

## GMAW Wire for Nickel and Nickel-Based Alloy

# KMS-59

### Classification

AWS A5.14/A5.14M	ERNiCrMo-13
JIS Z3334	SNi6059
EN ISO 18274	S Ni 6059
GB T15620	S Ni 6059

Shielding Gas:75% Ar+25%He

### Applications and Features

- ( 1 ) KMS-59 is 59%Ni-23%Cr-16%Mo-1%Fe alloy.
- ( 2 ) It provides excellent oxidizing acid, reducing acid, pitting, and crevice corrosion resistance.
- ( 3 ) Suitable for welding Alloy 59, Hastelloy C-22 and Hastelloy C-276 alloy.
- ( 4 ) Ideal for dissimilar welding between nickel alloy and duplex stainless steel .

### 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	Mo	Fe	Al	Ni
0.01	0.03	0.20	0.003	0.003	22.90	15.70	0.20	0.20	60.20

### Typical Mechanical Properties of Weld Metal

Tensile Strength	Yield Strength	Elongation	Charpy V-Notch	
N/mm <sup>2</sup>	N/mm <sup>2</sup>	%	°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