

GRIDUCT B3L

IDENTIFICATION

Griduct B3L, E 8018-B3L

CLASSIFICATION

AWS/SFA 5.5: E 8018 B3L, BS 2493:2Cr MoLBH,
DIN 8575-84 ECrMo2B26

DESCRIPTION

A basic coated low hydrogen electrode which deposits extra low carbon 2.25Cr% / 1.0Mo% weld metal. It is intended for welding creep resisting steels of similar composition, used in power generating plant operating at temperatures upto 600°C. The welds are of X-ray quality.

WELD METAL ANALYSIS (RANGE) %

C	Mn	Si	S	P	Cr	Mo
0.05 max	0.5 - 0.9	0.2 - 0.6	0.025 max	0.03 max	2.0 - 2.5	0.9 - 1.2

MECHANICAL PROPERTIES (RANGE)

UTS (MPa)	YS (MPa)	EL (%) (L=4D)	CVN Impact Value	
			Temp	Joules
550 - 650	460 - 580	17 - 25	0°C	30 - 90

TYPICAL APPLICATIONS

ASTM A 335 grade P22 ASTM A199, A200 T3b, T4, T21, T22, A213 T22, A181 F22, boilers, pressure vessels, headers, high pressure piping, heat exchangers and condensers, power generation, oil refineries, petrochemical industries, valve bodies, super heaters hydrocrackers, coal liquification plant.

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 dried 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)

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

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