 3/16", 11, 15 Guage	Tafa 01T Praxair Aluminum	MIL-W-6712C PWA 1320F SNECMA DMR33-12 Garrett FP5045 GEFC6	30-75 Rb 4379 PSI	<ul style="list-style-type: none"> Corrosion and chemical resistance Electrical conductivity Used in capacitor industry
HA111	Aluminum 99.0 Min, 1.0Si Max + Fe	10111	1/16", 1/8"	Praxair 1100 Metco Aluminum Metco Aluminum AW	MIL-W-6712	35-55 Rh 4379 PSI	<ul style="list-style-type: none"> Corrosion resistant Better corrosion resistance than pure aluminum
HA405	Copper Cu 98.7	10405	1/16", 1/8"	Tafa 05T Praxair Copper Metco Copper Metco Copper AW	MIL-R-19631A MIL-W-6712C type II	37 Rb 7324 PSI	<ul style="list-style-type: none"> Electric conductivity Copper reclamation Used as alternate to copper plating
HA613	Molybdenum Mo 99.0+	10613	1/16", 1/8"	Tafa 13T Praxair Moly Metco Sprabond®	PWA 36913 PWA 271-13 Rev D MSSR9507/19 Garrett FP5045 Type I	14-36 Rb 5496 PSI	<ul style="list-style-type: none"> Abrasion resistance Excellent adhesion to steel Excellent in molten metal environment in inert atmospheres
HA706	Nickel Ni 99.0	10706	1/16"	Tafa 06T Praxair Nickel Metco Nickel	MIL-W-6712C	58 Rb 4000 PSI	<ul style="list-style-type: none"> Corrosion protection Excellent machined surface finish Finishes "Bright & Shiny"
HA930	Silver Cu 34Zn 31Ag	10930	1/16"	Tafa 30S	GE B20A4 GE 70-49-44	86-94 Rb 6525 PSI	<ul style="list-style-type: none"> Stationary seals in Aircraft Good rubbing wear characteristics
HA802	Tin Sn 99.8	10802	2 mm, 1/8"	Tafa 02W Praxair Tin Metco Tin	MIL-W-6712C	69-71 Rb 2552 PSI	<ul style="list-style-type: none"> Good electrical conductivity Low melting point
HA814	Titanium Ti 99.8	10814	1/16"	Tafa 14T	ASTM B348/Grade I ASTM F67-89/Grade I	70-80 Rb 5700 PSI	<ul style="list-style-type: none"> Spraying in inert atmospheres Medical implants Excellent corrosion
HA902	Zinc Zn 99.9	10902	1/16", 2mm, 1/8", 3/16", 11, 15 Guage	Tafa 02Z Praxair Zinc Metco Zinc PP Metco Zinc AW	MIL-W-6712C	60-73 Rb 1218 PSI	<ul style="list-style-type: none"> Low melting point material Anode protection Excellent bonding to non-metallic surfaces

