



# 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 : M44033600  
Size  $\phi$  : 0.80 mm

Test certificate no : 1556  
MFD : 28.11.2023  
Email : [sales@specialwires.in](mailto:sales@specialwires.in)  
Web site : [www.specialwire.in](http://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	$\phi$ 0.8 - 0.05	DC+	80%Ar + 20%CO2 (or) 100% Co2	18-26	100-200	10 - 20	15-20
ACTUAL	$\phi$ 0.782	DC+	80%Ar + 20%CO2 (or) 100% Co2	24	187	17	18

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	0.852	0.015	0.010	0.023	0.024	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					
SPECIFICATION	480 min	400 min	22 min	27					
ACTUAL	579	519	24	1	2	3	4	5	AVG
				121	129	131	142	120	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