



# Test certificate

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

Brand	: STAR	Test certificate no	: 1568
Product	: MIG WELDING WIRE	MFD	: 03.01.2024
Classification	: ER70S-6	Email	: <a href="mailto:sales@specialwires.in">sales@specialwires.in</a>
Specification	: AWS A5.18-2017;ASME SFA A5.18	Web site	: <a href="http://www.specialwire.in">www.specialwire.in</a>
Batch No	: E954637		
Size $\phi$	: 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 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	$\phi$ 1.0 - 0.05	DC+	80%Ar + 20%CO2 (or) 100% Co2	18-30	150-300	10 - 20	15-20
ACTUAL	0.977	DC+	80%Ar + 20%CO2 (or) 100% Co2	28	209	14	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	0.075	1.44	0.840	0.015	0.005	0.017	0.004	0.006

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/mm2]	Yield Strength [N/mm2]	Elongation %	Average impact energy J@-30°C					
				1	2	3	4	5	AVG
SPECIFICATION	480 min	400 min	22 min	27					
ACTUAL	574	522	24	122	127	131	141	123	127

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