

TIG RODS FOR HEAT-RESISTANT LOW-ALLOY STEEL

DESCRIPTION & APPLICATIONS :

- STG-90B9 is a solid rod for 9%Cr-1%Mo heat-resistant low alloy steel with excellent creep resistance because of its combination of minor Nb and V.
- Suitable for the welding of ASTM A213-T91 steel pipe, A335 P91 and A387 Gr.91 steel plate.

NOTE ON USAGE :

- 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	Nb	V
0.09	0.56	0.24	0.015	0.009	0.66	8.74	0.92	0.05	0.2

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
610(62.2)	730(74.5)	20	750°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