# **TMS-625**

AWS A5.34 ENiCrMo3T0-4 mod.

#### **Characteristics and Applications:**

TMS-625 is a nickel-based metal core wire for welding Ni-alloyed steels, such as alloy 625 or 9% Ni for low temperature storage tank. This wire is designed for 100%Ar shielding welding. It can be welded for cladding and joint with NiCrMo alloy.

#### Notes on usage:

- 1. Before welding, the base metal should be cleaned from oil, rusty, moisture and the welding place should have the proper protection from the wind.
- 2. Use 100%Ar shielding gas. Maintain the flow rate not less than 20L/min when wire diameter is 1.2 mm.
- 3. Trailer shield is required to ensure the weld pool completely shielded until solidification is complete and no porosity problem.
- 4. Keep dry while in storage and delivery.

### Typical chemical composition of weld metal (wt%):

С	Mn	Si	Р	S	Cr	Ni	Мо	Fe	Nb
0.008	0.034	0.113	0.005	0.001	21.14	63.93	9.071	1.446	3.712

### Typical mechanical properties of weld metal:

Yield strength	Tensile strength	Elongation	Charpy V-Notch
(MPa)	(MPa)	(%)	-196°C (J)
501	788	46	

#### Welding position:





## Size and recommended current range (DC<+>) Stick out:15-20(mm),flow rate:20-25(I/mm):

Diameter (mm) Parameters	1.2
F, HF	200A-240A/22V-28V

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