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Metal Alloys

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HA101B	Aluminum Silicon Al 12Si	21101-1	1/16"	Praxair Tafa 01A	MIL-W-6712C PWA 36935 GE B50TF92S2 CLA SNECMA DMR33-027	72 Rb 4250 PSI	<ul style="list-style-type: none"> • Less corrosion resistance than pure aluminum • Non-galling, finer texture • Dimensional restoration
HA101C	Aluminum Silicon Al 5Si	21101-2 21101-3	1/16" 1/8"	Praxair Tafa 01S Metco SF Aluminum	MIL-W-6712C	95Rb 4250 PSI	<ul style="list-style-type: none"> • Dimensional restoration • Machines easier and sprays faster than pure Al • Corrosion resistant
HA110	Aluminum Bronze Cu 9Al .5Fe	21110 21110-2	1/16" 1/8"	Praxair Tafa 10T Metco Sprabronze® AA	MIL-W-6712C	65-68 Rb 6744 PSI	<ul style="list-style-type: none"> • Reclamation, cavitation easy to spray • Readily machinable • Dense coatings
HA104	Babbitt Sn 7Sb 3Cu	21104 21104-2 21104-3 21104-4	1/16" 2 mm 1/8" 3/16"	Praxair Tafa 04T Metco Sprababbitt® A	MIL-W-6712C	32-35 R _{15T} 2871 PSI	<ul style="list-style-type: none"> • Bearing reclamation • Capacitors • Good electrical conductivity • Dense coatings
HA112	Brass Zn 60Cu .7Sn .06Pb	21112	1/16"	Praxair Tafa 12T	MIL-W-6712C	51 Rb 551 I PSI	<ul style="list-style-type: none"> • Corrosion protection • Sprays fast, machines easy • Produces a smooth machined surface
HA706B	Nickel Chrome Ni 20Cr	21706 21706-2	1/16" 1/8"	Praxair Tafa 06C Metco Nickel #33	PWA 1317D MSSR9507/27 SNECMA DMR33-079	90 Rb 7324 PSI	<ul style="list-style-type: none"> • Machinable • Heat Oxidation Resistance • Oxygen barrier under ceramic coatings
HA770	Monel Ni 27Cu 2.0Fe 1.5Mg .25C .25Si .10Al S	21770	1/16"	Praxair Tafa 70T Metco Monel	MIL-W-6712B	80-84 Rb 4307 PSI	<ul style="list-style-type: none"> • Marine corrosion protection • Print rolls
HA116	Modified Silicon Bronze Cu 2.9Si .89Mn	21116	1/16"	Praxair Tafa 16T	Standard Grade	29 Rb 4060 PSI	<ul style="list-style-type: none"> • Restoration of Original Surface Condition
HA535	High Carbon Steel Composite	21535 21535-2	1/16" 1/8"	Praxair Tafa 35MXC®	Standard Grade	60 Rc 8425 PSI	<ul style="list-style-type: none"> • Extreme rough, high profile non-skid coatings
HA538	High Carbon Steel, #80 Fe .8C .7Mg .10Si .04P .03S	21538 21538-2	1/16" 1/8"	Praxair Tafa 38T Metco Sprasteel® #80	MIL-W-6712C	23 Rc 8425 PSI	<ul style="list-style-type: none"> • Low shrink material • High wear resistance • ID Fans
HA530	Medium Carbon Steel, #25 Fe 1.0Mg .35Si .15C P S	21530 21530-2	1/16" 1/8"	Praxair Tafa 30T Metco Sprasteel® #25	MIL-W-6712C	97-100 Rb 5700 PSI	<ul style="list-style-type: none"> • Dimensional restoration of mismachined and worn parts

