

GMAW Wire for Nickel and Nickel-Based Alloy

KMS-82

Classification

AWS A5.14/A5.14M	ERNiCr-3
JIS Z3334	SNi6082
EN ISO 18274	S Ni 6082
GB T15620	S Ni 6082

Shielding Gas:75% Ar+25%He

Applications and Features

- (1) KMS-82 is 72%Ni-20%Cr-3%Mn-2.5%Nb alloy.
- (2) It provides good mechanical properties and crevice corrosion resistance.
- (3) Suitable for welding 9%Ni steel , Inconel alloy 600, Incoloy 800, ASTM B163, B166,B167 and B168 Ni-Cr-Fe alloy.
- (4) Ideal for welding LNG and LPG tank .

Welding Position



Welding Instruction

- (1) Clean surface of base metal before welding.
- (2) Heat input should be controlled as low as possible.
- (3) For other instructions, please refer to Appendix B.

Typical Chemical Composition of Wire (wt%)

C	Si	Mn	P	S	Cr	Ti	Fe	Nb	Ni
0.01	0.11	3.19	0.004	0.003	18.39	0.40	0.11	2.64	75.10

Typical Mechanical Properties of Weld Metal

Tensile Strength	Yield Strength	Elongation	Charpy V-Notch	
N/mm ²	N/mm ²	%	°C	J
671	423	41	-196	100

Size and Suggested Operating Range (DC+)

Diameter (mm)	0.8	0.9	1.2	1.6
Current (A)	140~180	160~200	190~230	200~250
Voltage (V)	24~27	25~28	26~30	29~33