

## F Cr-Mo 2 (MOD)

**CODIFICATION:**                      **AWS :**    SFA 5.28 ER90S-B3

### CHARACTERISTICS AND APPLICATIONS:

F Cr-Mo 2 (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 2.25Cr-1Mo 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 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=4d) %	CVN Impact Strength at minus 20°C (Joules)
680	600	22	50

**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.