

GM 80S-B8

IDENTIFICATION

GM 80SB8, ER 80SB8

CLASSIFICATION

AWS/SFA 5.28 ER 80S-B8

DESCRIPTION

Copper coated filler wire for welding 9% Cr / 1.0 % Mo, air hardening steel used for elevated temperature, creep service and corrosion resistance against steam, hot hydrogen gas and high sulphur crude oils. The welds are of radiographic quality.

CHEMICAL ANALYSIS (RANGE) %

| C | Mn | Si | Cr | Cu | Ni | Mo | S | P |
|----------|-------------|----------|------------|----------|----------|------------|-----------|-----------|
| 0.10 max | 0.40 - 0.70 | 0.50 max | 8.0 - 10.5 | 0.30 max | 0.50 max | 0.8 - 1.20 | 0.025 max | 0.025 max |

MECHANICAL PROPERTIES (RANGE)

| TS (N/mm ²) | PS (N/mm ²) | EL (%) (L=4D) | CVN Impact Value | |
|-------------------------|-------------------------|---------------|------------------|---------|
| | | | Temp | Joules |
| 550 - 650 | 470 - 560 | 18 - 25 | 27±2°C | 30 - 80 |

TYPICAL APPLICATIONS

- For elevated temperature service upto 600° C .
- For boiler superheater tubing heat - exchangers, piping and pressure vessels in oil refineries and power plants.
- Forgings ASTM A336 grade F9.
- Pipes and tubes ASTM A335 grades P9, ASTM A199 grade T9.
- A 200 grade T9, A213 grade T9.
- Castings ASTM A 217 C12

SHIELDING GAS : 80% Argon + 20% CO₂

WELDING CURRENT : DC (-)

PACKING PARAMETER

| Size (mm) | Weight / Spool (kg) |
|-----------|---------------------|
| 0.8 | 12.5 |
| 1 | 12.5 |
| 1.2 | 12.5 |
| 1.6 | 12.5 |