

**Classifications**

AWS A5.28-05	: ER90S-B9
EN ISO 21952-A:2007	: G CrMo91
EN ISO 21952-B:2007	: G 62 9C1MV

**Description**

- For butt and fillet welding of power plant, heat exchanger and oil refineries such as 9%Cr-1%Mo-V heat-resistant steel.
- Excellent mechanical and toughness properties after PWHT.
- Proper tungsten electrode extension from the tip of torch is 4~6mm in general.
- Preheat at 150°C to 300°C and post weld heat treatment at 740°C to 780°C is necessary according to the plate thickness, type of steels, shape of base metals or under high restriction.

**Typical chemical composition of wire (%)**

C	Si	Mn	P	S	Cr	Mo
0.10	0.23	0.75	0.005	0.002	9.10	0.94

**Typical mechanical properties of all-weld metal**

	Y.S (MPa)	T.S (MPa)	El. (%)	IV (J) 20°C	Remarks
AWS A5.28	min. 410	min. 620	min. 16		PWHT, Ar+5% CO <sub>2</sub>
EN ISO 21952-A	min. 415	min. 585	min. 17	≥ 47	PWHT, Ar
EN ISO 21952-B	min. 410	min. 620	min. 15	-	PWHT, Ar
Example	540	750	20	90(@0°C)	PWHT, Ar+5% CO <sub>2</sub>

\* PWHT : 760°Cx2Hr

**Operating data**

Dia.(mm)		1.2	1.4
Current (Amp.)	Flat (PA/1G)	120 ~ 350	150 ~ 400
	Vertical (PF/3G)	80 ~ 180	100 ~ 250
	Overhead (PE/4G)	80 ~ 180	100 ~ 250

**Polarity and Shielding gas**

- DCEN (DC+)
- Ar : Ar+5% CO<sub>2</sub> (15~25ℓ/min.)