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HA560	Stainless Steel, #2 Fe 14Cr 1.0Mg 1.0Ni .3C .08Si P S	21560	1/16", 1/8", 3/16" 11 Gauge	Tafa 60T Praxair #2 Stainless Metco Metcoloy® #2	MIL-W-6712C RR OMAT #3/45D	40-43 Rc 4728 PSI	<ul style="list-style-type: none"> • Good wear and corrosion resistance • Best all purpose stainless steel
HA555	Stainless Steel, #5 Fe 18Cr 8.0Mg 5.0Ni .08Si .06C P S	21555	1/16", 1/8", 3/16"	Tafa 55T Praxair #5 Stainless Metco Metcoloy® #5	MIL-W-6712C	92-94 Rb 4162 PSI	<ul style="list-style-type: none"> • Reclamation • Corrosion protection • Low shrinkage and good machinability
HA580	Stainless Steel, #1 Fe 18Cr 8.0Ni 1.5Mg .5Si .12C P S	21580	1/16"	Tafa 80T Praxair #1 Stainless Metco Metcoloy® #1	MIL-W-6712C	93-97 Rb 4100 PSI	<ul style="list-style-type: none"> • Corrosion protection • Dimensional restoration • Print rolls
HA585	Stainless Steel <i>316 Stainless</i>	21585	1/16", 1/8"	Tafa 85T Metco Metcoloy® 4	Standard Grade	93-97 Rb 4100 PSI	<ul style="list-style-type: none"> • Corrosion protection • Dimensional restoration
HA588	Stainless Steel <i>316L Stainless</i>	21588	1/16", 1/8" 11 Gauge	Tafa 88T Praxair #16 Stainless Metco Metcoloy® #16	Standard Grade	93-97 Rb 6744 PSI	<ul style="list-style-type: none"> • Corrosion Protection • Dimensional Restoration • Print Rolls
HA802B	Tin Zinc Sn 20Zn	21802-1	2 mm	Tafa 02T	Standard Grade	Dead Soft 2857 PSI	<ul style="list-style-type: none"> • Low melting point • Corrosion resistance • Capacitors
HA902B	Zinc Aluminum Zn 15Al	21902-1	2 mm	Tafa Tafaloy® 02A	Standard Grade	73 Rb 3683 PSI	<ul style="list-style-type: none"> • Corrosion Protection • Oxidation resistance • Galvanizing

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Specialty Metal Alloys

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HA106	Cobalt Alloy Co 26Cr 10Ni 8W 1C	22106	1/16"	Tafa 106 MXC®	Standard Grade	58-69 Ra 6671 PSI	<ul style="list-style-type: none"> • Erosion and wear resistance • Machinable • Restore cobalt parts
HA206	Cobalt Alloy Co 28Cr 4Fe 3.5W 1.2C <i>Stellite 6</i>	22206	1/16"	Stellite 6	Standard Grade	45Rc 5700 PSI	<ul style="list-style-type: none"> • Excellent galling properties • High bond strength • Excellent corrosion resistance
HA524	Iron Chrome Aluminum Fe 23.5Cr 5.3Al .65Si	22524	1/16"	Tafa 24CA Praxair ALCRO	Standard Grade	88 Rb 7770 PSI	<ul style="list-style-type: none"> • Boiler applications • Excellent machinability • Ability to have featheredge coatings

