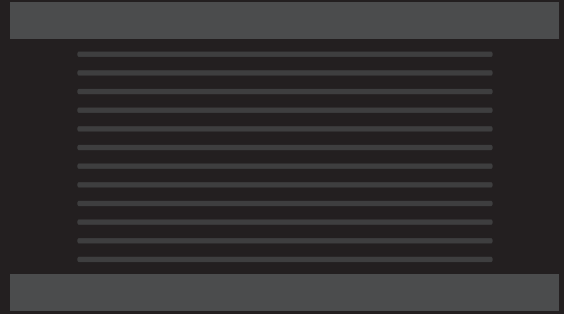




Praxair and TAFE thermal spray wires



Praxair Surface Technologies, Inc. and TAFE Incorporated offers a complete line of arc spray wires in its portfolio of thermal spray materials. Proud of our role in the emergence and growth of the arc spray process, we continue to develop and refine thermal spray wires of all types – solid or cored, soft or hard – to help you take full advantage of the **exceptional value** arc spray provides.

Whether your application calls for a reliable bond coat, dimensional restoration or resistance to wear and corrosion, Praxair and TAFE has a wire to **meet the challenge**. Understanding that “not all wires are alike”– in part because we optimize wires for **superior arc spray** coatings – we provide materials that perform every time. And we offer the complete “system”, including six hardware options, to start you on the way to **productive solutions**.

When you search for the right thermal spray wire, remember the company that built its reputation on arc spray technology: Praxair and TAFE. Let us work with you to continue to **develop and perfect** quality arc spray wires and coatings.

Phone: 1-603-223-2100
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E-mail: psti-info@praxair.com



Quality thermal spray wires must be made to tight compositional tolerances, have the appropriate surface finish, and be spooled properly for consistent performance.

Exceptional wires for superior coatings

We recognize that high quality spray equipment without compatible, first-rate coating materials can lead to less than desirable coatings. For arc spray, only wires designed and produced for thermal spraying ensure trouble-free application and superior, consistent coatings.

All Praxair and TAFE wires are engineered and manufactured exclusively for the specialized needs of thermal spray. Strict specifications and production controls guarantee that each wire is manufactured to a precise metallurgical composition and free from defects such as slivers or contaminants. Care is taken to ensure that our wires have the proper physical properties for thermal spraying – tensile strength, hardness, and surface finish – and that they are properly spooled for reliable performance. Post manufacturing

testing and analysis assure that the targeted characteristics are achieved.

Praxair and TAFE wires are available in a number of packaging options. We offer several sizes of level-layer wound spools and larger dispensing containers for high volume applications.

An extensive inventory of wires, available in 25 or 30 pound spools as well as bulk pay-off packs, assures prompt delivery and reinforces our commitment to the growth and development of arc spray applications.



