

ROYAL PRIME-91

AN ALL POSITION LOW-ALLOY FLUX-CORED
WELDING WIRE FOR 2CR-1.0MO STEEL

BASIC ALLOY: FE, MN, CR, MO
AWS/SFA-5.29: E91T1-B3 1C/1M
EN ISO 17632-B T57ZT1-1CA-G

KEY FEATURES:

ROFIL-91-B3 3 is specifically designed for welding materials subjected to high temperature service and provides single and multipass. all position welding of certain 2.25CR-1.0Mo steels. This is an all-position wire however when used for horizontal fillet joints the weld bead has equal leg lengths with flat faced fillets with fine ripples.

APPLICATIONS

- Welding for single or multi-pass welds on 2.25% Cr 1.0% Mo steels used for high pressure steam pipes of boilers,
- Power generation plant equipment, oil refining processing equipment, pressure vessels and castings of the same alloy content.

SHEILDING GAS

- Welding with CO₂ gas and Ar+ CO₂ gas mixture.

CHEMICAL COMPOSITION:

C	Mn	Si	S&P	Cr	Mo
0.05-0.12	1.25 Max.	0.80 Max.	0.030 Max	2.00-2.50	0.90-1.20

MECHANICAL PROPERTIES

YS (N/mm ²)	UTS (N/mm ²)	EL % (l=5d)
520 Min.	620 Min.	17 Min.

WELDING POSITION



DIEMENSION, CURRENT CONDITION & PACKING DATA

Size (mm)	Size (inch)	Current Condition (DC+)	Voltage (V)	Spool packing 12.5 kg.	Spool packing 15kg
1.20	3/ 64"	120-300	18-22	✓	✓
1.40	1/ 18"	160-340	18-22	✓	✓
1.60	1/ 16"	180-360	18-22	✓	✓
2.00	5/64"	200-380	18-22	✓	✓