

**ROYALFIL GS 80 B6 (E80T1-B6 C)**

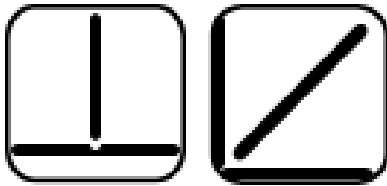
AWS A / SFA 5.29 E 80T1-B6 C

**Applications**

Royalfil GS-80B6 is used for welding of similar composition of Cr – Mo steel and other creep resistance steel. It is also used for welding of high temp. & Pipe steel for oil refineries, power plant, chemicals plant, fertilizers Industries. Materials to be welded are plate ASTM A387 Grade 9, Pipe / Tube ASTM A 335 Grade 9, ASTM A234 Grade WP9 (fittings), ASTM A199 GradeT9, Forgings ASTM A182 Grade F9, ASTM A336 Grade F9, Cast ASTM A 217 GradeC12

**Characteristics on Usage**

Royalfil GS-80B6 is flat and horizontal position low alloy Rutile base flux cored wire depositing approx 5% Cr, 0.50% Mo weld metal with CO2 shielding. The slag coverage is complete easily removable. The weld metal is radiographic quality and has creep resistance up to 650°C

**Welding Positions**

1G

2F

**Chemical Composition Of Weld Metal**

Element	C%	Mn%	Si%	S%	P%	Cr %	Mo
Typical Values	0.060	0.60	0.50	0.010	0.018	5.0	0.5
Spec. reqd.	0.05-0.12	1.25 Max	1.00 Max	0.030 Max	0.040 Max	4.0-6.0	0.40 -

**Mechanical Properties Of Weld Metal**

(After PWHT at 745 ± 15°C for 2 Hrs)

Property	U.T.S. (N/mm <sup>2</sup> )	Y.S. (N/mm <sup>2</sup> )	ELONGATION ( L = 4d ) %
Typical Values	620	530	24
Spec. reqd.	550-690	470 Min	19 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.