

ST-90B3R

Type : TIG

Conformances

AWS A5.28/ ASME SFA5.28 ER90S-B3

Applications

- High pressure pipe & Pressure vessels

Features

- Careful control of preheat, interpass temperatures, postheat is essential to avoid cracking.
- For welding 2.25Cr-1.0Mo steels for elevated temperatures and corrosive service
- X-factor value of wire is 10ppm or less

Welding Position

Current

GTAW: DC-

Shielding Gas

Ar

Diameter / Packaging

Diameter	Length mm(in)
mm (in)	5kg (11lbs)
2.0 (5/64)	✓
2.4 (3/32)	✓
3.2 (1/8)	✓

Typical Chemical Composition of the Wire (%)

C	Si	Mn	S	P	Cu	Ni	Cr
0.09	0.51	0.61	0.006	0.008	0.13	0.035	2.390
Mo	V	Al	Nb	Sb	Sn	As	X-Factor
0.94	0.003	0.002	0.004	0.001	0.002	0.003	9.6 ppm

Typical Mechanical Properties of All-Weld Metal

YS	TS	EL	Temp	CVN-Impact Value	PWHT
Mpa(lbs/in ²)	Mpa(lbs/in ²)	(%)	°C(°F)	J (ft.-lbs)	
549 (78,600)	641 (92,900)	21.5	20 (68)	197 (145)	690°C × 1hr