

ES MIG 80S-B2

GMAW
ER80S-B2

ESWECO
The Art of Welding

Description

ES MIG 80S-B2 is a 1.3Cr-0.5Mo-alloyed (ER80S-B2), copper-coated, solid wire for the GMAW of creep-resistant steels of the same composition, but it is also suitable for welding high strength steels. ES MIG 80S-B2 finds applications in the chemical industry, in the ammonia synthesis process, for heat exchangers, boilers, piping, and pressure vessels for temperature service up to about 1020°F (550°C). It will also find applications in the petro-chemical industries, as it is suitable for facing on casting and for casting repairs.

Current

DC+

Classifications

SFA/AWS A 5.28 ER80S-B2

Typical all weld metal composition, %

| C | Si | Mn | Cr | Mo |
|-----|-----|-----|-----|-----|
| 0.1 | 0.6 | 0.6 | 1.3 | 0.5 |

Typical mech. Properties all weld metal

| | |
|-----------------------|------|
| Yield stress, MPa | >470 |
| Tensile strength, MPa | >550 |
| Elongation, % | >19 |

Charpy V

Test temps, °C Impact values, J

Welding parameters

| Diameter, mm | Wire feed, m/min | Welding current, A | Arc voltage, V |
|--------------|------------------|--------------------|----------------|
| 0.8 | 2.0-10.8 | 40-170 | 16-22 |
| 1.0 | 2.7-14.7 | 80-280 | 18-28 |
| 1.2 | 3.7-12.4 | 120-350 | 20-33 |
| 1.6 | 3.5-12 | 225-480 | 26-38 |