

# GRIDUCT 9P2

## IDENTIFICATION

Griduct 9P2, E 9018-G

## CLASSIFICATION

AWS/SFA 5.5: E 9018G

## DESCRIPTION

A basic type hydrogen controlled iron powder electrode specially designed for welding of hot filler and capping passes of high strength pipe butt joints in vertical position. Deposited weld metal is tough, crack free and is of radiographic quality. The low hydrogen nature of the flux coating makes the electrode especially suited for joining crack - sensitive high strength pipes.

## WELD METAL ANALYSIS (RANGE) %

C	Mn	Si	S	P	Ni	Mo	Cr	V
0.09 max	0.9 - 1.60	0.20 - 0.55	0.012 max	0.015 max	0.7 - 1.0	0.20 - 0.45	0.20 max	0.05 max

## MECHANICAL PROPERTIES (RANGE)

TS (MPa)	YS (MPa)	EL (%) (L=4D)	CVN Impact Value	
625 - 740	550 - 660	18 - 26	Temp	Joules
			-60°C	50 - 100

## TYPICAL APPLICATIONS

- Welding of pipeline steel grade API - 5L, Grade X - 70, 75, 80
- Welding of higher strength steel structure where post-weld heat-treatment is impracticable.
- Off-shore construction, pressure vessels, pipe lines, BS4360 Grade 50E, 55C, 55EF structural steel, DIN St52.3, GS-38, GS-52, etc. For welding WB 36 Steel.

## WELDING PROCEDURE:

Use short arc length and stringer bead.

Re-dry the electrodes at 300° C for two hours.

**DIFFUSIBLE HYDROGEN CONTENT IN THE WELD METAL :** Max 5ml / 100g of weld metal.

**REDRYING TEMPERATURE :** 360°C / 1 to 2 hrs

## WELDING POSITION :



## PACKING PARAMETERS

Size (mm)	Length (mm)	Amps AC (90V) / DC (+)	Packing / Box (kg)	Packing / Box (Pcs)
2.5	350	60 - 90	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