

# GRIDUCT 98B9

## IDENTIFICATION

Griduct 98B9, E 9018-B9

## CLASSIFICATION

AWS /SFA 5.5: E 9018-B9

## DESCRIPTION

Non-synthetic Hydrogen controlled, heavy coated basic type electrode depositing 9Cr-1Mo-0.2V-N-Nb alloyed weld metal.

Deposited weld metal has excellent creep strength, toughness and fatigue life and oxidation and corrosion resistance at elevated temperature upto 620°C.

## WELD METAL ANALYSIS (RANGE) %

C	Mn	Si	S	Ni	P	Cr	Mo	V	Nb	N	Al	Cu
0.08 - 0.12	0.4 - 0.12	0.2 - 0.30	0.01 max	0.8 max	0.01 max	8.0 - 10.5	0.9 - 1.20	0.15 - 0.25	0.02 - 0.07	0.02 - 0.07	0.02 max	0.04 max

## MECHANICAL PROPERTIES (RANGE) PWHT 755±50C/2hrs.

UTS (MPa)	PS (MPa)	EL (%) (L=4D)	CVN Impact Value	
			Temp	Joules
630 - 740	530 - 620	17 - 24	20°C	47 min

## TYPICAL APPLICATIONS

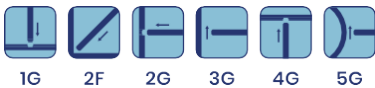
- For welding of P91, T-91 material-pipes, tubes etc.

**MICROSTRUCTURE :** In PWHT condition, the microstructure consists of tempered martensite.

**REDRYING TEMPERATURE FOR ELECTRODES :** 350°C / 2 hrs

**HARDNESS OF THE WELD METAL AFTER PWHT :** 260 VPN max.

## WELDING POSITION :



## PACKING PARAMETERS

Size (mm)	Length (mm)	Amps AC (70 OCV / 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 - 140	5 x 4 = 20	110 x 4 = 440
4	450	130 - 180	5 x 4 = 20	70 x 4 = 280
5	450	160 - 220	5 x 4 = 20	45 x 4 = 180