TGA-CuNi

AWS A5.7 ERCuNi

Characteristics and Applications

TGA-CuNi is used for oxyacetylene, gas-tungsten-arc.and Gas-metal-arc copper-nickel alloys.The copper-nickel weld metal has excellent resistance to corrosion in sea water, and is widely used for marine and desalination applications.

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%):

Cu	Mn	Fe	Si	Ni	P	Pb	Ti	S
67.00	0.80	0.60	0.05	30.1	0.006	0.005	0.45	0.006

Typical mechanical properties of all weld metal:

Tensile strength (MPa)	Elongation (%)
345	30

Sizes available:

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

SOLID WIRES