

ROYAL ER 90SB3 (ER 90SB3)

AWS –SFA A 5.28 ER 90SB3

Applications

These may also be used for joining combinations of Cr- Mo and carbon steel. All GMAW modes may be used. Special care must be used when using them in the as-welded condition due to higher strength levels

Characteristics on Usage

Filler Metals of this classification are used to weld the 2-1/4 Cr -1Mo steels used for high – temperature / high –pressure piping and pressure Vessels. Careful control of preheat, inter pass temperature and post weld heat treatment is essential to avoid cracking.

Chemical Composition Of Weld Metal

C%	Mn%	Si%	S%	P%	Cr %	Ni %	Mo
0.07 - 0.12	0.40 - 0.70	0.40 - 0.70	0.025 Max	0.025 Max	2.30 - 2.70	0.20 Max	0.90 -

Mechanical Properties Of Weld Metal

(After PWHT at 690 ± 15°C for 1 Hr soaking)

U.T.S. (N/mm ²)	Y.S. (N/mm ²)	ELONGATION (L = 4d) %
620 Min.	540 Min.	17 % Min.

Packing

Each Packets content 5 kg of Wire Rods having length 1000mm.