



MIG Welding Wire

PROSTAR® Premium Quality MIG welding wires are designed to meet the requirements of the metal fabrication industry, featuring excellent tolerance to rust and scale, excellent wetting characteristics, and superior arc stability.

Applications

- Heavy equipment
- Structural
- General carbon steel fabrication

Packaging

PROSTAR® Premium Quality MIG welding wires are available in several packaging sizes – 2 lb, 12 lb, 33 lb, 44 lb and 60 lb spools, and in various diameters conveniently designed to fit all needs.



It is also available in twist-free robotic containers of 330 lb (150 kg), 660 lb (300 kg), 990 lb (450 kg) and 1,200 lb (550 kg), designed to enhance the robot welding performance and reduce operating costs. See the following pages for details.

Wire Specifications

ER70S-6 – Designed for superior performance in carbon steel.

USA	Canada
AWS 5.18-93	ER480S-6
Class ER70S-6	CWB-CSA W48.4-95
ASME SFA-5.18	CWB-A5.18

Minimum Mechanical Properties with CO₂

Tensile Strength	85,000 psi (590 MPa)
Yield Strength	68,000 psi (470 MPa)
Elongation in 2"	29 %
Charpy V-Notch	60 ft/lb @ -20 °F (81 J @ -29 °C)

Typical Wire Chemistry (%)

C	0.06 - 0.12	Mo *	0.15 max.
Mn	1.45 - 1.65	Ni *	0.15 max.
Si	0.80 - 1.00	Ti+Zr *	0.15 max.
P	0.025 max.	Al *	0.020 max.
S	0.025 max.	Fe	Bal
Cu	0.30 max.		

* Total of Cr + Ni + Mo + V shall not exceed 0.50%

Wire Dia.	Package	PROSTAR®
.023"	2 lb	PRSS6RN06B001
.023"	12 lb	PRSS6RN06P006
.023"	33 lb	PRSS6RN06P015
.030"	2 lb	PRSS6RN08B001
.030"	12 lb	PRSS6RN08P006
.030"	33 lb	PRSS6RN08P015
.030"	330 lb	PRSS6RW08Q150
.030"	660 lb	PRSS6RW08Q300
.035"	2 lb	PRSS6RN09B001
.035"	12 lb	PRSS6RN09P006
.035"	44 lb	PRSS6RN09P020
.035"	60 lb	PRSS6RN09P027
.035"	330 lb	PRSS6RW09Q150
.035"	660 lb	PRSS6RW09Q300
.035"	990 lb	PRSS6RW09Q450
.035"	1200 lb	PRSS6RW09Q550
.040"	44 lb	PRSS6RN10P020
.045"	2 lb	PRSS6RN11B001
.045"	12 lb	PRSS6RN11P006
.045"	44 lb	PRSS6RN11P020
.045"	60 lb	PRSS6RN11P027
.045"	330 lb	PRSS6RW11Q150
.045"	660 lb	PRSS6RW11Q300
.045"	990 lb	PRSS6RW11Q450
.045"	1200 lb	PRSS6RW11Q550
.052"	60 lb	PRSS6RN13P027
.052"	330 lb	PRSS6RW13Q150
.052"	660 lb	PRSS6RW13Q300
.052"	990 lb	PRSS6RW13Q450
.052"	1200 lb	PRSS6RW13Q550



Gas Metal Arc Welding (GMAW or MIG) Wire Solutions

ER70S-3 – Designed for killed or semi-killed steel.

USA	Canada
AWS 5.18-93	ER480S-3
Class ER70S-3	CWB-CSA W48.4-95
ASME SFA-5.18	CWB-A5.18

Minimum Mechanical Properties with CO₂

Tensile Strength	76,000 psi (520 MPa)
Yield Strength	63,000 psi (435 MPa)
Elongation in 2"	29%
Charpy V-Notch	50 ft/lb @ -20 °F (67 J @ -29 °C)

Typical Wire Chemistry (%)

C	0.06 - 0.12	Mo *	0.15 max.
Mn	1.00 - 1.30	Ni *	0.15 max.
Si	0.50 - 0.70	Ti+Zr *	0.15 max.
P	0.025 max.	Al *	0.020 max.
S	0.025 max.	Fe	Bal
Cu	0.30 max.		

* Total of Cr + Ni + Mo + V shall not exceed 0.50%

Wire Diameter	Package	Part Number
0.035"	44 lb	PRSS3RN09P020
0.035"	60 lb	PRSS3RN09P027
0.040"	44 lb	PRSS3RN10P020
0.045"	44 lb	PRSS3RN11P020
0.045"	60 lb	PRSS3RN11P027

ER80S-D2 – Designed for higher strength low alloy steel.

USA	Canada
AWS A5.28-93	ER80S-D2
Class ER80S-D2	CWB-CSA W48.4-95
ASME SFA-5.28	CWB-A5.28

Minimum Mechanical Properties with CO₂

Tensile Strength	100,000 psi (690 MPa)
Yield Strength	85,000 psi (590 MPa)
Elongation in 2"	29 %
Charpy V-Notch	100 ft/lb @ -20 °F (136 J @ -29 °C)

Typical Wire Chemistry (%)

C	0.06 - 0.12	Mo	0.40 - 0.60
Mn	1.70 - 1.95	Ni	0.15 max.
Si	0.50 - 0.80	Ti+Zr	0.15 max.
P	0.025 max.	Al	0.020 max.
S	0.025 max.	Fe	Bal
Cu	0.30 max.		

Wire Diameter	Package	Part Number
0.035"	12 lb spool	PRSD2RN09P006

PROSTAR® Select MIG Welding Wire

PROSTAR® Select MIG Welding Wire features level layer winding on the spool to help ensure smooth wire feeding characteristics.

Class	Wire Diameter	Package	Part Number
ER70S-6	.030"	33 lb	PRSS6RS08P015
ER70S-6	.035"	44 lb	PRSS6RS09P020
ER70S-6	.045"	44 lb	PRSS6RS11P020
ER80S-D2	.035"	44 lb	PRSD2RS09P020
ER80S-D2	.045"	44 lb	PRSD2RS11P020

