GWELD
SEAL OF TRUST

GRIDUCT 88D3

IDENTIFICATION
Griduct 88D3, E 8018-D3

CLASSIFICATION
AWS/SFA 5.5: E 8018D3,
DIN 8556 ESY 5564 MnMoB BS: 2493: Mn MoBH

DESCRIPTION
A basic coated hydrogen controlled electrode of high strength, low alloy steels. It deposits 1.4% Mn-0.4% Mo weld metal which provides increased strength which ensures conformance to NACE requirements and high impact strength at subzero temperature. The deposited weld metal is of X-ray quality. Deposited weld metal has resistance to sulphide induced stress corrosion cracking in sour service and satisfy NACE MR-01-75 requirements.

WELD METAL ANALYSIS (RANGE) %

C	Mn	Si	S	P	Ni	Mo
0.05 - 0.12	1.0 - 1.80	0.20 - 0.70	0.015 max	0.020 max	0.90 max	0.40 - 0.65

MECHANICAL PROPERTIES (RANGE) PWHT 620± 14oC / 1 hr.

UTS (MPa)	PS (MPa)	EL (%) (L=4D)	CVN Impact Value	
			Temp	Joules
560 - 670	460 - 560	20 - 28	-30°C	48 - 100
			-51°C	30 - 70

TYPICAL APPLICATIONS
- For welding low alloy steel AISI 4130, 4140 for the repair and fabrication of manganese molybdenum castings.
- Pressure vessels, forgings, castings,
- ASTM A 302 Grade B, ASTM A 336 Grade F30
- ASTM A 487 Class I N, I Q, 2N, 2Q, En 19
- For offshore oil head process pipework and fittings.

HARDNESS OF THE WELD METAL : 225 BRINELL MAX.
ASME QUALIFICATION : QW 432 F NO: 4, QW 442 A NO : 11
MICROSTRUCTURE : In SR Condition, Microstructure consists of Tempered Bainite.
RECOMMENDED PREHEATING & INTERPASS TEMPRATURE : 93°C - 107°C
PWHT : The PWHT requirements will depend on a number of factors including, base material, property requirements, and need to conform to NACE etc. Temperatures will normally be about 620°C.

WELDING POSITION :

PACKING PARAMETERS

Size (mm)	Length (mm)	Amps AC / DC (+)	Packing / Box (kg)	Packing / Box (Pcs)
2.5	350	60 - 95	5 x 4 = 20	160 x 4 = 640
3.15 / 3.20	450	80 - 120	5 x 4 = 20	110 x 4 = 440
4	450	130 - 180	5 x 4 = 20	70 x 4 = 280
5	450	160 - 220	5 x 4 = 20	45 x 4 = 180