

GMAW Wires for Heat Resistant Steel

KMS-80B2

Classification

		AWS	A5.28	ER80S-B2
		JIS	-	-
		EN	-	-
Shielding Gas	Ar+1~2%O ₂	GB	-	-

Applications and Features

- (1) Ideal for welding in steel for power generation plants.
- (2) It is suitable for welding Cr-Mo steel.
- (3) Weld metal contains 1.25%Cr-0.5%Mo

Welding Instruction

- (1) Clean up the contaminations on the steel.
- (2) High hardenability with air cooling. Preheat and PWHT are required.
- (3) Preheat and inter pass temperature: 150~200℃, PWHT: 690℃
- (4) Please refer to Appendix A.

Typical Wire Composition of Weld Metal (wt %)

C	Si	Mn	P	S	Cr	Mo
0.10	0.60	1.10	0.012	0.015	1.15	0.55

Typical Chemical Composition of Weld Metal (wt %)

C	Si	Mn	Cr	Mo
0.05	0.62	0.82	1.22	0.55

Typical Mechanical Properties of Weld Metal (PWHT:850°Cx2Hr)

Tensile Strength N/mm ² (kgf/mm ²)	Yield Strength N/mm ² (kgf/mm ²)	Elongation %
582 (59.4)	469 (47.1)	24

Size and Suggested Operating Range (AC or DC+)

Parameters \ Diameter (mm)		Diameter (mm)		
		0.8	1.0	1.2
Short-Circuit	A	50~90	80~150	110~180
	V	16~18	17~20	18~22
Transfer	A	120~160	180~230	240~230
	V	22~26	24~30	26~33