

# GRIDUCT 9

## IDENTIFICATION

Griduct 9, E 9018-G

## CLASSIFICATION

AWS/SFA 5.5: E9018G / E9018G-H4R

DIN 8529: ESY 5576 Mn1 Ni Mo BH5

## DESCRIPTION

A heavy coated hydrogen controlled iron powder electrode for welding high tensile steel. Weldable in all positions, except vertical down. Striking and restricting properties are good with little spatter and easy to remove slag. Deposited weld metal is tough, crack free and is of radiographic quality.

## WELD METAL ANALYSIS (RANGE) %

C	Mn	Si	S	P	Ni	Mo
0.09 max	1.0 - 1.60	0.2 - 0.55	0.025 max	0.03 max	1.0 - 1.6	0.20 - 0.40

## MECHANICAL PROPERTIES (RANGE)

UTS (MPa)	YS (MPa)	EL (%) (L=4D)	CVN Impact Value	
			Temp	Joules
630 min	540 min	22 min	-50°C	30 min

## TYPICAL APPLICATIONS

- Ideal for welding high tensile low alloy with UTS upto 70 Kgf/mm<sup>2</sup>, fine grained, Q&T steels.
- Also used for fabrication of penstocks, tanks, pressure vessels, etc.
- DIN Steel 17Mn Mo64
- St E 355 to St E 500
- 15NiCuMoNb5, 11NiMoV53
- 20 MnMo Ni 45

## NOTE

Griduct 9 with H4R suffix comes in vacuum pack and will confine maximum 4 ml/100 gram diffusible hydrogen content in the weld metal.

## WELDING PROCEDURE:

Use short arc length and stringer bead. Redry the electrodes at 300°C for two hours.

## WELDING POSITION :



## PACKING PARAMETERS

Size (mm)	Length (mm)	Amps AC (90V) / DC (+)	Packing / Box (kg)	Packing / Box (Pcs)

2.5	350	60 - 85	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