

F Cr-Mo 91

CODIFICATION: **AWS :** SFA 5.28 ER90S-B9

CHARACTERISTICS AND APPLICATIONS:

F Cr-Mo 91 is copper-coated a solid wire for GTAW, yielding 9%Cr - 1%Mo and modified with Niobium, Vanadium and Nitrogen designed to provide improved creep strength, toughness, fatigue life, oxidation and corrosion resistance at elevated temperatures. The wire gives stable arc, smooth welding performance and deposits radiographic quality welds. F Cr-Mo 91 designed to weld the materials in power plant, refineries, naptha cracker units, etc. Following are some of the steels that can be welded with this wire.

I) Plate: A 387 Gr.91 (II) Pipes: A 335-P91 (III) Tubes: A 213 - T91

TYPICAL CHEMICAL COMPOSITION OF SOLID WIRE :

Element :	C	Mn	Si	P	S	Cr	Ni	Mo	V	Nb	N	Al	Cu
Percent :	0.11	0.95	0.25	0.007	0.008	9.35	0.35	1.0	0.2	0.03	0.04	0.02	0.10

TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL:

(PWHT: 760^oC FOR 2 HRS)

UTS	YS	Elongation
(MPa)	(MPa)	(L=4d) %
680	550	21

SHIELDING GAS: Argon

CURRENT CONDITIONS: DCEN

WELDING POSITION: H, F, VU, OH

APPROVALS: Adani Infra, CIB-MP, L&T Power, Reliance (SASAN Power)

PACKING:

STANDARD SIZE Diameter 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.