

Nimrod® 190

TOP FEATURES

- Nickel-copper MMA electrode for MONEL alloy 400
- The raised levels of manganese and titanium help suppress hot cracking and porosity.
- Recovery is about 110%

TYPICAL APPLICATIONS

- Heat exchangers, piping, vessels and evaporators

CLASSIFICATION

AWS A5.11	ENiCu-7
EN ISO 14172-A	E Ni4060

CURRENT TYPE

DC+

WELDING POSITIONS

All position, except vertical down

CHEMICAL COMPOSITION (WEIGHT %), WELD METAL

	C	Mn	Si *	S	P	Ni	Cu	Ti	Fe	Al
Min.	not specified	1.0	not specified	not specified	not specified	62.0	27.0	not specified	0.5	not specified
Max.	0.15	4.0	1.5	0.015	0.02	69.0	34.0	1.0	2.5	0.5
Typical	0.08	3.5	1.2	0.005	0.01	63	30	0.9	1	0.03

* DIN maximum 1.0% Si

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

As welded	Min.	Typical
Tensile strength (MPa)	480	520
0.2% Proof strength (MPa)	200	320
Elongation (%) 4d	30	40
5d	27	35
Reduction of area (%)	not specified	40
Impact ISO-V (J) -30°C	not specified	110
Hardness (HV)	not specified	160-180

OUTPUT RANGE

Diameter x Length (mm)	Current range (A)
2.5 x 300	60-80
3.2 x 350	70-110
4.0 x 350	90-145

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Electrodes/pack	Net weight/pack (kg)	Item number
2.5 x 300	CAN	245	4.1	NIM190-25-1
3.2 x 350	CAN	145	4.5	NIM190-32-1

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.