

NIMROD 625

DOWNHAND MMA ELECTRODE FOR SURFACING

PRODUCT DESCRIPTION

MMA electrode designed to combine easy operation with the deposition of high quality weld metal and a finished bead of good appearance. The electrode has a basic-rutile flux system and is made on a nickel core wire.

Nimrod 625 operates on AC or DC+ and is designed primarily for the downhand/flat or H-V positions.

Optimised for surfacing and overlays, for joining Nimrod 625KS is preferred.

Recovery is about 170% with respect to core wire, 65% with respect to whole electrode.

SPECIFICATIONS

AWS A5.11M	ENiCrMo-3
BS EN ISO 14172	E Ni 6 625

ASME IX QUALIFICATION

QW432 F-No 43

WELDING POSITIONS (ISO/ASME)



PA/1G



PB/2F



PC/2G

CHEMICAL COMPOSITION (WELD METAL WT %)

	C	Mn	Si	S	P	Cr	Ni	Nb	Fe	Mo	Cu
Min.	--	0.5	--	--	--	20.0	55	3.15	--	8.0	--
Max.	0.10	1.0	0.75	0.015	0.020	23.0	--	4.15	2.5	10.0	0.50
Typical	0.04	0.8	0.7	0.005	0.008	21.5	64	3.4	<1.5	9	0.05

ALL-WELD MECHANICAL PROPERTIES

As welded	Min. *	Typical
Tensile strength (MPa)	760	800
0.2% proof strength (MPa)	420	480
Elongation (%) 4d	30	34
5d	27	32
Reduction of area (%)	--	30
Impact ISO-V[J] -196°C	--	>28
Hardness (HV) as welded	--	250
work-hardened	--	450

* Cannot meet TS > 827MPa required by cold rolled ASTM N06625 Grade 1, but meets PS > 414MPa and properties of hot rolled grades. Cast CW-6MC solution annealed 1175°C + WQ requires TS > 485MPa.

TYPICAL OPERATING PARAMETERS, DC +VE OR AC (OCV: 70V)

Diameter (mm)	3.2	4.0	5.0
min. A	90	130	160
max. A	155	210	260

PACKAGING DATA

Diameter (mm)	3.2	4.0	5.0
Length (mm)	300	350	350
kg/carton	13.8	13.5	16.8
Pieces/carton	243	156	93

STORAGE

3 hermetically sealed ring-pull metal tins per carton, with unlimited shelf life.

Direct use from tin is satisfactory for longer than a working shift of 8h.

Excessive exposure of electrodes to humid conditions will cause some moisture pick-up and increase the risk of porosity.

For electrodes that have been exposed:

Redry 200 – 250°C/1-2h to restore to as-packed condition. Maximum 350° C, 3 cycles, 10h total.

Storage of redried electrodes at 50 – 200°C in holding oven or heated quiver: no limit, but maximum 6 weeks recommended.

Recommended ambient storage conditions for opened tins (using plastic lid): < 60% RH, > 18°C.

FUME DATA

Fume composition, wt % typical

Fe	Mn	Ni	Cr	Mo	Cu	F	OES (mg/m ³)
1	4	9	6	1	0.1	20	0.8