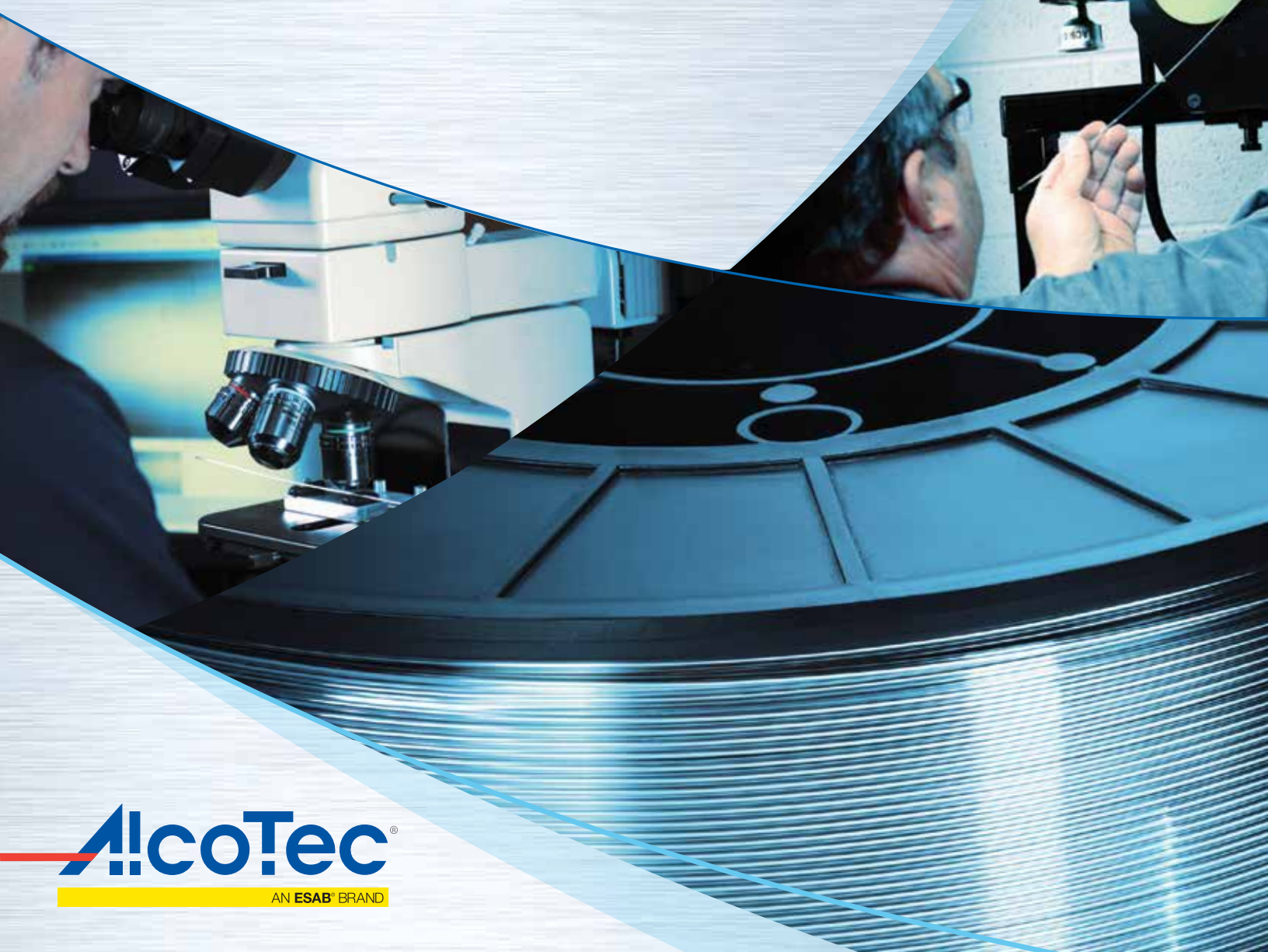


More than just **premium aluminum welding wire.**

Aluminum welding wire, equipment, and technical services.



