



# 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 No : A30567331012C3005  
Size :  $\varnothing$  1.20 mm

Test certificate no : 672  
Email : [sales@specialwires.in](mailto:sales@specialwires.in)  
Web site : [www.specialwire.in](http://www.specialwire.in)  
MFD : 30.05.2022

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        | $\varnothing$ 1.20-0.05 | DC+                   | 80%Ar +20%CO2  | 20-32               | 200-350              | 10-20                    | 15-20        |
| ACTUAL               | $\varnothing$ 1.15      | DC+                   | 80%Ar + 20%CO2 | 24                  | 218                  | 15                       | 17           |
| 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                | 0.069     | 1.45      | 0.881     | 0.015     | 0.01     | 0.022     | 0.009     | 0.29                  |
| RESULT                | OK        | OK        | OK        | OK        | OK       | OK        | OK        | OK                    |

## MECHANICAL PROPERTIES OF WIRE

| MECHANICAL PROPERTIES | Tensile strength [N/mm <sup>2</sup> ] | Yield Strength [N/mm <sup>2</sup> ] | Elongation % | Average impact energy J@-30°C |
|-----------------------|---------------------------------------|-------------------------------------|--------------|-------------------------------|
| SPECIFICATION         | 490 min                               | 400 min                             | 22 min       | 27 J                          |
| ACTUAL                | 642                                   | 501                                 | 23           | 27                            |
| RESULT                | OK                                    | OK                                  | OK           | OK                            |

Note :

Radiographic inspection : Met requirements

Ref No:048/0005

DATE:02.12.19



N. M.

Quality Assurance