



AUTOTHERME Cr-Mo 5

CODIFICATION: AWS : SFA 5.28 ER80S-B6

CHARACTERISTICS AND APPLICATIONS:

Autotherme Cr-Mo 5 is a copper-coated solid wire for GMAW, available in bright finish. The wire gives stable arc, smooth welding performances and deposits radiographic quality welds. It is suitable for welding 5Cr 0.5Mo steel. The weld metal possesses good high temperature properties. The weld metal possesses excellent creep property up to 550C. Especially suitable for welding of pipes and tubes of matching composition in Power plants, Refineries, Petrochemicals, Fertilizer plants, etc. Suitable for welding of ASTM steels: Grade F5/ F5a & F21 of SA-182, Grade T4, T22 of SA-199, Grade T22 of SA-213, Grade C5 of SA-217, Grade P22 of SA-335, Grade F5 & F21 (class 1&3) of SA-336, Grade FP5, FP21 of SA-369, Grade 5, 21 & 21L of SA-387, Grade CP5, CP21 of SA-426, Class 4, 4a of E types of SA-542, etc.

TYPICAL CHEMICAL COMPOSITION OF SOLID WIRE:

Element	C	Mn	Si	S	P	Cr	Mo	Cu
%	0.06	0.50	0.40	0.010	0.012	5.20	0.55	0.10

TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL:

(PWHT: 745°C FOR 1 HR)

UTS (MPa)	YS (MPa)	Elongation (L=4d) %
600	520	25

WELDING PARAMETER: DC(+)

Diameter	Flat	
	Volt, V	Current, A
1.20 mm	27-32	300-360
1.60 mm	25-30	340-420

SHIELDING GAS: Argon/ 1-5% O₂

WELDING POSITION: H, F, VU, OH

PACKING:

STANDARD SIZE	1.2 mm & 1.6 mm.
QUANTITY	15.0 kg wire, layer wound in a plastic spool that conforms to DIN-8559 SD-300.