The AlcoTec® advantage.

At AlcoTec®, aluminum welding isn't just part of our business, it's our only business. Since 1984, AlcoTec aluminum wire has been world renowned for quality, consistency, and performance.

And premium aluminum wire is just the start of what we offer. Our goal is to help you work smarter, faster, and better. With continuous innovation, we maximize your productivity while minimizing your costs by:

- Providing service and support that goes the extra mile to keep you up and running
- Helping you take your aluminum welding skills to the next level through expert training
- Becoming the ultimate partner you can trust for years to come

At AlcoTec, integrity is just as important to us as the quality of our product. We strive to treat everyone with the utmost respect. We measure our success by the number of long-term customers who trust us and value what we bring to the table. And we appreciate it when our customers say how much they like working with us.

We invite you to get to know AlcoTec's products, equipment, and technical services.

Our mission: To provide our customers with the most cost-effective solutions for their welding and cutting applications. Through technological leadership, the most reliable products and deliveries, and continuous improvement of our processes, we will delight our customers, employees, shareholders, and community.

Our values: Integrity, Progress, Quality, Leadership, and Teamwork.

**“We take the concerns
of our customers to heart!”**

– Todd Peters, Operations Manager, AlcoTec Wire Corporation

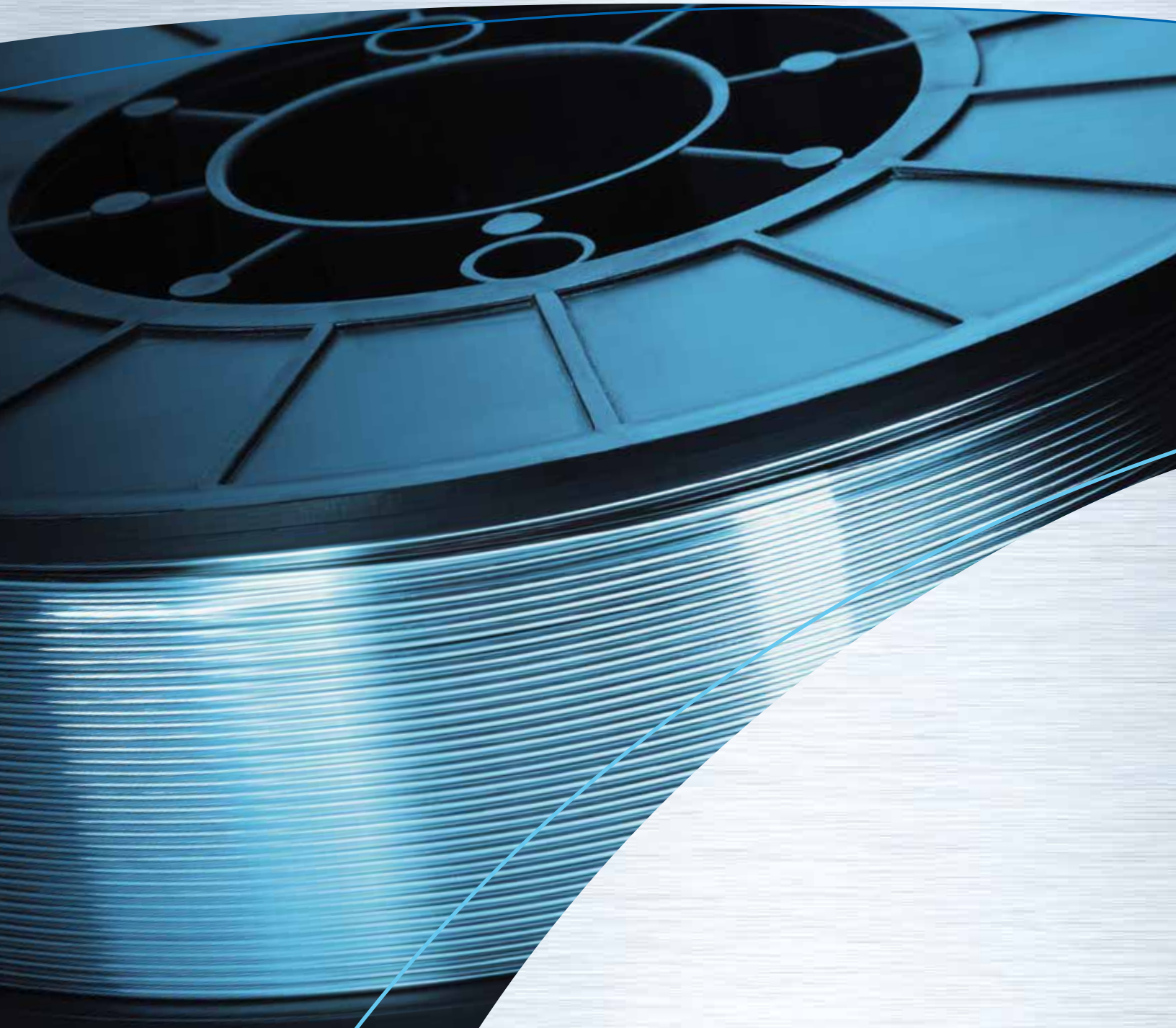
Environmental Health and Safety

At AlcoTec, we put a heavy emphasis on environmental health and safety, and are constantly looking for ways to improve our operations. Our facilities and products meet or exceed all applicable governmental requirements and standards. We educate and encourage our employees to comply with EHS policies.

AlcoTec is a subsidiary of ESAB Group, Inc., - the first global company to achieve both ISO 14001 (1999) and OHSAS 18001 (2006) certifications. Furthermore, we are proud to be ISO 9001 certified.



Products



Unbeatable quality.

There is a reason AlcoTec is the largest producer of aluminum welding wire in the world. The quality and performance of our products are second to none. We offer a wide range of aluminum wire and rods for GMAW, GTAW, brazing, and metallizing.

