

GMAW Wire for Nickel and Nickel-Based Alloy

KMS-61

Shielding Gas: 75% Ar+25%He

Classification

AWS	A5.14/A5.14M	ERNiCrMo-3
JIS	Z3334	S Ni 6625
EN	18274	S Ni 6625
GB	T15620	S Ni 6625

Applications and Features

- (1) High molybdenum content provides good stress, pitting and crevice corrosion resistance.
- (2) Ideal for welding materials of similar composition, such as Inconel 601, 625, 718 and Alloy 20.
- (3) Suited for welding pipeline and reactor components in power generation industry, high temperature service in engineering applications such as furnace equipment, petrochemical plants, and marine/offshore environments.

Welding Position



Welding Instruction

- (1) Clean surface of base metal before welding.
- (2) For other instructions, please refer to Appendix B.

Typical Chemical Composition of Weld Metal (wt%)

C	Si	Mn	Cr	Fe	Mo	Nb	Ni
0.012	0.144	0.06	21.26	2.56	8.47	3.50	63.81

Typical Mechanical Properties of Weld Metal

Tensile Strength	Yield Strength	Elongation	Charpy V-Notch	
N/mm ²	N/mm ²	%	°C	J
783	492	40	-196	88

Size and Suggested Operating Range (DC+)

Diameter (mm)	0.9	1.2	1.6
Current (A)	150~190	180~220	200~250
Voltage (V)	26~29	28~32	29~33