

GM 80SG

IDENTIFICATION

GM 80SG, ER 80SG

CLASSIFICATION

AWS/SFA 5.28 ER 80SG

DESCRIPTION

Copper coated solid wires alloyed 1.5% Mn, 0.40 % Mo intended for welding of similar composition used in power generating plant operating at welding of high tensile steels.

CHEMICAL ANALYSIS (RANGE) %

| C | Mn | Si | Mo | P | S | Cu |
|-------------|------------|-------------|-------------|-----------|-----------|----------|
| 0.07 - 0.12 | 1.5 - 20.0 | 0.40 - 0.60 | 0.40 - 0.60 | 0.025 max | 0.025 max | 0.35 max |

MECHANICAL PROPERTIES (RANGE)

| UTS (MPa) | YS (MPa) | EL (%) (L=4D) | CVN Impact Value | |
|-----------|----------|------------------|------------------|--------|
| | | | Temp | Joules |
| 550 min | 470 min | 17 min | -30°C | 27 min |

TYPICAL APPLICATIONS

- For welding low alloy steel AISI 4130, 4140 for the repair and fabrication of manganese molybdenum castings.
- AISI 4130, castings to ASTM A 487 2 A-B-C Fabrication of higher strength steels for off-shore oil well head process pipe work and fittings.
- Repair of medium strength low alloy steel castings. fabrication of steel to IS 8500-91 Gr 540B, 570B, 590B, IS2002-92Cr3

PREHEAT AND INTERPASS TEMPERATURE : 135 - 165°C

SHIELDING GAS : 80% Ar + 20% CO₂

WELDING CURRENT : DC (-)

PACKING PARAMETERS

| Size (mm) | Weight / Spool (kg) |
|-----------|---------------------|
| 1.2 | 12.50 / 15.0 |
| 1.6 | 12.50 / 15.0 |