



WELDING PRODUCTS

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**BIBUS METALS**  
SUPPORTING YOUR SUCCESS



# AVAILABLE GRADES

Nickel alloys are selected for their outstanding corrosion resistance and high temperature properties, so it is essential that welds in fabrications have the same characteristics as the base metal. BIBUS Metals Ltd stocks a wide range of welding consumables for joining and weld overlay cladding through our partnership with Special Metals Welding Product Company. As a leading developer and manufacturer of nickel-based welding consumables the fully integrated manufacturing facility encompasses every step of the production process from melting through to finished packaged products. The product tradenames have earned world-wide recognition as the standard for quality and product performance.

ALLOY / AWS / W.Nr.	KEY ATTRIBUTES & GENERAL USES
<b>NICKEL 61</b> ERNi-1 / 2.4155	Good corrosion resistance, particularly in alkalis. Welding of Ni200/201 & dissimilar welds joining Ni to stainless & carbon steels.
<b>MONEL 60</b> ERNiCu-7 / 2.4377	Good strength & corrosion resistance in reducing acids, salts & sea water. Used for joining alloys 400 & K-500 & for surfacing of steel.
<b>MONEL 67</b> ERCuNi / 2.0837	Excellent resistance to corrosion in sea water, widely used in marine applications. Used for Cu-Ni alloys & dissimilar welds between 200, alloy 400, Cu-Ni alloys.
<b>INCONEL 82</b> ERNiCr-3 / 2.4806	Corrosion resistance, strength & creep-rupture strength at elevated temperatures. Used for 600, 601, 690, 800/H/HT & dissimilar welds joining stainless/carbon steel.
<b>INCONEL 617</b> ERNiCrCoMo-1 / 2.4627	Excellent high temperature strength, metallurgical stability & oxidation resistance. Joining alloy 617 & other high temperature grades such as 800H/HT & cast grades.
<b>INCONEL 622</b> ERNiCrMo-10	Excellent dissimilar metal welding product, highly corrosion resistant. For joining C276, 625 & welds between nickel alloys, stainless & carbon steels.
<b>INCONEL 625</b> ERNiCrMo-3 / 2.4831	High strength over a broad temperature range with resistance to localised corrosion. A versatile welding consumable used for many dissimilar joints between nickel alloys, stainless steels, low alloy steels & carbon steels. Also used for weld overlay.
<b>INCO-WELD 725NDUR</b> ERNiCrMo-15	Age hardenable version of INCONEL 625 combining the corrosion resistance with higher strength & hardness after heat treatment.
<b>INCO-WELD C276</b> ERNiCrMo-4 / 2.4886	Excellent corrosion resistance in many aggressive media. Welding of C-276 & dissimilar welding of C-276 to other nickel alloys, stainless & low alloy steels.
<b>INCO-WELD 686CPT</b> ERNiCrMo-14	Most corrosion resistant grade for service in highly corrosive environments. For joining alloys 22, 625, C-276, 59, 686 & stainless steels & weld overlay.
<b>INCONEL FM 718</b> ERNiFeCr-2 / 2.4667	Age hardenable & achieves excellent mechanical properties comparable to 718. Welding of age hardenable grades 718 & X-750.
<b>NILO CF 36</b>	Formulated to have a low thermal expansion coefficient similar to NILO alloy 36 it resists solidification & reheat cracking.
<b>MONEL 187</b> ECuNi / 2.0838	Resists fouling & sea water corrosion for use in marine & desalination applications. Joining Ni200, alloy 400 & other nickel-copper alloys.
<b>MONEL 190</b> ENiCu-7 / 2.4366	Resistant to corrosion by sea water, salts & reducing acids. Welding of 400, K-500 & dissimilar joints between Cu-Ni alloys, Ni-Cu alloys & steels.
<b>INCONEL 112</b> ENiCrMo-3 / 2.4621	High strength at elevated temperatures & excellent corrosion resistance. Welding of 625 & 825 & for dissimilar welding of nickel alloys & stainless steels.
<b>INCONEL 182</b> ENiCrFe-3 / 2.4807	Excellent high temperature strength & oxidation resistance. Welding alloys 600, 601 & dissimilar welding of nickel alloys, stainless & carbon steel.

*MONEL, INCONEL, INCO-WELD, NILO & NI-ROD are tradenames of Special Metals Corporation*

**We also stock NI-ROD cast iron welding electrodes NI-ROD 44, 55, 55X & 99X.**

## PACKAGING

Filler metals are available in a variety of diameters on spool or in straight lengths - 915 mm (36") or 1000 mm (39"). Welding electrodes are available in straight lengths of 305 mm (12"). Common diameters as follows:

mm	0.8	0.9	1.0	1.14	1.2	1.6	2.4	3.2	4.0	4.7
in	0.031	0.035	0.039	0.045	0.047	0.063	0.094	0.126	0.157	0.185

Do you require further information or a quotation? Please contact us: [info@bibusmetals.co.uk](mailto:info@bibusmetals.co.uk) [www.bibusmetals.uk](http://www.bibusmetals.uk)

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