



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	: 1673	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	: D2032682			CE Certificate No	: 24DCMH76/S1
Size ϕ	: 1.00 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 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	ϕ 0.97	DC+	100% Co2	24	270	15	17	790	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	1.46	0.875	0.014	0.005	0.022	0.009	0.001	0.002	0.008

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	592	585	24	1	2	3	4	5	AVG
				153	150	154	137	135	145.8

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,