Metal and alloy wires

wires

Wire Name	Material	Diameter	Coverage (/ft ² /0.001") (/m ² /100 μm)	Spray Rate (/h/100 A)	Approved Specs	Application Data
Al-1800	Nickel Aluminum Molybdenum	1/16" (1.6 mm)	0.8 oz 1.0 kg	10 lbs 4.5 kg		<ul style="list-style-type: none"> • Bond Coat • Oxidation, Shock and Abrasion Resistance
Alcro	Iron Chrome Aluminum	1/16" (1.6 mm)	0.8 oz 1.0 kg	10 lbs 4.5 kg		<ul style="list-style-type: none"> • Good for Buildup • Excellent Wear Resistance
01A	Aluminum 12% Silicon	1/16" (1.6 mm)	0.3 oz 0.3 kg	6 lbs 2.8 kg	AWS C2.25/C2.25M PWA 36935 (PWA 271-35 Rev G) GE B50TF92 (Chemical Composition)	<ul style="list-style-type: none"> • Dimensional Restoration • Aircraft Approved
01P	Aluminum 1100	11 gauge (2.3 mm) 1/8" (3.2 mm)	0.3 oz 0.3 kg	6 lbs 2.8 kg	AWS C2.25/C2.25M	<ul style="list-style-type: none"> • Corrosion Protection
01S	Aluminum 6% Silicon	1/16" (1.6 mm)	0.3 oz 0.3 kg	6 lbs 2.8 kg	AWS C2.25/C2.25M FP5045 Type VIII, Rev AB	<ul style="list-style-type: none"> • Dimensional Restoration • Aircraft Approved
01T	Aluminum	1/16" (1.6 mm) 1/8" (3.2 mm)	0.3 oz 0.3 kg	6 lbs 2.8 kg	AWS C2.25/C2.25M FP5045 Type VI, Rev AB GE Manual # 70-49-40 (Alternate to 70-49-01)	<ul style="list-style-type: none"> • Corrosion Protection • Electrical Conductivity • Aircraft Approved
02A	Zinc Aluminum	2 mm 11 gauge (2.3 mm) 1/8" (3.2 mm) 3/16" (4.8 mm)	0.8 oz 1.0 kg	21 lbs 9.5 kg		<ul style="list-style-type: none"> • Corrosion Protection
02T	Zinc Tin	2 mm	0.9 oz 1.1 kg	45 lbs 20.4 kg		<ul style="list-style-type: none"> • Capacitors: Solderable Coating
02W	Pure Tin	2 mm	0.9 oz 1.1 kg	50 lbs 22.7 kg	AWS C2.25/C2.25M	<ul style="list-style-type: none"> • Sputtering Targets • Electrical Contacts • EMI/RFI Shielding
02Z	Zinc	1/16" (1.6 mm) 2 mm 1/8" (3.2 mm) 3/16" (4.8 mm)	0.9 oz 1.1 kg	21 lbs 9.5 kg	AWS C2.25/C2.25M	<ul style="list-style-type: none"> • Corrosion • EMI/RFI Shielding • Electrical Conductivity
04T	Babbitt	1/16" (1.6 mm) 2 mm 1/8" (3.2 mm)	0.9 oz 1.1 kg	50 lbs 22.7 kg	AWS C2.25/C2.25M	<ul style="list-style-type: none"> • Bearing Reclamation • Capacitors
05T	Copper	1/16" (1.6 mm) 1/8" (3.2 mm)	0.9 oz 1.1 kg	11 lbs 5.0 kg		<ul style="list-style-type: none"> • Electric Conductivity • Copper Reclamation • Decorative Coatings
06C	Nickel Chrome	1/16" (1.6 mm)	0.8 oz 1.0 kg	11 lbs 5.0 kg	Conforms to PWA 1317D	<ul style="list-style-type: none"> • Oxidation Resistance • Aircraft Approved
06T	Nickel	1/16" (1.6 mm)	0.8 oz 1.0 kg	10 lbs 4.5 kg	AWS C2.25/C2.25M	<ul style="list-style-type: none"> • Corrosion Protection at High Temperatures
10T	Aluminum Bronze	1/16" (1.6 mm) 1/8" (3.2 mm)	0.9 oz 1.1 kg	9 lbs 4.1 kg		<ul style="list-style-type: none"> • Bond Coat • Reclamation • Cavitation • Aircraft Approved
11T	Aluminum Bronze Nickel	1/16" (1.6 mm)	0.9 oz 1.1 kg	9 lbs 4.1 kg		<ul style="list-style-type: none"> • Cavitation • Reclamation of Sliding Components • Corrosion Protection
12T	Brass	1/16" (1.6 mm)	0.9 oz 1.1 kg	9 lbs 4.1 kg		<ul style="list-style-type: none"> • Use Where Tobin Bronze is Required • Pump Impellers • Bronze Castings
13T	Molybdenum	1/16" (1.6 mm) 1/8" (3.2 mm)	1.1 oz 1.3 kg	10 lbs 4.5 kg	PWA 36913 (PWA 271-13 Rev F) AWS C2.25/C2.25M MSSR 9507/102	<ul style="list-style-type: none"> • Galling and Scuffing Resistance • Aircraft Approved
14T	Titanium	1/16" (1.6 mm)	0.4 oz 0.5 kg	3 lbs 1.4 kg	ASTM B348/Grade 1 ASTM F67-89/Grade 1 (Chemical Composition)	<ul style="list-style-type: none"> • Medical Implants
16T	Silicon Bronze	1/16" (1.6 mm)	0.9 oz 1.1 kg	9 lbs 4.1 kg		<ul style="list-style-type: none"> • Cosmetic Repairs • Decorative Coatings • Automotive Approved

