Test certificate

(According to EN 10204 - Type 3.1)

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

Brand : STAR
Product : MIG WELDING WIRE
Classification : S4-C504(ER70S-6)
Specification : AWS A5.18-2025;ASME SFA A5.18;IS 6419:1996
Batch No : F2047236
Size Ø : 1.00 mm

Test certificate no : 1677
MFD : 02.11.2026
Email : sales@specialwires.in
Web site : www.specialwire.in

STAR Approvals
BIS Certificate No : 6700115211
IRS Certificate No : MDR22WC027
IBR Certificate No : Tech - II /611/2026
CE Certificate No : 24DCMH76/S1

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 A5.18-2025,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	Ø 1.0 - 0.05	DC+	80%Ar + 20%CO2 (or) 100% Co2	18-30	150-300	10 - 20	15-20	380 min	25 Max	Smooth
ACTUAL	Ø 0.97	DC+	100% Co2	24	270	15	17	810	1	Smooth

RESULT : The Operating Parameters met the requirements of AWS A5.18-2025;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	0.073	1.46	0.857	0.013	0.01	0.018	0.007	0.001	0.002	0.007

RESULT : The Chemical Composition of the wires met the requirements of AWS A5.18-2025;ASME SFA A5.18;IS 6419:1996

MECHANICAL PROPERTIES OF WELDED

MECHANICAL PROPERTIES	Tensile strength [N/mm2]	Yield Strength [N/mm2]	Elongation %	Average impact energy J@-30°C					
SPECFICATION	480 min	400 min	22 min	27					
				1	2	3	4	5	AVG
ACTUAL	595	575	24	152	153	158	154	158	155

RESULT : The Mechanical Properties of the welded met the requirements of AWS A5.18-2025;ASME SFA A5.18,IS 6419:1996

Note : Radiographic report NSD Acceptable

Rev No: 02

Rev Date : 09.11.2023

Prepared By,

Approved By,