

## NiCu30Mn

**CATEGORY** GMAW-GTAW Solid wires

**TYPE** Solid Nickel based filler metal alloyed with Copper.

**APPLICATIONS** Shipbuilding, seawater evaporation plants, tubes, pump building, offshore etc. NiCu30Mn is suitable for dissimilar welding between Nickel 200-201, stainless steel, carbon steel, Inconel and Incoloy alloys, Nickel Copper and Copper nickel alloys.

**PROPERTIES** This Nickel - Copper weld metal has properties similar to "Monel 400". It has good strength and resists corrosion in many media, including sea water, salts and reducing acids. The weld metal is not age hardenable and when used to join Monel K-500 it has lower strength than the base metal.

**CLASSIFICATION**

AWS	A 5.14: ER NiCu-7 (UNS: N04060)
EN ISO	18274: S Ni 4060 (NiCu30Mn3Ti)
DIN: W.Nr.	2.4377
DIN	1736: SG-NiCu30MnTi

**SUITABLE FOR** 2.4360, 2.4375, NiCu30Fe, NiCu30Al, Monel 400, R405, alloy K500 and dissimilar welding between these alloys.

**APPROVALS** CE approved

**WELDING POSITIONS:**



**WELD METAL ANALYSIS %**

Mn	Ni	Fe	Si	Cu	Ti	C
< 4.0	62-69	< 2.5	< 1.25	base	1.50-3.0	< 0.15

**MECHANICAL PROPERTIES**

Heat Treatment	R <sub>p0,2</sub> (N/mm <sup>2</sup> )	R <sub>m</sub> (N/mm <sup>2</sup> )	A <sub>5</sub> (%)	Impact Energy (J) ISO-V			Hardness HRc / HV
				20°C	-40°C	-60°C	
AW	>300	>450	>30	>70			

AW: as welded

**WELDING PARAMETERS / PACKING**

Welding Parameters			Packing		
D (mm)	Voltage (V)	Current (A)	spool type	kg / spool	kg / pallet
0.8			D 300 / K 300	12-15	
1.0			D 300 / K 300	12-15	
1.2			D 300 / K 300	12-15	
1.6			D 300 / K 300	12-15	

**REDRYING TEMPERATURE** not required

**GAS ACC. EN ISO 14175:** I1, I3 (Ar-He)