Medium Strength Copper Coated Low Alloy Steel Wire



# CLASSIFICATION

AWS A 5.28 : ER80S-Ni1

### CHARACTERISTICS

SUNMIG 80S-G is a copper-coated low alloy solid wire available in bright finish, gives smooth flow, stable arc and spatter free under optimum welding conditions. It is suitable for welding high strength fine grained structural steels containing -0.5% Mo. Weld deposit is resistant to cold cracking and provide good wetting, rust and scale tolerance. It gives radiographic quality welds.

## APPLICATIONS

Typical applications include pipelines and pressure vessels with operating temperatures of about 500°C, suitable for welding of penstock pipe-fine, fabrication of earth moving equipments etc. Also suitable for wide range of base metals such as problem steels containing high Sulphur to the basic carbon and low alloy Cr-Mo base metals.

# CHEMICAL COMPOSITION OF BARE SOLID WIRE (TYPICAL) (%):

Carbon	Manganese	Silicon	Molybdenum	Copper	Sulphur	Phosphorus
0.06	1.75	0.53	0.40	0.15	0.010	0.015

## MECHANICAL PROPERTIES OF ALL WELD METAL:

Ultimate Tensile Strength	Yield Strength	Elongation	CVN Impact at -45°C
640 N/mm2	540 N/mm2	23.00%	62 Joules

### **PACKING DATA:**

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

#### **SHIELDING GAS :**

GMAW: CO<sub>2</sub> gas and Argon+CO<sub>2</sub> mixture