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## PRODUCT DATA SHEET

### Nickel 61 Welding Filler Metal UNS N02061

### Nickel Alloy Welding Consumable

#### Chemical Composition (deposited weld metal)

Element	%	Element	%
Nickel	93.00 min	Iron	1.0 max
Titanium	2.0 – 3.5	Manganese	1.0 max
Aluminium	1.5 max	Phosphorus	0.030 max
Carbon	0.15 max	Silicon	0.75 max
Copper	0.25 max	Sulphur	0.015 max

**Nickel Welding Electrode 141** is used for gas tungsten arc (TIG), gas metal arc (MIG) and submerged arc (SAW) welding of Nickel 200 and Nickel 201. It is also used for surfacing of steel.

Inco Flux 6 submerged arc flux is used with the submerged arc process.

The reaction of titanium with carbon in the weld metal maintains a low level of free carbon and enables the filler metal to be used with the low carbon Nickel 201.

Dissimilar welding applications for Filler Metal 61 include joining Nickel 200 and 201 to stainless steels, carbon steels, Inconel and Incoloy alloys, 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.

#### Minimum Mechanical Properties (All Weld Metal, as Welded)

Tensile Strength	Elongation
MPa	%
415	20

**Availability:** TIG: 0.8 to 3.2 mm, 914 mm long in 4.54 kg packs and 1000 mm long in 5 kg packs  
MIG: 0.8 to 1.6 mm on spools weighing from 0.7 to 15 kg  
SAW: 1.6 to 3.2 mm in 12.5 to 30 kg spools and coils

#### Specifications

AWS A5.14 ERNi-1

DIN 1736 EL-NiTi4

Werkstoffe Nr 2.4155

ASME SFA-5.14 ERNi-1

ASME F41