TIG SOLID WIRE

ER 70S-6

TIG welding for low carbon steel/low alloy steel
Typical application scenarios:
- ✓ **Pressure pipe base welding**
- ✓ **Precision mechanical parts**
- ✓ **Automobile exhaust pipe**
- ✓ **Key welds of steel structures**

Features:

- High welding quality: good fluidity of deposited metal, beautiful weld formation, less spatter.
- Strong adaptability: high tolerance for slightly rusted or oily base materials, reducing pretreatment requirements.
- Excellent mechanical properties: tensile strength ⩾ 70ksi (about 480MPa), good elongation, meeting general structural welding requirements.
- High efficiency and economy: solid wire feeding is stable, suitable for automated welding, and improves production efficiency.

Chemical properties

Element	C	Mn	Si	P	S	Cu
Content	0.06-0.15	1.40~1.85	0.8-1.15	≤0.025	≤0.035	≤0.50

Material properties

Characteristics	Value/Description
Tensile strength	≥480 MPa（70 ksi）
Yield strength	≥400 MPa（58 ksi）
Elongation (gauge length 50mm)	≥22%
Impact toughness (-20℃)	≥27 J（Typical Value）
Electrical conductivity	≈10% IACS
Density	7.85 g/cm^3
Melting point	~1530℃