In addition to the seven most common alloys in all sizes, we also produce 15 specialty lines, plus we have the ability to custom-make products to match the unique requirements of your application.

For your convenience, and to accommodate local recycling requirements, AlcoTec offers various weights and spool types. A sample of available packaging options include:

- 12 in. (300 mm), 16 or 20 lbs (7.3 or 9.1 kg) plastic spools
- 12 in. (300 mm), 16 lbs (7.3 kg) wire baskets
- 8 in. (200 mm), 5 lbs (2.3 kg) plastic spools
- 4 in. (100 mm), 1 lb (0.45 kg) plastic spools
- 311 lbs (141 kg) drums
- 50 lbs (22.7 kg) AlumaPak Mini drums
- 1 lb (0.45 kg) TIG rod tubes
- 10 lbs (4.5 kg) TIG rod boxes

“AlcoTec’s consistency and quality is better than all the others.”

– Al Hartman, AlcoTec customer

Design and testing

Before your aluminum wire reaches your jobsite, it must pass our rigorous standards. AlcoTec takes such pride in our product that we control every aspect of the manufacturing process – all within our production facility. From factory equipment, testing, and certifications to packaging and distribution, every step is diligently performed at our facility in Traverse City, Michigan, USA. Not only does this allow us to ensure the quality and consistency of our wire, but also enables us to provide complete traceability of our finished product.

In addition to having an on-site testing facility, we’ve implemented a number of quality control procedures to ensure the superior product our customers have come to rely on:

- State-of-the-art drawing and spooling machinery combined with newly developed equipment and processes – providing the best dimensional, mechanical, and metallurgical control in the industry
- Proprietary shaving process produces a smooth, uniform surface free from abnormalities that can trap contaminants and cause porosity
- The meticulous cleaning of our metal to remove all manufacturing lubricants and prevent flaws in the welding process
- A Quality Control Laboratory that tests overhead welds for porosity, tensile strength, and ductility to ensure consistency and quality
- Certification of each lot of material to meet AWS specifications with product certificates available online

