

FOR HEAT-  
RESISTING STEEL

AWS ER90S-B3  
JIS YG2CM-G  
EN SG CrMo2

# KG-90SB3

## Typical applications

2.25%Cr-1% Mo Heat Resistant steels

## Characteristics on Usage

- ① Wide mixing range can be used, but generally 98%Ar+2%O<sub>2</sub> is recommended for KC-90SB3
- ② Excellent mechanical and toughness properties after PWHT
- ③ It is suitable to use shielding gas of 20 to 25ℓ /min.
- ④ Distance between a base plate and contact tip must be kept at around 6~15mm with current less than 250A, and around 15 ~ 25mm with current over than 250A.
- ⑤ Wind screen must be set at the welding in the place with strong wind
- ⑥ Preheat at 100°C to 200°C and post weld heat treatment at 620°C to 720°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	Cr	Mo
0.09	0.47	0.66	2.31	1.00

## Typical mechanical properties of all-weld-metal

Shielding Gas:	Y · P N/mm <sup>2</sup> {kgf/mm <sup>2</sup> }	T · S N/mm <sup>2</sup> {kgf/mm <sup>2</sup> }	El (%)	Charpy V-notch J {kgf · m} (-18°C)
Ar+2%O <sub>2</sub>	570 {58}	660 {67}	24	80 {8}

## Sizes available and recommended currents (DC wire⊕)

Dia.	(mm)	1.2	1.4	1.6
Amp.	F	100~350	140~400	200~550
	V&OH	50~180	100~250	120~300

## Package

Dia.	(mm)	0.8	0.9	1.0	1.2	1.4	1.6	
Spool	(kg)	5, 15, 20						
Pailpack	(S)	200, 250		250, 300		-		
Pailpack	(B)	-		350,400,450				

Approved by