



ProStar™ Twist-Free Welding Wire

Premium welding wire with virtually no cast or helix, delivering predictive performance weld after weld.

SIZES

- Higher productivity, lower operational costs
- No cast, twist or helix
- Predictive puddle wire and placement
- Distinctively clean

ProStar “Twist-Free” welding wire is the right choice for consistent, high-quality welds, throughput, and quality for automated welding processes. With no cast or helix, users can avoid uneven wear on consumables—typical with standard welding wires—which can cause arc wander, over-welding, feed issues, and shut-downs.

ProStar™ Premium, Twist-Free Wire



In your welding operation, the demand to produce high quality welds quickly and with reduced costs is relentless. However, production can be limited when your automated processes rely on standard quality welding wires which suffer from typical cast and helix issues.

Welding wire cast and helix can cause uneven wear on gun consumables which can cause arc wander and overwelding, as well as weld quality problems. This can also lead to wire feed issues which can result in process shutdowns. Combined, these complications can severely limit your productivity. This makes standard welding wire a poor choice despite any perceived savings at the time of wire purchase.

ProStar “Twist-Free” welding wire is the right choice for consistent, high-quality welds, throughput, and quality for automated welding processes. With no cast or helix, users can avoid these issues and protect productivity with predictive puddle placement and performance.

Additionally, *ProStar* welding wire’s distinctively clean and smooth surface, tight chemistry, and our proprietary drawing, coating, and packaging processes further help to ensure feedability, performance and consistent, high-quality welds.

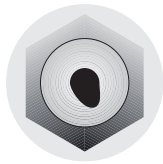
FEATURES	BENEFITS
Virtually no cast or helix	Minimizes arc wander, weld cost-per-inch and uniform tip wear
Single, high-quality mill source	Provides exceptional consistency of tight wire chemistry and purity while improving overall weld quality and overcast
Distinctly clean, consistent and smooth wire surfaces for a premium surface finish	Decreases downtime from wire feed issues
Exclusive, proprietary stackable wire package containers with lifting access on 4 sides	Reduces impact on floor space and provides faster, more efficient transportation
Inner packaging	Cuts down on the effects of moisture
Wire quantity view port on all PACs	Lessens downtime due to unforeseen shortages

Straight and Clean From Beginning to End

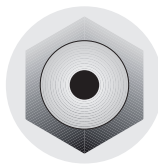
What Does Twist-Free Mean?

- “Twist-free” means the drawing and packaging process results in a product with very little cast or helix – wire comes out of its packaging much straighter compared to standard wires.
- Wire and arc placement are predictable—it goes where you want and doesn’t flip back and forth—helping to reduce overwelding, waste, and cost/inch.
- Straighter wire creates less wear points inside a conduit, with reduced possible binding areas and less drag for more consistent feeding.
- Straighter wire creates uniform contact tip wear, which means that properly sized tips can be used and consumable costs are reduced.
- Straighter wire provides feed consistency from pack to pack.
- All of these factors contribute to greater productivity, less downtime, and reduced overall welding costs.

Torch Tip Wear Comparison

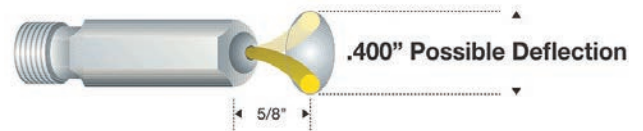


Irregular tip wear is possible with standard wire

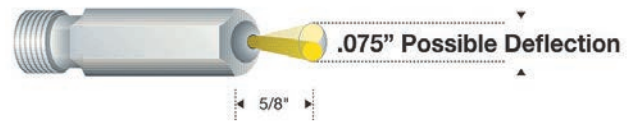


Uniform tip wear with ProStar™ twist-free welding wire

Performance Comparison



Standard wires with twist, helix & 25 in. (600 mm) cast



ProStar twist-free welding wire: no twist, helix, or cast

Make Your Processes Smoother

Praxair's high-performance wire packaging design can help you reduce moisture vulnerability and enhance feedability. Many manufacturers rely on round drums to package their product, causing improper cast or helix and resulting in birdnests.

We package wire in a moisture resistant plastic bag, in a specially designed box. This helps ensure a predictive performance, reduces overwelding and increases travel speeds, resulting in greater productivity and lower operational costs.

- Recyclable materials for easier disposal
- Proprietary double plates and corner supports eliminate tangling due to material handling damage
- Wire quantity view port



Clean Materials, Stringent Controls

*ProStar*TM twist-free welding wire starts as pickled green rod coils produced under ISO-certified control to some of the tightest batch-to-batch tolerances in the industry.

Our proprietary drawing and coppersing processes result in fewer scratches with less flaking or peeling to produce an extremely clean and smooth wire surface.

ProStar wire is packaged using our proprietary, twist-free winding machines. Innovative bulk packaging

design helps to ensure, maintain, and deliver twist-free performance, weld after weld.

The result is a wire product featuring reliable feeding and predictive welding performance that is consistent from pack to pack. This means less downtime due to clogged liners, unevenly worn consumables, and feed issues; less over-welding due to predictable placement of the weld puddle; and reduced overall weld cost-per-foot.



