# TGA-80Ni1

#### AWS A5.28 ER80S-Ni1 EN ISO 14341-B G 55A 4 A SN2

# **Characteristics and Applications :**

For all-position welding of 590 N/mm<sup>2</sup> 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%):

С	M	า	Si	Р	S	Ni	Cr	Мо	V	Cu
0.1	) 1.	1 (	0.60	0.011	0.010	0.85	0.07	0.02	0.002	0.1

### Typical mechanical properties of all weld metal:

Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-1bf) -46°C (-51°F)	
480(70)	580(84)	32	200(148)	

### Sizes available:

Diameter	(mm)	1.6	2.0	2.4	3.2	4.0
Length	(mm)			915		

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