



Test certificate

(According to EN 10204 - Type 3.1)

Special wire products (p) Ltd.,
235, Sidco Industrial Estate,
Ambattur, Chennai-600098

| | | | | | |
|----------------|--|---------------------|--|---------------------------|-----------------------|
| Brand | : STAR | Test certificate no | : 1701 | STAR Approvals | |
| Product | : MIG WELDING WIRE | MFD | : 01.06.2026 | BIS Certificate No | : 6700115211 |
| Classification | : S4-C504 (ER70S-6) | Email | : sales@specialwires.in | IRS Certificate No | : MDR22WC027 |
| Specification | : AWS A5.18-2017;ASME SFA A5.18;IS 6419:1996 | Web site | : www.specialwire.in | IBR Certificate No | : Tech - II /611/2026 |
| Batch No | : D2032259 | | | CE Certificate No | : 24DCMH76/S1 |
| Size ϕ | : 0.80 mm | | | | |

This is to certify that all tests required by the specifications shown for classification were performed, and the material tested met all requirements. It is manufactured and supplied as per the Quality system program of SWP, which meets the requirements of ANSI/AWS A5.18-2017,IS 6419:1996 and other specification, as applicable.

| OPERATING PARAMETERS | SIZE OF WIRE(MM) | POLARITY CURRENT TYPE | SHIELDING GAS | NOMINAL VOLTAGE (V) | NOMINAL CURRENT, (A) | STICK OUT DISTANCE, (MM) | GAS FLOW L/M | CAST, (mm) | HELIX (mm) | FINISH |
|----------------------|--------------------|-----------------------|---------------------------------|---------------------|----------------------|--------------------------|--------------|------------|------------|--------|
| SPECIFICATION | ϕ 0.80 - 0.05 | DC+ | 80%Ar + 20%CO2 (or) 100% Co2 | 18 - 26 | 100 - 200 | 10 - 20 | 15-20 | 380 min | 25 Max | Smooth |
| ACTUAL | ϕ 0.77 | DC+ | 100% Co2 | 23 | 180 | 15 | 17 | 810 | 1 | Smooth |

RESULT : The Operating Parameters met the requirements of AWS A5.18-2017;ASME SFA A5.18,IS 6419:1996

CHEMICAL COMPOSITIONS OF WIRE

| CHEMICAL COMPOSITIONS | C | Mn | Si | P | S | Cr | Ni | Mo | V | Cu |
|-----------------------|-------------|-------------|-------------|-----------|-----------|-----------|-----------|----------|----------|----------|
| SPECIFICATION | 0.06 - 0.15 | 1.40 - 1.85 | 0.80 - 1.15 | 0.025 Max | 0.035 Max | 0.150 Max | 0.150 Max | 0.15 Max | 0.03 Max | 0.50 Max |
| ACTUAL | 0.065 | 1.48 | 0.869 | 0.015 | 0.007 | 0.024 | 0.008 | 0.001 | 0.002 | 0.006 |

RESULT : The Chemical Composition of the wires met the requirements of AWS A5.18-2017;ASME SFA A5.18;IS 6419:1996

MECHANICAL PROPERTIES OF WELDED

| MECHANICAL PROPERTIES | Tensile strength [N/mm ²] | Yield Strength [N/mm ²] | Elongation % | Average impact energy J@-30°C | | | | | |
|-----------------------|---------------------------------------|-------------------------------------|--------------|-------------------------------|-----|-----|-----|-----|-------|
| SPECIFICATION | 480 min | 400 min | 22 min | 27 | | | | | |
| ACTUAL | 588 | 485 | 24 | 1 | 2 | 3 | 4 | 5 | AVG |
| | | | | 152 | 149 | 151 | 139 | 137 | 145.6 |

RESULT : The Mechanical Properties of the welded met the requirements of AWS A5.18-2017;ASME SFA A5.18,IS 6419:1996

Note : Radiographic report NSD Acceptable

Rev No: 02

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Prepared By,



Approved By,