

# GRIDUCT 96B3

## IDENTIFICATION

Griduct 96B3, E 9016-B3

## CLASSIFICATION

AWS /SFA 5.5: E9016B3

## DESCRIPTION

Hydrogen controlled, heavy coated, basic type electrode depositing a low carbon 2.25% Cr / 1.0 Mo weld metal. It is intended for welding creep resisting steels of similar composition used in steam generation plant operating at temperature upto 600°C. The weld deposit meets x-ray / radiographic quality requirements.

## WELD METAL ANALYSIS (RANGE) %

C	Mn	Si	S	P	Cr	Mo
0.05 - 0.12	0.4 - 0.9	0.2 - 0.6	0.025 max	0.03 max	2.0 - 2.50	0.90 - 1.25

## MECHANICAL PROPERTIES (RANGE)

UTS (MPa)	YS (MPa)	EL (%) (L=4D)	CVN Impact Value	
			Temp	Joules
620 - 740	530 - 620	17 - 24	27 ± 2°C	40 - 90

## TYPICAL APPLICATIONS

- ASTM A 199, A 200,
- A 213 Grade T22, T36 & T4
- A 182 F 22
- A 387 Grade D
- A 217 WC9
- A 335 Grade P 22
- Chemical and Petrochemical industries where resistance to hydrogen attack, corrosion from sulphur bearing crude oil and stress corrosion cracking in sour atmosphere is required.

**REDRYING TEMPERATURE FOR ELECTRODES :** 300°C / 1 hr

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

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

## WELDING POSITION :



## PACKING PARAMETERS

Size (mm)	Length (mm)	Amps AC (70V) / DC (+)	Packing / Box (kg)	Packing / Box (Pcs)

	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