

RAAJMIG-S3

Copper coated continuous or cut length solid wire for TIG/MIG welding.

CLASSIFICATION : AWS: SFA/A 5.18: ER70S-3

CHARACTERISTICS : Copper coated solid mild steel welding wire, smooth flow, stable arc and minimum spatter under optimum welding conditions. Gives radiographic quality welds.

APPLICATION : Suitable for welding structural steel, pressure vessels and boilers involving unalloyed and micro alloyed structural steels with specified tensile strength upto 520 N/mm² to meet sub-zero impact requirements down to -51°C.

SHIELDING GAS : **MIG** welding with CO₂ gas and Ar+ CO₂ gas mixture
TIG welding with Argon gas

CHEMICAL COMPOSITION % (solid wire chemistry)

| C | Mn | Si | S | P | Cu |
|-------------|-----------|-----------|-----------|-----------|----------|
| 0.06 – 0.15 | 0.90-1.40 | 0.45-0.75 | 0.035 Max | 0.025 Max | 0.50 Max |

ALL WELD MECHANICAL PROPERTIES (UNDER CO2 GAS SHIELD)

| YS (N/mm ²) | UTS (N/mm ²) | EL % | CHARPY “V” NOTCH IMPACT AT |
|----------------------------|-----------------------------|-------|--|
| 420-510 | 510-660 | 22-30 | Minus 30 ⁰ C : 80-100 Joules ⁷ |

DIEMENSION, CURRENT CONDITION & PACKING DATA (RAAJMIG S3)

| Size(mm) | Size(inch) | Current Condition (DC+) | Voltage (V) | Gas Flow Rate L/min. | Spool packing 12.5 kg. | Spool packing 15 kg | Drum packing 100/200kg |
|----------|------------|-------------------------------|----------------|----------------------------|------------------------------|---------------------------|------------------------------|
| 0.80 | 0.031 | 70-220 | 16-24 | 10-20 | √ | √ | X |
| 1.20 | 0.047 | 150-300 | 24-34 | 15-25 | √ | √ | √ |

DIEMENSION, CURRENT CONDITION & PACKING DATA (RAAJTIG S3)

| Size(mm) | Size(inch) | Length (mm) | Length (inch) | Current Condition (DC+) | Voltage (V) | Tube packing 5 kg | Box packing 20 kg |
|----------|------------|----------------|------------------|-------------------------------|----------------|-------------------------|-------------------------|
| 1.60 | 1/ 16” | 1000 | 36” | 40-80 | 10-16 | √ | √ |
| 2.0 | 5/ 64” | 1000 | 36” | 50-100 | 12-18 | √ | √ |
| 2.4/ 2.5 | 3/ 32” | 1000 | 36” | 60-120 | 14-20 | √ | √ |
| 3.2 | 1/ 8” | 1000 | 36” | 100-150 | 16-24 | √ | √ |
| 4.0 | 5/ 32 | 1000 | 36” | 140-200 | 18-28 | √ | √ |

Raajratna offer a wide range of copper coated welding wires for MIG/TIG/SAW.

Customer packing on request.