

# Welding Alloys: Electrode Core Wire

## Wire • Strip

JLC Classification	Nickel 99.2	NiFe 55:45*	NiFe 60:40*	Bimetal(ICN)	NiCu	NiCuTi	CuNiTi	NiCr20Nb	JLC 625
AWS Classification	ENi-CI	ENiFe-CI	ENiFe-CI	-	ENiCu-3	ENiCu-7	ECuNi	ENiCr3T-X	ENiCrMo-3
AWS Specification	A 5.15	A 5.15	A 5.15	-	A 5.15	A 5.11	A 5.6	A 5.34	A 5.11
UNS Designation	W82001	W82002	W82002	-	W84002	W84190	W60715	W86082	W86112
Werkstoff Nr	2.4066	-	2.4560	-	2.4360	2.4366	2.0838	2.4648	2.4621
DIN	1736	-	-	-	-	1736	1733	1736	1736

\*Other grades of NiFe electrode core wires with Ni 36%, 40%, 45%, 50% and 70% are also available.

### Nominal Chemical Composition (%)

Ni	Min 99.2	Min 54.0	Min 59.0	Min 57.0	Min 63.0	Min 62.0	29.0-32.0	Min 67.0	Min 58.0
Cu	Max 0.20	Max 0.20	Max 0.20	Max 0.20	28.0-34.0	28 - 34	Balance	Max 0.20	Max 0.50
Ti	-	-	-	-	Max 0.2	2.0-3.0	0.2-0.5	Max 0.6	0.20-0.40
Cr	-	-	-	-	-	-	-	18-20	20.0-23.0
Mn	0.3	0.5 - 1.5	0.5 - 1.5	Max 1.0	1.25	3.0 -4.0	0.5-1.0	3.0-4.0	Max 0.50
Fe	Max 0.4	Balance	Balance	Balance	1.0 - 2.5	0.5-2.5	0.4-0.7	Max 2.0	Max 5.0
Others	Max 0.5	Max 0.5	Max 0.5	Max 0.5	Max 0.5	-	Max 0.2	Nb: 2.0-3.0	Nb: 3.15-4.15 Mo: 8.0-10.0

Applications	Welding of cast iron	Welding of cast iron	Welding of cast iron	Welding of cast iron	Welding of cast iron	Arc welding electrode	Arc welding electrode	Arc welding electrode	Arc welding electrode
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### Electrode Core Wires

Metric units		
Diameter	mm	2.0, 2.5, 3.2, 3.25, 4.0, 4.80, 5.0
Length	mm	250, 300, 350, 400, 450, 500
Imperial units		
Diameter	inch	5/64, 1/8, 5/32, 3/16
Length	inch	10, 12, 14, 16, 18

Other dimensions also available on request

### Coils

Wires >1.50mm diameter are available in wire-rods and coil as per the customer specification

### Strip electrodes

Thickness	mm	0.2-1.0
Width	mm	Max 100

Weight of each coil depends on width of the strip