



F Cr-Mo 1 (MOD)

CODIFICATION: AWS : SFA 5.28 ER80S-B2

CHARACTERISTICS AND APPLICATIONS:

F Cr-Mo 1 (MOD) is a copper-coated solid wire for GTAW, 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 1.25Cr - 0.5Mo steel. The weld metal possesses good high temperature properties. It deposits notch free weld deposit with excellent mechanical properties. Especially suitable for welding of pipes & tubes of matching composition in Power plants, Refineries, Petrochemicals, Fertilizer plants, etc. Suitable for welding of ASTM steels: Grade F2, F11, F12 class 1 & 2 of SA-182, Grade T11 of SA-199, Grade T2, T11 & T12 of SA-213, Grade WC6 of SA-217, Grade P2, P11 & P12 of SA-335, Grade FP2, FP11 & FP12 of SA-369, Grade 2, 11 & 12 of SA-387, Grade CP2, CP11 & CP12 of SA-426, etc.

TYPICAL CHEMICAL COMPOSITION OF SOLID WIRE:

Element	C	Mn	Si	S	P	Cr	Mo	Cu	Sn	As	Sb
%	0.08	0.50	0.45	0.007	0.009	1.30	0.50	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: 620°C FOR 1 HR)

UTS (MPa)	YS (MPa)	Elongation (L=4d) %	CVN Impact Strength at minus 20°C (Joules)
620	550	24	80

SHIELDING GAS: Argon

CURRENT CONDITION: DCEN

WELDING POSITION: H, F, VU, OH

PACKING:

STANDARD SIZE Diameter 1.6 mm, 2.0 mm, 2.4 mm & 3.2 mm in cut lengths of 500 mm / 1000 mm each.

QUANTITY 5 kg wire put in an air-tight polythene bag and finally packed in a plastic container.

Identification AWS code is punched on each wire.