

## E NiTi 3

**CATEGORY** SMAW Stick Electrodes

**TYPE** Nickel based welding electrode for DC +.

**APPLICATIONS** NiTi 3 is developed for welding and cladding Nickel 200 and Nickel 201. This alloy is also suited for surfacing of steel. Dissimilar welding applications of filler metal NiTi 3 include joining Nickel 200 and 201 to stainless steels, copper-nickel alloys, and Monel alloys. It is also used for joining Monel alloys and copper-nickel alloys to carbon steels, and for joining copper-nickel alloys to Inconel and Incoloy alloys.

**PROPERTIES** The reaction of titanium with carbon maintains a low level of free carbon and enables the filler metal to be used with Nickel 201. The weld metal has good corrosion resistance, particularly in alkalis.

**CLASSIFICATION**

AWS	A 5.11: E Ni-1
EN ISO	14172: E Ni 2061
DIN: W.Nr.	2.4156
DIN	1736: EL-NiTi3

**SUITABLE FOR** Pure nickel, nickel clad steel, copper to unalloyed or stainless steel, nickel to steel, Nickel alloy 200 - Nickel 201, Monel UNS Nr (unified numbering system) : N 02200 - N 02201. DIN 17 742: Ni 99.6 ; Ni 99.2 ; LC-Ni99.6 ; LC-Ni99, Mat n° : 2.4060 - 2.4061 - 2.4066- 2.4068

**WELDING POSITIONS:**



**WELD METAL ANALYSIS %**

C	Mn	Si	S	P	Ti	Fe	Al	Cu	Ni a
< 0.10	< 0.75	< 1.25	< 0.02	< 0.03	1.0-4.0	< 0.75	< 1.0	< 0.25	> 92.0

**MECHANICAL PROPERTIES**

Heat Treatment	Tensile strength		Elongation (%)	Impact Energy (J) ISO-V			Hardness HRc / HV
	(PSI)	(MPA)		+20°C	+40°C	+60°C	
AW	60.000	414	20	120			

AW: as welded

**WELDING PARAMETERS / PACKING**

D (mm)	Welding Parameters			Packing		
	Length (mm)	Current (A)	kg / can	kg / 6 pack	kg / 1000	
2.4	305	65-85				
3.2	356	90-125				
4.0	356	125-170				