STG-80B6

AWS A5.28 ER80S-B6
EN –
GB T8110 ER55-G

TIG RODS FOR HEAT-RESISTANT LOW-ALLOY STEEL

DESCRIPTION & APPLICATIONS :

- STG-80B6 is a solid tungsten rod for 5%Cr-0.5%Mo heat-resistant low alloy steel with high tensile strength and excellent creep resistance.
- Suitable for the welding of ASTM A213Gr.T5, ASTM A217Gr.C5, and ASTM A335Gr.P5.

NOTE ON USAGE :

- When welding, heat input and temperature need to be managed to avoid crack of beads.
- Use Ar as shield gas, purity should be above 99.997%, and control the flow properly. The gas flow should be 7~12 l/min when the current is 100~200Amp; 12~15 l/min when the current is 200~300Amp.
- The proper Wire-stick-out should be 5mm, and arc should be 1~3mm.
- There should be proper win shielded facility in case of porosities.

WELDING POSITION :

TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%) : (Ar)

C	Mn	Si	P	S	Ni	Cr	Mo
0.08	0.46	0.42	0.016	0.008	0.4	5.53	0.56

TYPICAL MECHANICAL PROPERTIES OF WELD METAL: (Ar)

YIELD POINT $N/mm^2(Kgf/mm^2)$	TENSILE STRENGTH $N/mm^2(Kgf/mm^2)$	ELONGATION RATE %	HEAT TREATMENT
495(50.5)	614(62.7)	25	740°Cx1hr

SIZE AND RECOMMENDED CURRENT RANGE : DC(-)

Diameter (mm)	1.2	1.6	2.0	2.4	3.2	4.0
Current (Amp)	70-90	80-100	90-120	100-160	160-220	180-250