Metal and alloy wires

wires

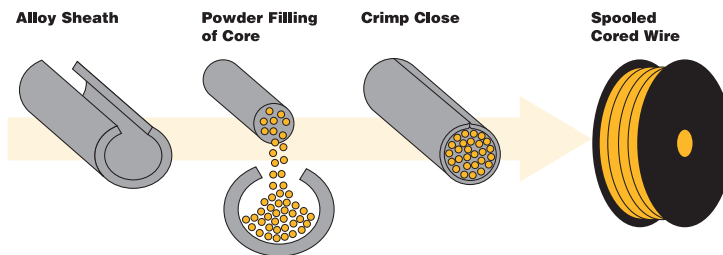
Wire Name	Material	Diameter	Coverage (/ft ² /0.001") (/m ² /100 μm)	Spray Rate (/h/100 A)	Approved Specs	Application Data
30S	Silver Copper Zinc	1/16" (1.6 mm)	1.0 oz 1.2 kg	12 lbs 5.4 kg	GE B20A4 (Chemical Composition) GE Manual # 70-49-44 FAA RDE#00-630 CFM70-48-16-340-007	<ul style="list-style-type: none"> Stationary Seals in Aircraft Engines Good Rub Wear Characteristics
30T	Low Carbon Steel	1/16" (1.6 mm)	0.9 oz 1.1 kg	10 lbs 4.5 kg		<ul style="list-style-type: none"> Dimensional Restoration of Mismachined and Worn Parts
38T	High Carbon Steel (0.80 C)	1/16" (1.6 mm)	0.9 oz 1.1 kg	10 lbs 4.5 kg	AWS C2.25/C2.25M	<ul style="list-style-type: none"> Reclamation Wear and Erosion Resistance ID Fans
39T	High Carbon Steel (1.0 C)	1/16" (1.6 mm)	0.9 oz 1.1 kg	10 lbs 4.5 kg		<ul style="list-style-type: none"> Excellent Wear Resistance Harder than 38T
45CT [®]	Nickel Chrome Titanium	1/16" (1.6 mm)	0.9 oz 1.1 kg	11 lbs 5.0 kg		<ul style="list-style-type: none"> Protection Against High Temperature Sulfidation
55T	18/5 Stainless 200 Series Stainless	1/16" (1.6 mm) 1/8" (3.2 mm)	0.8 oz 1.0 kg	10 lbs 4.5 kg	AWS C2.25/C2.25M FP5045 Type IV, Rev AB	<ul style="list-style-type: none"> Low Carbon Low Shrinkage Good Machinability Aircraft Approved
58T	Copper Nickel Indium	1/16" (1.6 mm)	0.8 oz 1.0 kg	10 lbs 4.5 kg	GE B50TF72 CL A (Chemical Composition) GE Manual #70-49-05	<ul style="list-style-type: none"> Fretting Resistance Dense, Low Oxide Coatings Aircraft Approved
60T	420 Stainless Steel	1/16" (1.6 mm) 1/8" (3.2 mm)	0.8 oz 1.0 kg	10 lbs 4.5 kg	AWS C2.25/C2.25M OMAT#3/45D FP5045 Type V, Rev AB	<ul style="list-style-type: none"> Reclamation Low Shrinkage Allows Thick Buildups Good Wear Resistance Aircraft Approved
61T	430 Stainless Steel	1/16" (1.6 mm)	0.8 oz 1.0 kg	10 lbs 4.5 kg		<ul style="list-style-type: none"> Slightly More Machinable and Better Corrosion Resistance than 60T
70T	Nickel Copper	1/16" (1.6 mm)	0.8 oz 1.0 kg	10 lbs 4.5 kg	AWS C2.25/C2.25M	<ul style="list-style-type: none"> Marine Corrosion Protection Print Rolls
71T	Nickel Chrome Molybdenum	1/16" (1.6 mm)	0.8 oz 1.0 kg	11 lbs 5.0 kg		<ul style="list-style-type: none"> Prohibits Caustic Corrosion Paper Mill Digesters
75B [®]	BondArc [®] Nickel 5% Aluminum	1/16" (1.6 mm)	0.9 oz 1.1 kg	10 lbs 4.5 kg	PWA 36937 (PWA 271-37 Rev F) GE Manual # 70-49-38 (Alternate to 70-49-10) OMAT#3/229 FP5045 Type XV, Rev AB BF Goodrich Ltr 1623 CFM 70-48-14-340-005 AWS C2.25/C2.25M	<ul style="list-style-type: none"> Bond Coat Aircraft Approved Oxidation /Abrasion Resistance at High Temperatures
77T	Alloy C-276 type: Nickel Chrome Molybdenum	1/16" (1.6 mm)	0.9 oz 1.1 kg	11 lbs 5.0 kg		<ul style="list-style-type: none"> Acidic and Hot Gas Corrosion Resistance
78T	Alloy 718 type: Nickel Chrome Molybdenum	1/16" (1.6 mm)	0.8 oz 1.0 kg	11 lbs 5.0 kg	GE Manual # 70-49-45 CFM 70-48-17-340-008	<ul style="list-style-type: none"> Aircraft Engine Dimensional Restoration Acidic and Hot Gas Corrosion Resistance
79B	Nickel 20% Aluminum	1/16" (1.6 mm) 1/8" (3.2 mm)	0.9 oz 1.1 kg	10 lbs 4.5 kg	OMAT#3/90A FP5045 Type II, Rev AB	<ul style="list-style-type: none"> High Temperature Oxidation and Abrasion Resistance Aircraft Approved
80T	18/8 Stainless Steel 304 Series Stainless	1/16" (1.6 mm)	0.8 oz 1.0 kg	10 lbs 4.5 kg	AWS C2.25/C2.25M	<ul style="list-style-type: none"> Corrosion Protection Dimensional Restoration Print Rolls
85T	316 Stainless Steel	1/16" (1.6 mm)	0.8 oz 1.0 kg	10 lbs 4.5 kg		<ul style="list-style-type: none"> Corrosion Protection Dimensional Restoration
88T	300 Series Stainless	1/16" (1.6 mm)	0.8 oz 1.0 kg	9.5 lbs 4.3 kg		<ul style="list-style-type: none"> Corrosion Protection Dimensional Restoration Print Rolls
204M	KirkSITE type	1/16" (1.6 mm)	0.8 oz 1.0 kg	22 lbs 10 kg	Proprietary Alloy	<ul style="list-style-type: none"> Used to Create Metal Faced Tooling

