



Test certificate

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

Brand	: STAR	Test certificate no	: 1671
Product	: MIG WELDING WIRE	MFD	: 24.02.2026
Classification	: S4-C504(ER70S-6)	Email	: sales@specialwires.in
Specification	: AWS A5.18-2017;ASME SFA A5.18	Web site	: www.specialwire.in
Batch No	: E2024907		
Size Ø	: 1.0 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 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	Ø 1.0 - 0.05	DC+	80%Ar + 20%CO2 (or) 100% Co2	18-30	150-300	10 - 20	15-20
ACTUAL	Ø 0.97	DC+	100% Co2	24	270	15	17

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

CHEMICAL COMPOSITIONS OF WIRE

CHEMICAL COMPOSITIONS	C	Mn	Si	P	S	Cr	Ni	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	0.50 Max
ACTUAL	0.072	1.46	0.843	0.015	0.005	0.024	0.008	0.008

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

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	575	466	41	1	2	3	4	5	AVG
				146	147	148	156	133	146

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

Note : Radiographic report NSD Acceptable

Rev No: 02

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Quality Assurance