GMAW Wire for Nickel and Nickel-Based Alloy

KMS-60

Classification

AWS A5.14/A5.14M ERNiCu-7 JIS Z3334 SNi4060

Shielding Gas:75% Ar+25%He

EN ISO 18274 S Ni 4060 GB T15620 S Ni 4060

Applications and Features

- (1) KMS-60 is 65%Ni-30%Cu-3%Mn-2%Ti alloy.
- (2) The addition of Mn and Ti is to avoid the hot crack and porosity.
- (3) Suitable for welding Monel400/404 and ASTM B127 alloy.
- (4) Ideal for welding offshore structure, exchanger, pipeline, tank and evaporator.

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%)

С	Si	Mn	P	S	Ti	Fe	Al	Cu	Ni
0.05	0.21	3.38	0.001	0.001	2.28	0.15	0.08	28.20	65.68

Typical Mechanical Properties of Weld Metal

Tensile Strength	Tensile Strength Yield Strength		Charpy V-Notch		
N/mm²	N/mm²	%	°C	J	
750	500	45	-	-	

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