

**ROYALFIL GS 100 D2 (E 100T5-D2C)**

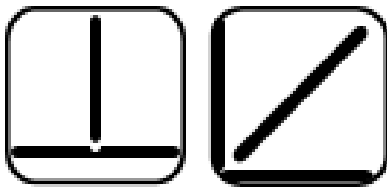
AWS A / SFA 5.29 E 100 T5-D2C

**Applications**

Royalfil GS- 100 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 – 40 Deg c.

**Characteristics on Usage**

Royalfil GS-100 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**

1G

2F

**Chemical Composition Of Weld Metal**

Element	C%	Mn%	Si%	S%	P%	Mo %
Typical Values	0.065	2.0	0.50	0.01	0.018	0.40
Spec. Reqd.	0.15 Max	1.65-2.25	0.80 Max	0.03 Max	0.03 Max	0.25-0.55

**Mechanical Properties Of Weld Metal**

Property	U.T.S. (N/mm <sup>2</sup> )	Y.S. (N/mm <sup>2</sup> )	ELONGATION ( L = 4d ) %	IMPACT (CVN) AT -40 °C ( J )
Typical Values	750	660	20	60
Spec Reqd.	690-830	610 Min	16 Min	27 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.