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HA774	Molybdenum Nickel Aluminum Ni 5.5Al 5.0Mo	22774	1/16"	Praxair Tafa 74MXC® Metco 8447	MSRR9507/35 GE B50TF166 Garrett FP5045	78 Rb 7454 PSI	<ul style="list-style-type: none"> Erosion and fretting wear Salvage and build-up of machinable and gradable carbon steels
HA779	Nickel Aluminum Ni 20Al	22779 22779-2	1/16" 1/8"	Praxair Tafa 79B Metco 405-1 Metco 405, 405NS	RR OMAT #3/90A	55-80 Rb 8949 PSI	<ul style="list-style-type: none"> High temperature resistance Oxidation and abrasion resistant Dense coatings
HA775	Nickel Aluminum Bond Wire Ni 5Al	22775	1/16"	Praxair Tafa 75B Metco 8400	PWA-36937 SNECMA DMR33-011 Garrett FP5045 RR OMAT #3/229	78 Rb 9746 PSI	<ul style="list-style-type: none"> High temperature resistance Oxidation and abrasion resistant Dense coatings
HA711	Nickel Aluminum Bronze Cu 9Al 4Ni 4Fe 1.5Mg	22711	1/16"	Praxair Tafa 11T	Standard Grade	60 Rb 9000 PSI	<ul style="list-style-type: none"> Cavitation, reclamation of sliding components Corrosion protection
HA773	Nickel Chrome Aluminum Ni 21Cr 7Al	22773	1/16"	Praxair Tafa 73MXC® Metco 8443	Standard Grade	95 Rb 7454 PSI	<ul style="list-style-type: none"> Oxidation and corrosion resistant Self-bonding Salvage and build-up
HA776	Nickel Chrome Aluminum Yttrium Ni 22Cr 10Al 1.0Y	22776	1/16"	Praxair Tafa 76MXC®	Standard Grade	52-90 Rb 10964 PSI	<ul style="list-style-type: none"> Bond coat Oxidation resistant
HA798	Nickel Chrome Iron Fe 26Cr 3Ni 1.7C 1.6Mg 1.6Si .8Mo	22798	1/16"	Praxair Tafa 98MXC®	Standard Grade	39-42 Rc 5772 PSI	<ul style="list-style-type: none"> Corrosion and wear resistant Easily machinable Good bond strength
HA771	Nickel Chrome Molybdenum Ni 22Cr 10Mo 2Fe <i>Inconel® 625</i>	22771	1/16"	Praxair Tafa 71T Metco 8625	Standard Grade	92 Rb 6970 PSI	<ul style="list-style-type: none"> Caustic stress corrosion protection Restoration of worn or mismachined components
HA777	Nickel Chrome Molybdenum Ni 20Cr 20Mo 7Fe 4W <i>Hastelloy® C-276</i>	22777	1/16"	Praxair Tafa 77T	Standard Grade	35 Rc 6990 PSI	<ul style="list-style-type: none"> Acidic and hot gas corrosion Good abrasion and metal-to-metal wear
HA778	Nickel Chrome Molybdenum Ni 18.5Cr 18.5Fe 3.0Mo <i>Inconel® 718</i>	22778	1/16"	Praxair Tafa 78T Metco 8718	GE #70-49-45, FAA RDA #000-637	30 Rc 8992 PSI	<ul style="list-style-type: none"> Acidic and hot gas corrosion Restoration of worn or mismachined components
HA745	Nickel Chrome Titanium Fe .63Mg .18C.05P .06S	22745	1/16"	Praxair Tafa 45CT	Standard Grade	32 Rc 6961 PSI	<ul style="list-style-type: none"> Extreme resistance to corrosion Boiler applications
HA595	Armacor™ M Proprietary High Chrome Steel	22595	1/16"	Praxair Tafa 95MXC®	Standard Grade	70 Rc 5772 PSI	<ul style="list-style-type: none"> Corrosion and wear protection Hard abrasion coatings High chrome finish

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HA590	Armacor™ C Fe 25Cr 10Ni 4Mo 2B 2Cu	22590	1/16"	Tafa 90 MXC®	Standard Grade	45 Rc 5076 PSI	<ul style="list-style-type: none"> • Corrosion and Wear Protection • Increased hardness • High chrome finish
HA596	Armacor™ 16 Fe 21Cr 8Ni 3.2Mo 2.5B 2.2Cu 1.8Mg 1.5Si .2C	22596	1/16"	Tafa 96 MXC®	Standard Grade	53 Rc 5772 PSI	<ul style="list-style-type: none"> • High temperature corrosion protection and abrasion resistance • High chrome finish

THERMAL SPRAY WIRES

Carbides

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HA205	Chrome Carbide Cr ₃ C ₂ 40Fe + FeC	31205	1/16", 2mm	Praxair Chrome Carbide	Standard Grade	45 Rc 5700 PSI	<ul style="list-style-type: none"> • High hardness and wear resistance • For applications above 1000°F
HA840	Tungsten Carbide Fe 41WC/W ₂ C .1Zn	31840	1/16", 2mm		Standard Grade	52 Rc 6700 PSI	<ul style="list-style-type: none"> • Excellent bond strength • Abrasion resistance • Dredge cutter blades
HA597	Duocor™ Fe 15Cr 5Ni 2B 1.5Si .7Mg +26WC + 6TiC	31597	1/16", 2mm	Tafa 97 MXC®	Standard Grade	64-69 Rc 5100 PSI	<ul style="list-style-type: none"> • Abrasion and wear resistant • High bond strength • Non-skid surface