

TGA-80

AWS A5.28 ER80S-G
EN ISO 21952-A W Z
JIS Z3316 W 59 A 0U 0

Characteristics and Applications :

For all-position welding of 590N/mm² high tensile steel, it is suitable for root pass welding of pipes and commonly applied in welding Mn-Mo , Mn-Mo-Ni alloy high tensile steel.

Notes on usage :

1. 100% Argon shielding gas with 99.997% high purity is recommended and the flow rate must be properly controlled. The recommended flow rate is 7-12l/min when arc current is 100-200Amp and it goes up to 12-15l/min when arc current rises to 200-300Amp.
2. Trailer Shield is required to ensure the weld pool completely shielded by inert gas until solidification is complete and no porosity problem.
3. Select right gas cup size and employ proper stick out of tungsten electrode.
4. Be sure to clean up the contaminations on the base metal and welding seam so as not to derogate the weld metal quality from particles.

Typical chemical composition of wire (wt%):

	C	Mn	Si	P	S	Mo	Cu
AWS	Not Specified						
EN ISO	Not Specified						
Typical value	0.08	1.56	0.67	0.015	0.012	0.50	0.02

Typical mechanical properties of all weld metal:

	Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-lbf) 0°C (32°F)
AWS	Not Specified	550(80)	Not Specified	Not Specified
EN ISO	≥ 530(77)	620-820(90-119)	≥ 15	≥ 47
Typical value	650(94)	700(102)	24	200(148)

Sizes available:

Diameter (mm)	2.4
Length (mm)	915

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SOLID WIRES