

GMAW Wire for Nickel and Nickel-Based Alloy

KMS-276

Classification

AWS A5.14/A5.14M	ERNiCrMo-4
JIS Z3334	SNi6276
EN ISO 18274	S Ni 6276
GB T15620	S Ni 6276

Shielding Gas:75% Ar+25%He

Applications and Features

- (1) KMS-276 is 57%Ni-16%Cr-15.5%Mo-5.5%Fe-4%W alloy.
- (2) Excellent resistance to pitting, stress-corrosion cracking and oxidizing atmospheres.
- (3) Suitable for welding Hastelloy C-276, ASTM B574, B575, B19, B622, B628 Ni-Cr-Mo alloy.
- (4) Ideal for welding the clad side of joints on steel in the chemical, petrochemical and petroleum industries.

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	W	Ni
0.01	0.05	0.50	0.003	0.001	15.60	15.90	5.70	3.60	58.44

Typical Mechanical Properties of Weld Metal

Tensile Strength	Yield Strength	Elongation	Charpy V-Notch	
N/mm ²	N/mm ²	%	°C	J
729	433	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