



CLASSIFICATIONS

EN ISO 14341-A	AWS A5.18
G 42 3 M21 2Ti	ER70S-2

KEY FEATURES AND APPLICATIONS

- Micro-alloyed steel wire that is triple deoxidized with the additions of titanium, aluminium and zirconium.
- Typically used on welding applications involving carbon-manganese and low-alloyed steels.
- The formulation allows for effective use on surfaces with residual grease or oxidation, such as galvanised steel before the coating process.
- Excellent mechanical properties at subfreezing temperatures down to -30°C.
- Widespread usage across diverse industries, including fabrication of tanks, containers, automotive components, structural assemblies, household appliances, pipelines, boilers, naval vessels and petrochemical infrastructures.

BASE MATERIALS

S235JR-S355JR, S235JO-S355JO, S235J2-S355J2, S275N-S420N, S275M-S420M, P235GHP355GH, P355N, P285NH-P355NH, P195TR1-P265TR1, P195TR2-P265TR2, P195GH-P265GH, L245NB-L415NB, L245MB-L415MB, GE200-GE240

ASTM A 106 Gr. A, B, C; A 181 Gr. 60, 70; A 283 Gr. A, C; A 285 Gr. A, B, C; A 414 Gr. A, B, C, D, E, F, G; A 501 Gr. B; A 513 Gr. 1018; A 516 Gr. 55, 60, 65, 70; A 573 Gr. 58, 65, 70; A 588 Gr. A, B; A 633 Gr. A, C, E; A 711 Gr. 1013; API 5 L Gr. B, X42, X52, X56, X60

CHEMICAL COMPOSITION OF WIRE %

	C	Si	Mn	P	S	Ni	Cr	Mo	V	Cu	Al	Ti + Zr
MIN	0.04	0.40	0.90	-	-	-	-	-	-	-	0.05	0.05
MAX	0.14	0.80	1.40	0.025	0.025	0.15	0.15	0.15	0.03	0.35	0.20	0.25

Single values are maximum values according to EN ISO 14341

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

Yield Strength (MPa)	Tensile Strength (MPa)	Elongation (%)	Impact ISO-V (J)	Test Temperature
480 (≥420)	560 (500 - 640)	24 (≥20)	50 (≥47)	-30°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 - M21	DC+

PACKAGING AND AVAILABLE SIZES

Part Number	Diameter (mm)	Spool	Weight (kg)	Pallet Qty
XP10278	0.8	BS300	15	72
XP10281	1.0	BS300	15	72
XP10284	1.2	BS300	15	72