

GRIDUCT 98G



IDENTIFICATION : GRIDUCT-98G E9018G

CLASSIFICATION : AWS/SFA 5.5 : E 9018 G DIN 8529 ESY 42761 NiBH5

CHARACTERISTICS :

A basic coated, low hydrogen electrode depositing tough and crack free weld metal. The electrode has a very good operability in all positions except vertical down. The weld metal meets X-ray quality requirements.

TYPICAL APPLICATIONS :

For welding high tensile steels used for pressure vessels and other applications where high strength must be maintained after extended PWHT cycles such as normalizing and stress relieving. A516 grade 70 steel subjected to normalizing and stress relieving cycles ASTM A508 class 1, 1a, 2, 3. ASTM A533 Type A-D class 1 and 2, etc. SAILMA 450HI, micro-alloyed steel.

ASME IX QUALIFICATION : QW 432 F NO. 4, QW 442 A NO. 10

MICROSTRUCTURE : In the PWHT condition, the microstructure consists mainly of tempered high strength bainite.

DIFFUSIBLE HYDROGEN CONTENT : 4 ml/100 g. max

WELD METAL ANALYSIS (RANGE) %:

C	Mn	Si	S	Ni	Mo	P	Cu
0.09 max	1.0-1.5	0.20-0.45	0.02 max	0.8-1.45	0.3-0.50	0.025 max	0.10 max

MECHANICAL PROPERTIES (RANGE):

PWHT	Tensile Strength MPa	Yield Strength MPa	Elongation % (L=4D)	Charpy V-notch impact strength in joules	
				Temp	Joule
As welded	620-780	550 min	20 min	-40°C	60-120
Normalizing 900°C/2 hrs + SR 610°C/3 hrs	520-600	450-540	22-32	-40°C	50-100

CURRENT CONDITION AND PACKING SPECIFICATION :

SIZE (mm)	LENGTH (mm)	AMPS AC/DC (+)	PACKING PER BOX	WEIGHT 1000 Pcs
2.50	350	60-100	160X4=640	19.0
3.15	450	80-130	110X4=440	42.0
4.00	450	130-180	70X4=280	67.00
5.00	450	160-220	45 X 4=180	104.0