

AUTOTHERME - 1

CODIFICATION: **AWS :** SFA 5.18 ER70S-6

CHARACTERISTICS AND APPLICATIONS:

Autotherme-1 is a copper coated mild steel GMAW wire for welding of mild steel, low carbon steel and other structural steels of tensile strength up to 540 MPa. The wire burns with smooth arc and minimum spatter under optimum welding conditions. It is designed for single and multi-pass welding of low and medium carbon steels like; SA-36, A/B/C/D grades of SA-283, A/B/C grades of SA-285, A/B grades of SA-414, etc.

TYPICAL CHEMICAL COMPOSITION OF SOLID WIRE:

Element	C	Mn	Si	S	P	Cu
%	0.09	1.60	0.90	0.018	0.018	0.15

TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL:

UTS (MPa)	YS (MPa)	Elongation (L=4d) %	CVN Impact strength at minus 30°C (Joules)
550	480	28.0	55

WELDING PARAMETER: DC(+)

Diameter	Flat	
	Volt, V	Current, A
0.80 mm	28-32	170-200
1.20 mm	27-31	260-290
1.60 mm	26-30	330-360

SHIELDING GAS: Co₂

WELDING POSITION: H, F, VU, OH

APPROVAL: Adani Infra, BHEL, BV, CIB-MP, L&T Power, NTPC

PACKING:

STANDARD SIZE	Diameter 0.8 mm, 1.2 mm & 1.6 mm
QUANTITY	12.5 / 15.0 kgs wire, random/ layer wound in a plastic spool that conforms to DIN-8559 SD-300.