

GMAW Wie for Nickel and Nickel-Based Alloy

KMS-17

Classification

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

Shielding Gas: 75% Ar+25%He

Applications and Features

- (1) Due to high molybdenum content, this alloy offers excellent resistance to stress corrosion cracking, pitting and crevice corrosion.
- (2) Ideal for welding materials of similar composition, such as Hastelloy C-276.
- (3) Suitable for welding pipelines, pressure vessels, chemical processing plants, offshore oil and gas facilities, and marine 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	W	Ni
0.009	0.03	0.42	16.06	5.71	15.46	3.38	57.06

Typical Mechanical Properties of Weld Metal

Tensile Strength	Yield Strength	Elongation	Charpy V-Notch	
N/mm ²	N/mm ²	%	°C	J
729	567	42	-	-

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