

GRIDUCT B3L



IDENTIFICATION : GRIDUCT B3L E8018 B3L

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

CHARACTERISTICS :

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.

TYPICAL APPLICATION:

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, superheaters 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, 5 times, 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.

WELD METAL ANALYSIS (RANGE) %:

C	Mn	Si	S	P	Cr	Mo
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0.050 max	0.5-0.9	0.2-0.6	0.025 max	0.03 max	2.0-2.50	0.90-1.20
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MECHANICAL PROPERTIES OF THE WELD METAL AFTER PWHT 690°C/1 HR :

Ultimate Tensile Strength MPa	Yield Stress MPa	Elongation (%) (L=4D)	Charpy Vnotch Impact Value Joules	
			Temp	Joules.
550-650	460-580	17-25	0°C	30-90

RECOMMENDED CURRENT AND PACKING DATA :

SIZE mm	LENGTH mm	AMPS AC(70V) DC(+)	Packing per box	WEIGHT 1000Pcs,kg
2.5	350	60-80	160x4=640	18.9
3.15	450	90-130	110x4=440	41.6
4.0	450	140-190	70x4=280	67.2
5.0	450	190-250	45x4=180	100.0