

ENi4

GB/T ——

AWS A5.23 ENi4

EN ISO ——

Description: ENi4 is a nickel–iron submerged-arc welding (SAW) wire classification used in applications that require good mechanical strength and toughness, especially for structural steels used in pressure vessels, offshore platforms, bridges, and general fabrication. It belongs to the nickel-molybdenum SAW filler metal group, providing enhanced strength and weldability compared to plain low-alloy consumables.

Application: ENi4 is commonly used in: Heavy Structural Fabrication（Pressure vessels、Offshore oil & gas platforms、Large structural steel bridges）； Industrial & Energy Sectors（Power plant components、Heavy machinery frames、Structural supports）； Fabrication Workshops（Thick plate and longitudinal seam welding） Due to its balance of ductility and strength, ENi4 is considered a good all-purpose filler for demanding welded structural assemblies.

Typical Chemical Composition(%):

	C	Si	Mn	S	P	Cr	Ni	Mo	Cu
Requirement	0.12-0.19	0.10-0.30	0.60-1.0	0.020	0.015	——	1.60-2.10	0.10-0.30	0.35
Actual Result	0.16	0.21	0.70	0.015	0.003	——	1.87	0.22	0.01

Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	620	——	——	——
Actual Result	675	——	——	——