

XP ER 70S-3 (SG1)

MILD STEEL



CLASSIFICATIONS

EN ISO 636-A	AWS A5.18
W 42 4 2Si	ER70S-3

KEY FEATURES AND APPLICATIONS

- Solid copper-coated wire for welding unalloyed and low-alloyed steels with low Si and Mn content.
- Provides a minimum yield strength of 420 MPa.
- Ideal for root pass and to support welding when no back pass is possible.
- Excellent mechanical properties at subfreezing temperatures down to -40°C.
- Ideal for a variety of applications, including general constructions, shipbuilding, bridges, tanks and is extremely suited for joining thin sheet metals.

BASE MATERIALS

S235J2G3 - S355J2G3, E360, P235T1-P355T1, P235G1TH, L210, L290MB, P255G1TH, P235GH, P265GH, P295GH, P310GH, P255NH, S235JRS1 - S235J4S, S355G1S - S355G3S, S255N - S385N, P255NH-P385NH, GE200-GE260

ASTM A27 a. A36 Gr. all; A214; A242 Gr.1-5; A266 Gr. 1, 2, 4; A283 Gr. A, B, C, D; A285 Gr. A, B, C; A299 Gr. A, B; A328; A366; A515 Gr. 60, 65, 70; A516 Gr. 55; A570 Gr. 30, 33, 36, 40, 45; A 572 Gr. 42, 50; A606 Gr. all; A607 Gr. 45; A656 Gr. 50, 60; A668 Gr. A, B; A907 Gr. 30, 33, 36, 40; A841; A851 Gr. 1, 2; A935 Gr.45; A936 Gr. 50; API 5 L Gr. B, X42-X60

CHEMICAL COMPOSITION OF WIRE %

	C	Si	Mn	P	S	Ni	Cr	Mo	V	Al	Ti + Zr	Cu
MIN	0.06	0.50	0.90	-	-	-	-	-	-	-	-	-
MAX	0.14	0.80	1.30	0.025	0.025	0.15	0.15	0.15	0.03	0.02	0.15	0.35

Single values are maximum values according to EN ISO 636

MECHANICAL PROPERTIES OF ALL-WELD METAL - TYPICAL (MIN.) VALUES

Yield Strength (MPa)	Tensile Strength (MPa)	Elongation (%)	Impact ISO-V (J)	Test Temperature
430 (≥420)	530 (500 - 640)	24 (≥20)	80 (≥47)	-40°C

Test data for mechanical properties are not guaranteed since actual as welded conditions depend on numerous variables

OPERATING DATA

Shielding Gases	Polarity
EN ISO 14175 - I1	DC-

PACKAGING AND AVAILABLE SIZES

Part Number	Diameter (mm)	Length (mm)	Weight (kg)	Packaging
XP10346	1.6	1000	5	PAP 20 Tube
XP10349	2.4	1000	5	PAP 20 Tube
XP10352	3.2	1000	5	PAP 20 Tube