Available Alloys, Chemical Composition Limits, and Physical Properties

Alloy	Silicon Si	Iron Fe	Copper Cu	Manganese Mn	Magnesium Mg	Chromium Cr
1100	Si + Fe = 0.95		0.05-0.20	0.05	--	--
1188	0.06	0.06	0.005	0.01	0.01	--
1199	0.006	0.006	0.006	0.002	0.006	--
1350	0.10	0.40	0.05	0.01	--	0.01
206.0	0.10	0.15	4.2-5.0	0.20-0.50	0.15-0.35	--
2319	0.20	0.30	5.8-6.8	0.20-0.40	0.02	--
357.0	6.5-7.5	0.15	0.05	0.03	0.45-0.6	--
4008	6.5-7.5	0.09	0.05	0.05	0.30-0.45	--
4009	4.5-5.5	0.20	1.0-1.5	0.10	0.45-0.6	--
4010	6.5-7.5	0.20	0.20	0.10	0.30-0.45	--
4043	4.5-6.0	0.8	0.30	0.05	0.05	--
4047	11.0-13.0	0.8	0.30	0.15	0.10	--
4145	9.3-10.7	0.8	3.3-4.7	0.15	0.15	0.15
4643	3.6-4.6	0.8	0.10	0.05	0.10-0.30	--
5183	0.40	0.40	0.10	0.50-1.0	4.3-5.2	0.05-0.25
5356	0.25	0.40	0.10	0.05-0.20	4.5-5.5	0.05-0.20
5554	0.25	0.40	0.10	0.50-1.0	2.4-3.0	0.05-0.20
5556	0.25	0.40	0.10	0.50-1.0	4.7-5.5	0.05-0.20
5654	Si + Fe = 0.45		0.05	0.01	3.1-3.9	0.15-0.35
5087	0.25	0.40	0.05	0.7-1.1	4.5-5.2	0.05-0.25
5754	0.40	0.40	0.10	0.50	2.6-3.6	0.30

Certifications

With such a thorough and proven process, AlcoTec leads the industry in product certifications and approvals. In fact, we are the only single-source for all current aluminum alloys registered for welding applications. What's more, AlcoTec is the first aluminum wire manufacturer to hold every product approval and certification available and recognized in the world – a claim no other aluminum wire manufacturer can make. That means no matter where you are or what you fabricate, you can always count on AlcoTec.

Zinc Zn	Titanium Ti	Others (1) Each Total	Aluminum (7) Al (min)	Approximate Melting Range F°	Density lbs /cu. in.	Post (4) Anodize Color Tint
0.10	--	0.05 0.15	99.00	1190-1215	0.098	Golden
0.03	0.01	0.01 --	99.88	1215-1220	0.0975	Clear
0.006	0.002	0.002 --	99.99	1220	0.0975	Clear
0.05	--	0.03 0.10	99.50	1195-1215	0.0975	Clear
0.10	0.15-.030	0.05 (2) 0.15	Rmnd	1060-1200	0.101	Golden
0.10	0.10-0.20	0.05 (3) 0.15	Rmnd	1010-1190	0.100	Golden
0.05	0.20	0.05 0.15	Rmnd	1040-1140	0.098	Gray
0.05	0.04-0.15	0.05 0.15	Rmnd	1035-1135	0.097	Gray
0.10	0.20	0.05 0.15	Rmnd	1015-1150	0.098	Gray
0.10	0.20	0.05 0.15	Rmnd	1035-1135	0.097	Gray
0.10	0.20	0.05 0.15	Rmnd	1065-1170	0.097	Gray
0.20	--	0.05 0.15	Rmnd	1070-1080	0.096	Gray
0.20	--	0.05 0.15	Rmnd	970-1085	0.099	Gray-Black
0.10	0.15	0.05 0.15	Rmnd	1065-1175	0.097	Gray-Black
0.25	0.15	0.05 0.15	Rmnd	1075-1180	0.096	Gray
0.10	0.06-0.20	0.05 0.15	Rmnd	1060-1175	0.096	White
0.25	0.05-0.20	0.05 0.15	Rmnd	1115-1195	0.097	White
0.25	0.05-0.20	0.05 0.15	Rmnd	1065-1175	0.096	White
0.20	0.05-0.15	0.05 0.15	Rmnd	1100-1190	0.096	White
0.25	0.15	0.05 (5) 0.15	Rmnd	1054-1180	0.096	White
0.20	0.15	0.15 (6) 0.15	Rmnd	1095-1195	0.097	White

