GMAW Wire for Nickel and Nickel-Based Alloy

AWS A5.14/A5.14M	ERNiCrCoMo-1
JIS Z3334	SNi6617
EN ISO 18274	S Ni 6617
GB T15620	S Ni 6617
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Applications and Features

- (1) KMS-617 is 53%Ni-23%Cr-12%Co-9%Mo-1%Fe alloy.
- (2) Excellent mechanical properties at high temperature, oxidization and corrosion resistance.
- (3) Suitable for welding Inconel 617, Inconel 600, 601 and Incoloy 800 HT.
- (4) Ideal for welding the engine components in aerospace industry, after burners, turbine seals;

heat treating equipment and many other high temperature service applications.

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	Р	S	Cr	Мо	Ti	AI	Fe	Со	Ni
0.05	0.05	0.03	0.003	0.003	21.80	8.80	0.32	1.30	0.70	10.70	55.90

Typical Mechanical Properties of Weld Metal

Tensile Strength	Yield Strength	Elongation	Charpy V-Notch		
N/mm²	N/mm ²	%	°C	J	
770	480	38	-	-	

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