



# Test certificate

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

Product : MIG WELDING WIRE  
Grade : ER70S-6  
Character : AWS - 5.18 ER 70S 6, IS - 6419 S-4  
Batch : E939432  
Size : Ø0.80 MM

Certificate No : 1458  
Email : [sales@specialwires.in](mailto:sales@specialwires.in)  
Web site : [www.specialwire.in](http://www.specialwire.in)  
MFD : 10-08-2023

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 SPL, which meets the requirements of ISO 9001, ANSI/AWS A5.01 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 |
|----------------------|------------------|-----------------------|----------------|---------------------|----------------------|--------------------------|--------------|
| SPECIFICATION        | Ø0.80MM-0.05     | DC+                   | 80%Ar +20%CO2  | 18-26               | 100-200              | 10-20                    | 15-20        |
| ACTUAL               | 0.78             | DC+                   | 80%Ar + 20%CO2 | 21                  | 159                  | 12                       | 18           |
| RESULT               | OK               | OK                    | OK             | OK                  | OK                   | OK                       | OK           |

## CHEMICAL COMPOSITIONS OF WIRES

| CHEMICAL COMPOSITIONS | C (%)     | Mn (%)    | Si (%)    | P (%)     | S (%)    | Cr (%)    | Ni (%)    | Copper Coating % (CU) |
|-----------------------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------------------|
| SPECIFICATION         | 0.06-0.15 | 1.40-1.85 | 0.80-1.15 | 0.025 MAX | 0.035MAX | 0.150 MAX | 0.150 MAX | 0.50MAX               |
| ACTUAL                | 0.071     | 1.450     | 0.867     | 0.015     | 0.007    | 0.017     | 0.006     | 0.01                  |
| RESULT                | OK        | OK        | OK        | OK        | OK       | OK        | OK        | OK                    |

## MECHANICAL PROPERTIES OF WIRE

| MECHANICAL PROPERTIES | Tensile strength [N/mm2] | Yield Strength [N/mm2] | Elongation % | Average impact energy J@-30°C |
|-----------------------|--------------------------|------------------------|--------------|-------------------------------|
| SPECIFICATION         | 550 MAX                  | 400 MAX                | 22 min       | 22J                           |
| ACTUAL                | 496                      | 352                    | 42           | 22J                           |
| RESULT                | OK                       | OK                     | OK           | OK                            |

Note :

Radiographic inspection : Met requirements

Ref No:048/0005

DATE:02.12.19



Quality Assurance