Notes:

1. Beryllium shall not exceed 0.0003%.
2. Nickel shall not exceed 0.05%.
3. Vanadium shall be 0.05-0.15% and Zirconium shall be 0.10-0.25%.
4. Use filler alloy chart for color matching.
5. 0.10-0.20 Zr.
6. 0.10-0.6 Mn + Cr.
7. Rmnd = Remainder

Available Sizes and Packages

Diameters	
in.	mm
0.030	0.8
0.035	0.9
0.040	1.0
0.047 (3/64)	1.2
0.062 (1/16)	1.6
0.079 (a)	2.0
0.094 (3/32)	2.4
0.125 (1/8)	3.2
0.156 (5/32) (a)	4.0
0.187 (3/16) (a)	4.8

Packages			Pallet	
Type	lbs	kg	lbs	kg
Spool	1	0.45	1,134	514.4
Basket	16	7.3	1,296	590.8
Spool (a)	16	7.3	1,296	590.8
Spool (c)	20	9.1	1,620	738.6
Spool (c)	26	10.9	2,106	960.1
Spool (b) (c)	30	13.6	1,620	734.8
Spool (c)	167	75.7	501	228.4
Mini Drum (c)	50	22.7	400	197.6
Drum (c)	311	141	622	282.1
Rods/Tubes (c)	1	0.45	720	326.6
Rods/Box	10	4.5	1,200	547.1

Notes: (a) These sizes are not available in all alloys and packages.

(b) These sizes and/or packages are traverse wound.

(c) These packages have specific sizes available only.



AlcoTec ER4043

Alloy 4043 is one of the oldest and most widely used welding and brazing alloys and can be classified as a general-purpose filler alloy. The silicon additions result in improved fluidity (wetting action) to make the alloy the preferred choice for welders. The alloy is available in both solid wire and rods. The alloy is less sensitive to weld cracking and produces brighter, almost smut-free welds.



AlcoTec ER4047

Alloy 4047 was originally developed as a brazing alloy to take advantage of its low melting point and narrow freezing range. In addition, it has a higher Silicon content than 4043, which provides an increased fluidity and reduces shrinkage. The alloy produces bright and almost smut-free welds. Hot cracking is significantly reduced when using 4047 as a filler alloy. The alloy is available in both solid wire and rods. It may be used in applications of sustained elevated temperatures.



AlcoTec ER5183

Alloy 5183 was developed to provide the highest strengths possible in the as-welded condition of alloy AA5083 and other similar high Magnesium alloys. The more common filler alloy 5356 will typically fail to meet the as-welded tensile specification requirements of alloy 5083. The alloy is typically utilized in applications where high strengths, high fracture toughness for impact resistance and exposure to corrosive elements are important. The alloy is available in both solid wire and rods. The alloy is not recommended for elevated temperature service applications.



AlcoTec ER5356

Alloy 5356 is the most widely used welding alloy and can be classified as a general-purpose type filler alloy. Alloy 5356 is typically chosen because of its relatively high shear strength. Any 5XXX alloy base material, welded with 5356, with a weld pool chemistry greater than 3% Mg and service temperatures in excess of 149°F (65°C), are susceptible to stress corrosion cracking. The alloy is available in both solid wire and rods. The alloy is not recommended for elevated temperature service applications.



AlcoTec ER5554

Alloy 5554 is a solid medium wire with a typical 2.7% Mg content. It is recommended for welding of Aluminum-Magnesium alloys like 5454. Typical applications are chemical storage tanks and automotive components like wheels and frame sections. The alloy is available in both solid wire and rods. The weld metal is not sensitive to stress corrosion cracking at elevated temperatures.



