

# ROYALFIL GS 90 D2 (E90T5-D2 C)

AWS A / SFA 5.29 E 90T5-D2 CEN ISO 18276 A T555MnMoBC3H5

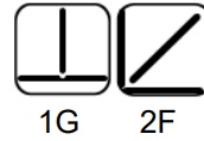
## Applications

Royalfil GS- 90 D2 is designed for welding of high strength, low alloy pressure vessels steel is such as A302 Gr. B, HSLA steels and Manganese- Molybdenum castings, such as ASTM A 49, A 291 and A 735 etc. to meet low temperature toughness as well as down to -50 °C.

## Characteristics on Usage

Royalfil GS-90 D2 is low alloy basic flux cored wire depositing 2.0 % Mn, 0.4 % Mo weld metal with CO<sub>2</sub> shielding. The weld deposit is of radiographic quality with very low diffusible hydrogen and stable and smooth arc with good slag detachability. However, the weld metal from these Mn-Mo steel electrodes is quite air-hardenable and usually requires preheat and PWHT.

## Welding Positions



## Recommended Stick Out

15-20mm

## OutShielding Gas

Carbon Dioxide (CO<sub>2</sub>) shielding  
Gas Flow: 15-20 Lit/Min.

## Chemical Composition Of Weld Metal

C%	Mn%	Si%	S%	P%
0.15 Max	1.65-2.25	0.80 Max	0.030 Max	0.030 Max
Ni%				
0.25-0.55				

## Mechanical Properties Of Weld Metal

U.T.S. (N/mm <sup>2</sup> )	Y.S. (N/mm <sup>2</sup> )	ELONGATION ( L = 4d ) %	MPACT(CVN) AT -20 °C ( J )
620-760	540-610 Min	17-22 Min	27-50 Min

## Welding Parameters (DC + VE)

Diameter (mm)	Flat & Horizontal (A)	Flat & Horizontal (V)
1.20	180-250	26-30
1.60	210-280	26-30

## Packing

15 kgs. Vacuum packed plastic spool