



Test certificate

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

Brand : STAR
Product : MIG WELDING WIRE
Classification : ER70S-6
Specification : AWS A5.18-2017;ASME SFA A5.18
Batch No : A3071384
Size ϕ : 1.00 mm

Test certificate no : 1558
MFD : 06.11.2023
Email : sales@specialwires.in
Web site : www.specialwire.in

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	ϕ 1.0 - 0.05	DC+	80%Ar + 20%CO ₂ (or) 100% Co ₂	18-30	150-300	10 - 20	15-20
ACTUAL	ϕ 0.973	DC+	80%Ar + 20%CO ₂ (or) 100% Co ₂	27	218	17	19

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	0.035MAX	0.150 Max	0.150 Max	0.50MAX
ACTUAL	0.066	1.44	0.850	0.015	0.010	0.024	0.009	0.010

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	581	518	25	1	2	3	4	5	AVG
				123	128	134	140	122	128

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

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Quality Assurance