

**ROYALFIL GS 80 M (E80C-GM)**

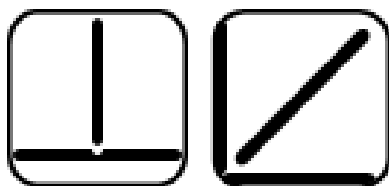
AWS A / SFA 5.28 E80C-GM

**Applications**

Intended for single & multiple pass applications. Used for welding of medium & high tensile low alloy steel with (80 %Ar - 20% CO<sub>2</sub>). It can be used on 1.25 Cr. & 0.5 Mo steels. Recommended for welding of steam boiler plates and high temperature steels.

**Characteristics on Usage**

ROYALFIL GS-80M is a low alloy steel metal cored welding wire. It gives low spatter, higher deposition rate, and good penetration & generates less fumes. Faster travel speeds are achievable than with solid wire, thus increasing productivity.

**Welding Positions**

1G

2F

**Chemical Composition Of Weld Metal**

Element	C%	Mn%	Si%	S%	P%	Cr %	Mo %
Typical Values	0.050	1.20	0.50	0.007	0.017	1.25	0.005
Spec. Req'd.	0.10 Max	1.00-1.50	0.3-0.6	0.030 Max	0.030 Max	1.0-1.50	0.4-0.05

**Mechanical Properties Of Weld Metal**

(After PWHT at 620°C for 1 Hr)

Property	U.T.S. (N/mm <sup>2</sup> )	Y.S. (N/mm <sup>2</sup> )	ELONGATION ( L = 4d ) %	IMPACT ( CVN ) AT 0° C
Typical Values	630	540	24	90
Specific req'd.	550 Min	470 Min	19 Min	47 Min

**Welding Parameters (DC + VE)**

Diameter (mm)	Flat & Horizontal (A)	Flat & Horizontal (V)
1.20	180-250	28-34
1.60	200-300	28-34

**Packing**

15 Kgs. vacuum packed plastic spool.