



AUTOTHERME Cr-Mo 2 (MOD)

CODIFICATION: **AWS :** SFA 5.28 ER90S-B3
 EN ISO : 21952-B-G 62 M13 2C1M

CHARACTERISTICS AND APPLICATIONS:

Autotherme Cr-Mo 2 (MOD) is a copper-coated solid wire for GMAW, available in bright finish, gives smooth flow, stable arc and spatter free under optimum welding conditions. This wire having lesser impurities i.e. S, P, will improve the subzero impact property. It gives radiographic quality welds. It is suitable for welding 2.25Cr - 1Mo steel. The weld metal possesses good high temperature properties. 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 F22 (class 1 & 3) of SA-182 and SA-336, Grade T4, T22 of SA-199, Grade T22 of SA-213, Grade WC9 of SA-217, Grade P22 of SA-335, Grade FP22 of SA-369, Grade 22, 22L of SA-387, Grade CP22 of SA-426, Grade 22 of SA-541, Class 1 of A, B types of SA-542, etc.

TYPICAL CHEMICAL COMPOSITION OF SOLID WIRE:

Element	C	Mn	Si	S	P	Cr	Mo	Cu	Sn	As	Sb
%	0.08	0.46	0.50	0.007	0.009	2.50	1.00	0.05	0.003	0.003	0.002

X-factor: $(10P + 5Sb + 4Sn + As) / 100 \leq 12$ ppm (elements in ppm)

J-factor: $(Mn + Si) \times (P + Sn) 10^4 \leq 120$

TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL:

(PWHT: 690°C FOR 1 HR)

UTS (MPa)	YS (MPa)	Elongation (L=5d) %	CVN Impact Strength At minus 20°C (Joules)
680	600	22	50

WELDING PARAMETER: DC(+)

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

SHIELDING GAS: Argon/ 1-5% O₂

WELDING POSITION: H, F, VU, OH

APPROVAL : CE

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.