AlcoTec ER5556

Alloy 5556 develops the highest as-welded strengths in fillet welds, nearly double that of 4043. The 5XXX series of alloys offer an excellent combination of corrosion resistance, strength, toughness, workability, and weldability. As a result, they are used in a wide variety of applications. The alloy is available in both solid wire and rods.

One characteristic of this series of alloys, however, is their susceptibility to stress corrosion cracking when the weld pool chemistry is greater than 3% Mg and there is exposure to prolonged temperature in excess of 149°F (65°C). Special alloys and tempers are often required to overcome this problem.



Equipment



Always innovating.

In today's competitive industry, everyone is looking to work smarter, faster, and better. With AlcoTec on your side, you'll have valuable resources to help you do just that. Our Product Development Group has one goal – to bring new ideas to the market that optimize the aluminum welding process. Our innovative equipment solutions often become the industry standard, and our customers have the unique opportunity to implement the technology first, giving them a competitive advantage.

“AlcoTec has a very good quality product. They stand behind it.”

– Joseph Maino, AlcoTec customer

AlumaPak® and AlumaPak® Mini

The AlumaPak® and AlumaPak® Mini are designed to provide continuous twist-free wire in high volume for high-production applications [311-lb (141 kg) drum] and medium-production applications [50-lb (27 kg) drum].

- Maximizes product stability and protects product quality from the time the wire leaves the factory until it is put to use
- Designed to keep your welders up and running and reduce down time, saving you money
- Eliminates spool changeovers, reducing cost and downtime
- Proprietary shaving process produces a smooth, uniform surface free from abnormalities that can trap contaminants and cause porosity
- Environmentally friendly AlumaPak and AlumaPak Mini drums are 100% recyclable



AlumaPak [311-lb (141 kg)] Drum Components and Accessories

Alloy/Dia.	Pak-Cone Plastic Cone Lid	Pak-Connector Conduit Connector	Pak-Tubing Blue Conduit	Pak-Feed-Assist Payoff Assist Device	Pak-Ring Decoiling Ring	Pak-Cart 4-Wheel Cart (1)	Pak-Yoke Lifting Yoke (2)	Pak-Straightener	Pak-Trak Belted Casting Device (3)	Powered Pak-Trak (PPT)
4043 .035	X	X	X	X		O	X	O		
4043 .047	X	X	X	X		O	X	O		
4043 .062	X	X	X	X		O	X	O		
4047 .035	X	X	X	X		O	X	O		
4047 .047	X	X	X	X		O	X	O		
4047 .062	X	X	X	X		O	X	O		
5183 .035	X	X	X		X	O	X	O		
5183 .047	X	X	X		X	O	X	O	O	O
5183 .062	X	X	X		X	O	X	O	O	O
5356 .035	X	X	X		X	O	X	O		
5356 .047	X	X	X		X	O	X	O	O	O
5356 .062	X	X	X		X	O	X	O	O	O
5554 .035	X	X	X		X	O	X	O		
5554 .047	X	X	X		X	O	X	O	O	O
5554 .062	X	X	X		X	O	X	O	O	O
5556 .035	X	X	X		X	O	X	O		
5556 .047	X	X	X		X	O	X	O	O	O
5556 .062	X	X	X		X	O	X	O	O	O

X = Required, O = Optional

Notes:

1. The 4-wheel cart is not necessary for 50-lb (22.7 kg) samples. AlcoTec recommends the use of a 4-wheel cart for each weld station where an AlumaPak will be used.
2. The lifting yoke is not necessary for 50-lb (22.7 kg) samples. AlcoTec recommends the use of a lifting yoke for full drums. One lifting yoke can be used for multiple weld stations.
3. This device works best with .047-.062 in. (1.2-1.6 mm) diameter wire, although may work with .035 in. (0.9 mm). Consult AlcoTec Technical Support.

Note: The alloys and sizes in the **bold print** are currently being supplied. It is necessary to establish procedures for all other non-current alloys and sizes. Before offering these non-current types, check with manufacturing/QC.

