

GRIDUCT 2

IDENTIFICATION

Griduct 2, E 7018-A1

CLASSIFICATION

AWS/SFA 5.5: E7018-A1, BS 2493MoBH, DIN 8557 EMoB26

DESCRIPTION

Hydrogen controlled, medium-heavy coated basic type all position electrode depositing about 0.5% molybdenum in the weld metal. It is primarily intended for welding similar composition steels used where creep rupture strength and ductility at service temperature upto 550°C are required. The Mo content enhances resistance to hydrogen attack in chemical process plant operation. The deposited weld metal meets x-ray / radiographic code requirements.

WELD METAL ANALYSIS (RANGE) %

C	Mn	Si	S	P	Mo
0.12 max	0.50 - 0.90	0.20 - 0.60	0.025 max	0.030 max	0.40 - 0.65

MECHANICAL PROPERTIES (RANGE)

UTS (MPa)	YS (MPa)	EL (%) (L=4D)	CVN Impact Value	
			Temp	Joules
500 min	400 min	25 min	27±2°C	80 - 180
			0°C	70 - 150
			-20°C	50 - 120

TYPICAL APPLICATIONS

- ASTM A 336 F1, A 204 A,B,C
- DIN 15Mo3 (1.5415)
- ASTM A 217 WC1, A 352 LC1
- BS 3059 Grade 243
- ASTM A 335 Grade P 1
- C-Mn steel where higher tensile strength is required.
- Chemical process plant.

REDRYING TEMPERATURE FOR ELECTRODES : 300°C / 2hrs

MONOSTRUCTURE : In the stress relived condition, microstructure consists of tempered bainite.

ASME IX QUALIFICATION : QW 432 F - NO 4, QW 442 A - NO 11

WELDING POSITION :



PACKING PARAMETERS

GWELD

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	350 / 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