



CLASSIFICATIONS

EN ISO 16834-A	AWS A5.28
G 55 5 M21 Mn3NiCrMo	ER100S-G

KEY FEATURES AND APPLICATIONS

- Low-alloyed solid wire designed for welding fine-grained, quenched and tempered high-strength steels.
- Provides a minimum yield strength of 550 MPa.
- Offers superior crack resistance and weld integrity.
- Excellent mechanical properties at subfreezing temperatures down to -50°C.
- Widely used in the construction of high-strength pipelines, earthmoving and mining equipment, trucks, mobile cranes, concrete pumps and lifting equipment.

BASE MATERIALS

T1, T1A, T1B, StE 460, StE590, X60, X65, X70, X80, S460, S500, S550, S620, Weldox

CHEMICAL COMPOSITION OF WIRE %

	C	Si	Mn	P	S	Ni	Cr	Mo	Cu	V	Ti	Zr	Al
MIN	-	0.60	1.30	-	-	0.50	0.40	0.15	-	-	-	-	-
MAX	0.14	0.80	1.80	0.015	0.018	0.65	0.65	0.30	0.30	0.03	0.10	0.10	0.12

Single values are maximum values according to EN ISO 16834

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

Yield Strength (MPa)	Tensile Strength (MPa)	Elongation (%)	Impact ISO-V (J)	Test Temperature
640 (≥550)	730 (640 - 820)	20 (≥18)	50 (≥47)	-50°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
XP15254	0.8	BS300	15	72
XP15257	1.0	BS300	15	72
XP15260	1.2	BS300	15	72