

GRIDUCT B2L

IDENTIFICATION

Griduct B2L, E 7018-B2L

CLASSIFICATION

AWS A5.5: E 7018 B2L IS 1395: E 55B- B2L26Fe
BS 2493 1Cr MoLBH DIN 8575-84 ECrMo1B20+

DESCRIPTION

A heavy coated, basic type, low hydrogen all-position, except vertical down, electrode, which deposits 1.25% Cr/ 0.5% Mo weld metal. The electrode is synthetic type and is intended for welding creep resisting steels of similar composition, used in power generating plant operating at temperatures upto 570°C. The welds are of X-ray quality.

WELD METAL ANALYSIS (RANGE) %

C	Mn	Si	S	P	Cr	Mo	Sn
0.050 max	0.5 - 0.9	0.2 - 0.6	0.015 max	0.012 max	1.0 - 1.5	0.4 - 0.65	0.015 max

MECHANICAL PROPERTIES (RANGE)

UTS (MPa)	YS (MPa)	EL (%) (L=4D)	CVN Impact Value	
			Temp	Joules
530 - 650	425 - 580	19 - 26	-20°C	40 min

TYPICAL APPLICATIONS

- ASTM A 335 grades P11 and P12 ASTM A 155 grades ½ C, 1 Cr, 1 ¼ Cr, A182F11, DIN 13 CrMo44, GS-17CrMo55, BS 3604 grades 620 and 621.
- Ideal for welding Chromium-Molybdenum alloy steels (0.5 Cr-0.5 Mo, 1cr-0.5 Mo, 1.25 Cr-0.5 Mo), boilers, pressure vessels, headers, high pressure piping, heat exchangers and condensers, power generation, oil refineries, petrochemical industries.

WELDING PROCEDURE

Use short arc length. Weaving of electrodes, if necessary should be done at slow speed and keeping a short arc. The electrodes should be used in perfectly dry condition

ASME QUALIFICATION : QW-432 F.NO4, QW-442 A NO.4

RECOMMENDED REDRYING : 300°C / 2 hrs, (max 5 times, and total 10 hrs max)

MOISTURE IN THE FLUX COATING : 0.3% by weight, maximum

DIFFUSIBLE HYDROGEN CONTENT IN THE WELD METAL : Max 5 ml / 100g. of weld metal

RECOMMENDED PREHEATING & INTERPASS TEMPRATURE : 165°C-190°C

MICROSTRUCTURE : After PWHT, the microstructure consists of tempered bainite.

WELDING POSITION :



PACKING PARAMETERS

Size (mm)	Length (mm)	Amps AC (70V) / DC (+)	Packing / Box (kg)	Packing / Box (Pcs)
2.5	350	60 - 80	5 x 4 = 20	160 x 4 = 640
3.15 / 3.20	450	90 - 130	5 x 4 = 20	110 x 4 = 440
4	450	140 - 190	5 x 4 = 20	70 x 4 = 280
5	450	190 - 250	5 x 4 = 20	45 x 4 = 180