AlumaPak [311-lb (141 kg)] Drum Accessories – Miscellaneous

Part #	Description
GUIDE-ADPKITMIL30A	Adapter Guide Kit for Miller 30A
GUIDE-ADPKITPROFAX	Adapter Guide Kit for Profax
GUIDE-ARISTOROBOT	Adapter Guide for Aristo Robot
GUIDE-BINZEL	Adapter Guide for Binzel Feeders
GUIDE-COBRA	Adapter Guide for Cobra Feeder
GUIDE-FITGUN	Adapter Fitting for 1/4 in. Gun
GUIDE-FITTUBING	Adapter Fitting for 5/16 in. Conduit
GUIDE-FRONIUS	Adapter Guide for Fronius Feeder
GUIDE-FRONIUS2015	Adapter Guide for Fronius “TPS/i” Feeders
GUIDE-LINCOLN	Adapter Guide for Lincoln Feeder*
GUIDE-LINCOLN12	Adapter Guide for Some Lincoln Feeders Manufactured After 2012*
GUIDE-LINDE35	Adapter Guide for Linde35 Feeder
GUIDE-MILLERXR	Adapter Guide for MillerXR Feeder
GUIDE-MILLER60	Adapter Guide for Miller 60 Series Feeders
GUIDE-MILLER70	Adapter Guide Kit for Miller 70 Series Feeders
GUIDE-MILLER350	Adapter Guide for MillerMatic 350 Feeders
GUIDE-MOTOMAN	Adapter Guide for Motoman Gun
GUIDE-OTC	Adapter Guide for OTC Feeder*
GUIDE-OTC12	Adapter Guide for OTC Feeders with the Retaining Screw*
GUIDE-OTCSTRAIGHT	Adapter Guide for OTC Wire Straightener
GUIDE-PANAROBO	Adapter Guide for Panarobo Feeder
GUIDE-PANASONICSTR	Adapter Guide for Panasonic Straightener
GUIDE-PRINCE	Adapter Guide for Prince Feeders
GUIDE-TUBING	Guide for Tubing, White Nylon 3/16 in.
PAK-CART	Optional 4-Wheel Cart For Drums
PAK-CONE	Plastic Drum Lid for all Drum Installations
PAK-CONNECTOR	Connector/Strain Relief for Connecting Pak-Tubing to Pak-Cone
PAK-EXTENDER	Required Accessory for 4XXX Series Mini-Drums
PAK-FEEDASSIST-A	Required Feed Assist Device for 4XXX Series Drums
PAK-RING	Wire Decoiling Ring
PAK-SPINNER	Replacement Spinner Arm for Pak-Feedassist-A (used on 4XXX Series Drums)

AlumaPak [311-lb (141 kg)] Accessories – Miscellaneous (cont.)

Part #	Description
PAK-STRAIGHTNER	Optional 5-Roll Wire Straightening Device
PAK-TRAKBELT	Pak-Trak Belt
PAK-TRAKLGSHV	Pak-Trak Large Sheave
PAK-TRAKROLLER	Pak-Trak Roller
PAK-TRAKSMHV	Pak-Trak Small Sheave
PAK-TUBECUTTER	Tubing Cutter
PAK-TUBING	Guide Tubing HDPE 7/16 in. Blue
PAK-WIRESTROLLER	Pak-Wire Straightener Roller

*Contact AlcoTec Technical Services at 1-800-228-0750 if you have questions about which adapter you need.

50-lb (22.7 kg) AlumaPak Mini

Maximum Results: AlcoTec's commitment to innovation continues with the efficient 50-lb (22.7 kg) AlumaPak Mini.

You'll save time because spool changeover is eliminated, which reduces your labor and production costs. The wire's cast and pitch out of the drum, as compared to tight spools, improves feeding characteristics.

You'll save money because the AlumaPak Mini is less expensive than 50 one-pound (0.5 kg) wire spools. Plus, each one-pound (0.5 kg) spool typically leaves around 3% of the wire unused at the end of the spool. Every inch of the AlumaPak Mini is wire that ends up in your weld. The AlumaPak Mini is also 100% recyclable, avoiding harmful landfill waste.



