# TECHNICAL DATA SHEET







# CLASSIFICATIONS

 EN ISO 16834-A
 AWS A5.28

 G 69 4 M21 Mn3Ni1CrMo
 ER110S-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 690 MPa.
- Ideal choice for steels requiring high-strength and tough weld metal in critical applications.
- Excellent mechanical properties at subfreezing temperatures down to -40°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, HY90, N-A-XTRA 56-63-65-70, X65, X70, X80, S460, S500, S550, S620, S690, WELDOX

| CHEMICAL COMPOSITION OF WIRE % |      |      |      |       |       |      |      |      |      |      |      |      |      |
|--------------------------------|------|------|------|-------|-------|------|------|------|------|------|------|------|------|
|                                | С    | Si   | Mn   | Р     | S     | Ni   | Cr   | Мо   | Cu   | V    | Ti   | Zr   | Al   |
| MIN                            | -    | 0.40 | 1.30 | -     | -     | 1.20 | 0.20 | 0.20 | -    | 0.05 | -    | -    | -    |
| MAX                            | 0.12 | 0.70 | 1.80 | 0.015 | 0.018 | 1.60 | 0.40 | 0.30 | 0.35 | 0.13 | 0.10 | 0.10 | 0.12 |

Single values are maximum values according to EN ISO 16834

|  | MECHANICAL PROPERTIES OF ALL-WELD METAL - TYPICAL (M |  |
|--|--|--|
|--|--|--|

| Yield Strength (MPa) | Tensile Strength (MPa) | Elongation (%) | Impact ISO-V (J) | Test Temperature |
|----------------------|------------------------|----------------|------------------|------------------|
| 750 (≥690)           | 800 (770 - 940)        | 19 (≥17)       | 70 (≥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 - M21 | DC+      |

| PACKAGING AND AVAILABLE SIZES |               |       |             |            |  |  |  |  |
|-------------------------------|---------------|-------|-------------|------------|--|--|--|--|
| Part Number                   | Diameter (mm) | Spool | Weight (kg) | Pallet Qty |  |  |  |  |
| XP15263                       | 0.8           | BS300 | 15          | 72         |  |  |  |  |
| XP15266                       | 1.0           | BS300 | 15          | 72         |  |  |  |  |
| XP15269                       | 1.2           | BS300 | 15          | 72         |  |  |  |  |

