

# GRIDUCT 700

## IDENTIFICATION

Griduct 700, E 12018-G H4

## CLASSIFICATION

AWS/SFA 5.5 : E 12018G-H4

E69Mn2NiCrMoH3

## DESCRIPTION

Heavy coated Hydrogen controlled Low-alloy, High Tensile Electrode. The electrode works in all position and deposits weld metal of radiographic quality. The weld metal is of extremely high metallurgical purity is ageing-resistant, retaining good weld metal toughness down to -40°C.

## WELD METAL ANALYSIS (RANGE) %

C	Mn	Si	S	P	Ni	Cr	Mo	V	Nb
0.05 - 0.08	1.45 - 1.90	0.30 - 0.60	0.015 max	0.02 max	1.65 - 1.95	0.30 - 0.60	0.30 - 0.60	0.05 max	0.05 max

## MECHANICAL PROPERTIES (RANGE)

TS (MPa)	YS (MPa)	EL (%) (L=5D)	CVN Impact Value	
			Temp	Joules
780 min	700 min	17 min	-40°C	47 min

## TYPICAL APPLICATIONS

- Penstock, earth moving equipments and heavy steel Fabrications made from high tensile steel.
- For welding USS -T1 steel, WEL -TEN 80 steels, SA 517 grade F and their equivalents. Specially recommended for welding ASTM AS17 Gr F Q&T steel.
- Excellent for welding fully killed fine grained steels.

## 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. The electrodes should be dried at 400° C for 1 hour to obtain better result. Maintain interpass temperature below 120° C.

**DIFFUSIBLE HYDROGEN CONTENT** : 4.0ml / 100g max of deposited weld metal

## WELDING POSITION :



## PACKING PARAMETERS

Size (mm)	Length (mm)	Amps AC (90V) / 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	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 - 240	5 x 4 = 20	45 x 4 = 180