

SUNMIG 80S-Ni1

Copper Coated 1% Ni Alloyed Wire



CLASSIFICATION

AWS A 5.28 : ER80S-Ni1

CHARACTERISTICS

SUNMIG ER80S-Ni1 is a low alloy copper-coated solid wire available in bright finish, gives smooth flow, stable arc and spatter free under optimum welding conditions. It is designed for welding low alloy steels with 1% Ni content, fine grained for low temperature applications upto -50°C. Nickel increases atmospheric weathering resistance and improves electrochemical balance between weld and base metal. It gives radiographic quality welds.

APPLICATIONS

Typical applications include storage tanks for liquefied gas, distillers in coke oven batteries and petrochemical industries. It is also suitable for the construction of offshore platforms, pressure vessels and pipelines.

SPECIFIED CHEMICAL COMPOSITION OF BARE SOLID WIRE (%):

Carbon	Manganese	Silicon	Nickel	Molybdenum	Copper*	Sulphur	Phosphorus
0.12 max	1.25 max	0.40-0.80	0.80-1.10	0.35 max	0.35 max	0.025 max	0.025 max

*Including Cu in the coating

Hardness, 3 Layer: 210 BHN max (irrespective of type of gas used)

SPECIFIED MECHANICAL PROPERTIES OF ALL WELD METAL:

Condition	Ultimate Tensile Strength (N/mm ²)	Yield Strength (N/mm ²)	Elongation	CVN Impact at -45°C
As welded	550 min	390.0 min	24% min	28 Joules min

PACKING DATA:

Diameter (mm)	KG/spool
1.20	15 Kg
1.60	15 Kg

SHIELDING GAS :

GMAW: 95-98% Argon / Balance O₂ or Argon / CO₂