

Nimrod® 625KS (NICRO 60/20)

TOP FEATURES

- Designed to combine easy operation with the deposition of high quality, radiographically sound weld metal and a finished bead of good appearance.
- Optimised for DC+ welding in all positions including pipework qualified in the ASME 6G position.
- Recovery is about 120%

TYPICAL APPLICATIONS

- Furnace equipment, petrochemical and power generation plants.
- Overlays on pumps, valves and shafts, in offshore and marine environments
- Cryogenic 9% nickel steels

CLASSIFICATION

AWS A5.11	ENiCrMo-3
EN ISO 14172-A	E Ni 6625

CURRENT TYPE

DC+

WELDING POSITIONS

All except vertical down

APPROVALS

TÜV	DNV
+	+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL, ALL WELD METAL

	C	Mn	Si	S	P	Cr	Ni	Nb	Fe	Mo	Cu
Min.	not specified	0.5	not specified	not specified	not specified	20.0	55	3.15	not specified	8.0	not specified
Max.	0.10	1.0	0.75	0.015	0.020	23.0	not specified	4.15	2.5	10.0	0.50
Typical	0.04	0.7	0.4	0.005	0.005	22	63	3.2	< 1.5	9.3	0.01

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Typical values as welded		Min. *	RT	+160°C
Tensile strength	(MPa)	760	800	725
0.2% Proof strength	(MPa)	420	500	440
Elongation (%)	4d	30	40	33
	5d	27	38	31
Reduction of area (%)		not specified	40	32
Impact ISO-V (J)	-196°C	not specified	60	-
Hardness (HV)	As welded	not specified	250	-
	work-hardened	not specified	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.

OUTPUT RANGE

Diameter x Length (mm)	Current range (A)
2.5 x 300	60-80
3.2 x 300	70-110
4.0 x 350	100-155

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Electrodes/pack	Net weight/pack (kg)	Item number
2.5 x 300	VPMD	110	1.9	NIM625KS-25-2
3.2 x 300	VPMD	68	1.8	NIM625KS-32-2
4.0 x 350	VPMD	51	2.3	NIM625KS-40-2

TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application.

Safety Data Sheets (SDS) are available here:



Subject to Change – The information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.eu for any updated information.