Cored wires

Wire Name	Material	Diameter	Coverage (/ft ² /0.001") (/m ² /100 μm)	Spray Rate (/h/100 A)	Approved Specs	Application Data
35 MXC[®]	Iron-based High Carbon Alloy	1/16" (1.6 mm)	0.8 oz 1.0 kg	8.5 lbs 3.9 kg		<ul style="list-style-type: none"> • Traction and Anti-Skid Coatings • Wear Resistance
37 MXC	Iron Chrome Carbon	1/16" (1.6 mm)	1.0 oz 1.2 kg	8 lbs 3.6 kg		<ul style="list-style-type: none"> • High Hardness • Excellent Wear Resistance
73 MXC	Nickel Chrome Aluminum	1/16" (1.6 mm)	0.8 oz 1.0 kg	8.5 lbs 3.9 kg	PWA 36947 (PWA 271-47 Rev F) MSSR 9507/14 GE Manual # 70-49-39 (Alternate to 70-49-21) FP5045 Type XVIII, Rev AB	<ul style="list-style-type: none"> • Oxidation and Corrosion Resistance • Aircraft Approved
74 MXC	Nickel Aluminum Molybdenum	1/16" (1.6 mm)	0.8 oz 1.0 kg	8.5 lbs 3.9 kg	MSSR 9507/35 GE B50TF166 (Chemical Composition) FP5045 Type XVI, Rev AB	<ul style="list-style-type: none"> • Medium Hardness for Bearing Wear Applications • Particle Erosion Resistance • Aircraft Approved
76 MXC	Nickel Chrome Aluminum Yttrium	1/16" (1.6 mm)	0.8 oz 1.0 kg	7 lbs 3.2 kg	GE B50TF296 (Chemical Composition)	<ul style="list-style-type: none"> • Bond Coat to Ceramics • Oxidation and Heat Resistance • Aircraft Approved
90 MXC	Iron Chrome Nickel	1/16" (1.6 mm)	1.0 oz 1.2 kg	7 lbs 3.2 kg		<ul style="list-style-type: none"> • Corrosion and Wear Protection
95 MXC	Iron Chrome Boron	1/16" (1.6 mm)	1.0 oz 1.2 kg	8 lbs 3.6 kg		<ul style="list-style-type: none"> • Corrosion and Wear Protection • ID Fans • Boiler Tubes
96 MXC	Iron Nickel Chrome	1/16" (1.6 mm)	1.0 oz 1.2 kg	7.5 lbs 3.4 kg		<ul style="list-style-type: none"> • High Temperature Corrosion Protection • Abrasion Resistance
97 MXC	Nickel Chrome Tungsten Carbide Iron	1/16" (1.6 mm)	1.0 oz 1.2 kg	6.5 lbs 3.0 kg		<ul style="list-style-type: none"> • Abrasion and Wear Resistance
98 MXC	Iron Chrome Nickel	1/16" (1.6 mm)	1.0 oz 1.2 kg	8 lbs 3.6 kg		<ul style="list-style-type: none"> • Corrosion and Wear Protection
106 MXC	Cobalt Nickel Chrome Tungsten	1/16" (1.6 mm)	0.9 oz 1.1 kg	6.5 lbs 3.0 kg		<ul style="list-style-type: none"> • Abrasion and Fretting Resistance in High Temperature Environments
444 MXC	Nickel Chrome Aluminum Molybdenum	1/16" (1.6 mm)	0.8 oz 1.0 kg	8.5 lbs 3.9 kg	EMS 56762	<ul style="list-style-type: none"> • Wear and Corrosion Resistance • Dimensional Restoration of Bearing Areas