ProStar Twist-Free Mild Steel Wire Grades

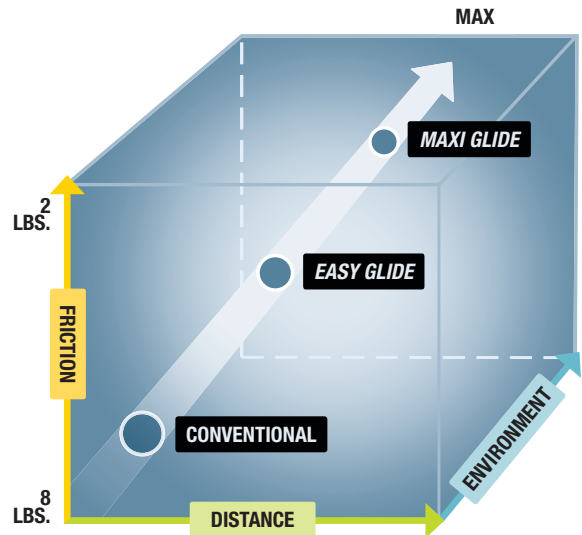
DRUM SIZE	ER70S-3	ER70S-6 Automotive	ER70S-6 Professional	ER80SD-2/90SD-2
	Available Wire Diameter (in)			
330 lbs. (150 kg)	.035 .040	×	.035 .040 .045 .052	0.35 0.52
660 lbs. (299 kg)	.035 .045 .052	Available early 2019 .035 .045 .052	.030 .035 .040 .045 .052	.045
1,200 lbs. (544 kg)	.035 .045 .052	.035 .045 .052	.030 .035 .040 .045 .052 .062	.045 .052 .062

ProStar Wire Conduits

Advance Your Wire's Delivery



Praxair's *Easy Glide™* reduced-friction wire conduit saves you time and money.



More consistent feed and weld appearance. Less chance for quality issues.

Praxair's feed systems for ferrous and non-ferrous materials, including tubular wires

- Conduit design provides twist-free, low-drag 24/7 wire delivery.
- Automatic switch-over device aids in continuous production and around-the-clock wire supply.
- Improves efficiency & profitability.

FITS YOUR OPERATION

- Place your welding wire in any convenient place without impacting feedability and welding performance.
- Frees up floor space near your robotic welder for improved ergonomics.

OTHER DELIVERY OPTIONS

- Aside from Praxair's *EasyGlide™* system, we can provide traditional conduit options to better aid in your operation's wire delivery.

Select Conduit for the Application	Conventional	<i>Easy Glide™</i>	<i>Maxi Glide™</i>
DISTANCE	Short (10 – 20 ft.)	Moderate (10 – 100 ft.)	Long (10 – 150 ft.)
ENVIRONMENT	Fabrication & manufacturing	<ul style="list-style-type: none"> PA6 covering for moderate to severe environment Can handle moderate robotic movement Ideal for fume, dirt & dust 	<ul style="list-style-type: none"> PA12—much more flexible or aramid/rubberized cover Can handle excessive/violent robot movement Grease, oil dust
REDUCED FRICTION	2 – 15#	≤ 2#	< 2#
APPLICATION	<ul style="list-style-type: none"> Limited bends Large curves Grooves easily 	<ul style="list-style-type: none"> 18" bends Flexible installations Long life 	<ul style="list-style-type: none"> 12" bends Ideal for violent, robotic movement Long distances

ProStar™ Wire Feed Systems

ProStar 24/7 Feed System

Eliminate cell downtime with the continuous delivery of welding wire to the robot.

Praxair's 24/7 wire feed system helps improve and protect the productivity of your robotic MIG welding cells. Each "wire farm" consists of two 1,200 lbs. drums of ProStar wire. As one drum empties, the system pivots to continue the feed from the other, allow a continuous feed.



24/7 Swing Arm

Prior to the first drum being spent, its wire end is welded to wire start in the full drum. As the wire source transitions from drum to drum, the swing arm simultaneously rotates to supply wire from the full drum.

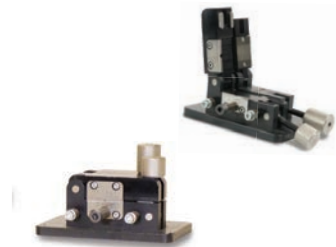
24/7 Butt Welder

Joins mild steel wires of various diameters. Set the welding current to position one for .030 to .062 diameter wires or position two to weld 5/64 to 5/32 diameter wire.



24/7 Die Set

With shaving plates available for many wire diameters, the 24/7 die set ensures a consistent diameter across the welded seams when drums are joined together by removing the resultant flash and any burrs from the welding process.



ProStar SmartBooster™ Auxiliary Feeder

Push your welding wire through MaxiGlide™ runs up to 50 yards long with multiple curves.

The SmartBooster feeder is Praxair's powerful, standalone auxiliary feeder system available in a turnkey, fully integrated package* or portable split system. The SmartBooster feeder is ideal for setups in which MaxiGlide conduit is mounted inside the cable tracks. When deployed in a "wire farm," bulk pacs are placed in a safe, forklift accessible area to allow inspection at all times.

- Available in integrated or portable split system
- Brushless motor for precise torque control
- Cold wire motor control function
- Includes robot arc on-time monitoring
- "Arc-Voltage" motor control function
- CE certified



*The integrated system is pictured here.

Contact your Praxair representative to see how ProStar Welding Wire can help you protect and improve productivity.



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