Eliminate spool changeover and reduce downtime:

- Save time – one-pound spool changeovers are eliminated
- Save money by using every inch of wire
- Two quick connections, and you're ready to weld - no tools needed
- Wire feeds directly into your gun
- Feed wire from a distance of 30 ft. (9 m) or more
- Easy to move and transport

AlumaPak Mini [50-lb (22.7 kg)] Components and Accessories

Alloy/ Dia.	Pak- Cone Plastic Cone Lid	Pak- Connector Conduit Lid Connector	Pak- Tubing Blue Conduit	Pak- Feed Assist Pay-Off Assist Device	Pak-Ring Wire Decoiling Ring	Pak- Extender 4XXX Mini Drum Conversion Kit	Pak-Trak Belted Casting Device (1)	Powered Pak-Trak (PPT)	Pak- Straightener
4043 .035	X	X	X	X		X			O
4043 .047	X	X	X	X		X			O
4043 .062	X	X	X	X		X			O
4047 .035	X	X	X	X		X			O
4047 .047	X	X	X	X		X			O
4047 .062	X	X	X	X		X			O
5183 .035	X	X	X		X				O
5183 .047	X	X	X		X		O	O	O
5183 .062	X	X	X		X		O	O	O
5356 .035	X	X	X		X				O
5356 .047	X	X	X		X		O	O	O
5356 .062	X	X	X		X		O	O	O
5554 .035	X	X	X		X				O
5554 .047	X	X	X		X		O	O	O
5554 .062	X	X	X		X		O	O	O
5556 .035	X	X	X		X				O
5556 .047	X	X	X		X		O	O	O
5556 .062	X	X	X		X		O	O	O

X = Required, O = Optional

¹This device works best with .047-.062 in. (1.2-1.6 mm) diameter wire, although may work with .035 in. (0.9 mm). Consult AlcoTec Technical Support.

Powered Pak-Trak (PPT)

The Powered Pak-Trak was inspired by a customer’s need for increased productivity. This breakthrough device pulls/pushes welding wire from a drum package to your existing wire feeder.

The Powered Pak-Trak reduces downtime caused by spool changeover because one drum contains as much wire as 20 spools. The PPT also improves the quality of the welds by modifying the cast of the wire to eliminate defects such as wire wander. The air-driven system provides delivery of wire to a feeder up to 100 ft. (33 m) away, requires no electrical connections to the feeder, and is compatible with all aluminum alloys.



Technical Services



No one knows aluminum welding better.

We are your tried and true aluminum welding experts. Unlike other manufacturers who deal with multiple welding processes, we specialize solely in aluminum. This allows us to provide an unmatched array of service from experienced engineers and technicians - expertise you won't find anywhere else.

As an Alcotec partner, help is always available. Our Customer Service Specialists work directly from our manufacturing facility, so you'll work with a factory-based technician who can help you with everything from troubleshooting to checking on the status of an order. You can even arrange a consultation with one of our industry-leading Metallurgical or Welding Engineers.

Our team of Field Specialists have been technically trained to personally solve simple problems to complex issues. You can reach our Service Team by phone, email, Facebook, or clicking the "Ask the Experts" link on our website. Either way, you can look forward to a prompt, thorough response to your question.

"I absolutely recommend Alcotec. They're more than a wire company. They fix issues that aren't really their problems."

– Rusty Beckner, Alcotec customer

Training and certification

Aluminum welding is a specialized process. Whether you're transitioning from welding other materials, or you're a seasoned veteran, it is always important to understand the latest technologies and best practices. That's why we've developed a range of services to help improve your welding and your bottom line that are available at the Alcotec facility – or we'll come to you.

- **Alcotec Weld School: Aluminum Welding Technology Theory & Practice** – an international program that provides a hands-on approach to welding aluminum alloys; visit alcotec.com to register
- Welder Certification Program
- Welder training
- On-site tailored consulting – assisting in the methodology and process of your application
- Weld procedure development via tailored support or Welding Procedure Specifications (WPS)





Your aluminum partner.

To learn more about what AlcoTec can do for you,
call 1.800.228.0750 or visit alcotec.com.

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