

# GRIDUCT 5

## IDENTIFICATION

Griduct 5, E 7018-G

## CLASSIFICATION

AWS/SFA 5.5: E7018G

## DESCRIPTION

A heavy coated basic type, hydrogen-controlled, iron powder electrode with high deposition efficiency. The electrode deposits weld metal having about 0.60% nickel and are of radiographic quality and meets impact requirements at -50° C.

The weld deposit is tough, ductile and is highly resistant to hot or cold cracking even when subjected to high stresses, dynamic loading etc.

## WELD METAL ANALYSIS (RANGE) %

C	Mn	Si	S	P	Ni
0.10 max	1.0 - 1.60	0.55 max	0.025 max	0.03 max	0.40 - 0.80

## MECHANICAL PROPERTIES (RANGE)

UTS (MPa)	YS (MPa)	EL (%) (L=4D)	CVN Impact Value	
500 - 600	440 - 540	24 - 30	Temp	Joules
			-50°C	30 - 80

## TYPICAL APPLICATIONS

- For the welding of structural steel where resistance to brittle fracture is required under adverse operating conditions such as those found in off-shore production platforms.
- Used for production of pressure vessels, bridges, pipelines
- Recommended for higher carbon & higher Sulphur steels, which are susceptible to hydrogen induced cracking.
- For welding SAILMA 350HI steel, storage tanks, pipe line etc.

**REDRYING TEMPERATURE :** 250°C / 2 hrs

**DIFFUSIBLE HYDROGEN :** max 5.0ml/100g of weld metal in the weld metal

**ASME IX QUALIFICATION :** QW 432 F - NO 4, QW 442 A - NO 1

## WELDING POSITION :



## PACKING PARAMETERS

Size (mm)	Length (mm)	Amps AC (90V) / DC (+)	Packing / Box (kg)	Packing / Box (Pcs)
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2.5	350	65 - 85	$5 \times 4 = 20$	$160 \times 4 = 640$
3.15 / 3.20	450	110 - 140	$5 \times 4 = 20$	$110 \times 4 = 440$
4	450	140 - 180	$5 \times 4 = 20$	$70 \times 4 = 280$
5	450	180 - 240	$5 \times 4 = 20$	$45 \times 4 = 180$