

ST-91B9

A213 T91(Seamless tube), A335 P91(Seamless pipe), A387 Gr91(Plate), A182/A336 F91(forging), A234 WP91

Conformances

AWS A5.28/ ASME SFA5.28 ER90S-B9
EN ISO 21952-A W CrMo91

Applications

- Headers, main steam piping and turbine casings

Features

- Good high temp. creep resistance
- In the PWHT condition the microstructure consists of tempered martensite with alloy carbides

Current

GTAW: DC -

Shielding Gas

Ar

Diameter / Packaging

Diameter	
mm (in)	5kg*1000
1.0 (0.039)	
1.2 (0.045)	
1.6 (1/16)	
2.0 (5/64)	
2.4 (3/32)	√
2.6 (0.10)	
3.2 (1/8)	

Typical Chemical Composition of the Wire(%)

C	Si	Mn	Cr	Ni	Mo	Shielding Gas
0.10	0.30	0.47	8.91	0.67	0.96	Ar

Typical Mechanical Properties of All-Weld Metal

	YS MPa(lbs/in ²)	TS MPa(lbs/in ²)	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft.lbs)
As welded with 100% Ar	746 (108,200)	830 (121,000)	21	0 (32) R.T	180 (133) 190 (137)