



AMA 1100R

AWS/ASME SFA-5.5
EN1599

E 9018-B9-H4 (E9018-B91-H4)
E CrMo 91B 42 H5

Application/properties:

Basic core wire alloyed electrode suited for high temperature martensitic 9%Cr-1%Mo-V-Nb-N steels, in turbine and boiler fabrication and in the chemical industry especially for T 91 and P91 steels and operating temperatures up to 650 °C . High creep ruptures strength and good toughness properties under long term stresses.

Weld metal analysis in % (typical values):

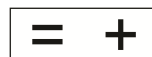
C	Mn	Si	Cr	Mo	Ni	S	P	V	Nb	N
0.09	0.85	0.2	9	1	0.45	< 0.01	< 0.01	0.2	0.06	0.04

Mechanical Properties of all-weld metal: (single values are typical values)

Heat treatment	Tensile Strength (N/mm ²)	Yield Strength (N/mm ²)	Elongation A5 (%)	Impact energy (J) ISO-V
				+20°C
T	>620	> 530	> 17	80

Tempered 2 hrs at 760°C, Air cooling

Welding Parameters		
Diameter (mm)	Length (mm)	Amperage (A)
2.5	250	60 - 90
3.25	350	90 - 130
4.0	350	140 - 180
5.0	450	170 - 230



Materials:

DIN Standard	1.4903 X10CrMoVNb9-1
ASTM Standard	ASTM A199 Gr. T91 ; A335 Gr .P91 (T91) ; A213/213M Gr. T91

Remarks:

- Just Consume Dry Electrode
- Redrying: required on 300°C to 350°C for 2 hours.