

## NIMROD 617KS

MMA (SMAW)

## 617 MMA ELECTRODE FOR HIGH TEMPERATURE APPLICATIONS

## PRODUCT DESCRIPTION

Special basic flux on matching nickel alloy core wire. The chromium range of the weld metal is higher than the parent material to maintain oxidation resistance at a lower aluminium level.

The electrode is optimised for DC+ welding in all positions including fixed pipework qualified in the ASME 5G/6G positions.

Recovery is about 105% with respect to core wire, 65% with respect to whole electrode.

## CLASSIFICATIONS

AWS A5.11M ENiCrCoMo-1  
ISO 14172 E Ni 6117

## ASME IX QUALIFICATION

QW432 F-No 43

## WELDING POSITIONS (ISO/ASME)



PA/1G



PB/2F



PC/2G



PF/3Gu



PE/4G

## CHEMICAL COMPOSITION (WELD METAL WT %)

	C	Mn	Si	S	P	Cr	Ni	Co	Mo	Nb	Cu	Fe	Al	Ti
min.	0.05	0.3	--	--	--	21.0	45.0	9.0	8.0	--	--	--	--	--
max.	0.15	2.5	0.75	0.015	0.020	26.0	bal	15.0	10.0	1.0	0.50	5.0	1.5	0.6
Typical	0.07	1.0	0.4	0.003	<0.01	24	52	12	9	<0.5	0.05	1	0.15	0.2

## ALL-WELD MECHANICAL PROPERTIES

As welded	Min.	Typical
Tensile strength (MPa)	700	760
0.2% proof strength (MPa)	400	520
Elongation (%) 4d	25	43
5d	25	40
Reduction of area (%)	--	40
Impact ISO-V(J) +20°C	--	70
Hardness, cap/mid (HV)	--	230/245

## OPERATING PARAMETERS, DC +VE

Diameter (mm)	2.5	3.2	4.0
min. A	60	75	100
max. A	80	110	155

## PACKAGING DATA

	Diameter (mm)	Length (mm)	Item number	No of pieces		Weight (kg)	
				can	box	can	box
METAL CAN	2.5	300	NIM617KS-25	246	738	4.0	12.0
	3.2	350	NIM617KS-32	153	459	5.0	15.0
	4.0	350	NIM617KS-40	91	273	5.0	15.0

Redrying : 200 – 300°C/1-2h to restore to as-packed condition. Maximum 350° C, 3 cycles, 10h total.

## FUME DATA (WT % TYPICAL)

Fe	Mn	Ni	Co	Cr <sup>6</sup>	Mo	Cu	F	OES (mg/m <sup>3</sup> )
1	4	9	2.5	6	1	0.2	20	0.8

All information in this data sheet is accurate to the best of our knowledge at the time of printing. Please refer to [www.specialalloys.eu](http://www.specialalloys.eu) for any updated information.