Cored wire advantages

Praxair and TAFE is the thermal spray leader in the development and manufacture of cored wires. Advanced materials engineering allows compositions that cannot be drawn as solid wires to be produced by enclosing powders in a metallic sheath.



Application of cored wire technology has resulted in arc spray coatings replacing plasma coatings for many aircraft engine repairs and industrial wear applications.

**Arc spray
equipment options**

options

Praxair and TAFE's complete family of Arc Spray Systems offers something for everyone. Whether your applications demand high productivity in a controlled work cell or occasional repairs performed by a well-trained operator, our line of push, pull or push/pull twin-wire arc systems has a gun that meets your performance and budget requirements.



8830

Is an established, heavy-duty unit using an air motor drive to pull the wire to the gun. The 8830 produces outstanding arc spray coatings with virtually any type of wire: hard, soft, solid or cored.



8835

Is a machine-mount version of the 8830, using a D.C. electric drive to pull the wire to the gun. Engineered for repeatability, the 8835 is renowned for reliability and robust performance.



BP400

Utilizes pusher technology for easier hand-held operation. The BP-400 features a lightweight gun and is a proven performer, producing consistent coatings every day in shops around the world.



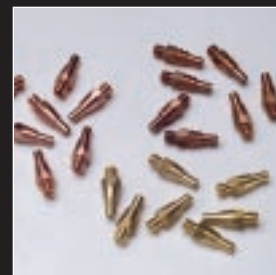
9000

Is a push/pull unit designed for automated spraying yet offers the hand spraying option. The 9000 is widely utilized in shops that overhaul gas turbine engines due to its unsurpassed coating quality and repeatability.



Spare Parts

Only Praxair and TAFE genuine spare parts should be used in your thermal spray equipment. Designed and manufactured to precise tolerances, Praxair and TAFE spare parts ensure proper system operation providing optimal equipment operation.



Contact Tips

Rely on Praxair and TAFE high quality contact tips for your arc spray guns. Standard contact tips and long-life contact tips are available for different sized wires. Praxair and TAFE designs and manufactures contact tips for Models 8830, 8835, 9000, 8850, BP400 and ID extensions.



In today's competitive marketplace, improved productivity and reduced costs are key business goals. Meeting them requires a total-capabilities resource that can provide customized solutions for gases, equipment and supply options, as well as thermal spray technology and related services.

They require a company like Praxair, North America's largest industrial gases supplier, with the ability to offer local coverage and international reach.

As your single-source supplier, Praxair can help reduce your total cost of ownership as well as improve productivity, provide competitive pricing and deliver supply reliability.



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Coverage values and Spray Rates are estimates and are subject to variation based on operating conditions and system parameters.

Thermal spray coatings produced by wire-based processes require the use of a sealer to be effective in corrosive environments.

The information contained herein is offered for use by technically qualified personnel at their discretion and risk without warranty of any kind.

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