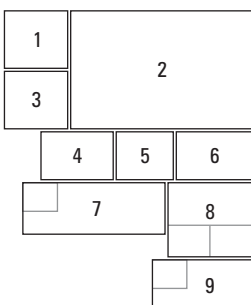
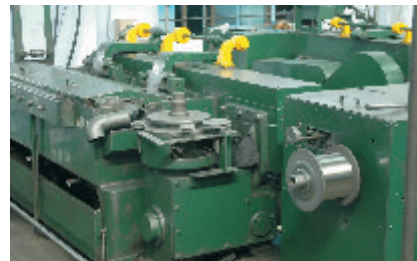
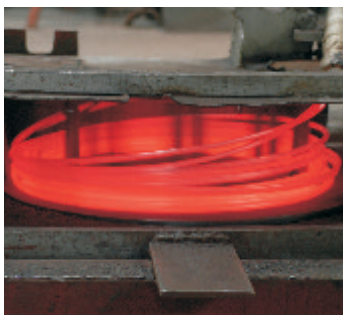


Nickel Alloy
ENGINEERING



Production PROCESS Flow



1. Raw Materials
2. Melting
3. Hot Rolling
4. Batch Annealing
5. Wire Drawing (Thick)
6. Wire Drawing (Fine)
7. Continuous Annealing
8. Testing Lab
9. Packaging

PROFILE at a glance

JLC Electromet Pvt. Ltd., an ISO 9001 certified company, is a leading manufacturer of Nickel and Nickel-based speciality alloys in wire, strip, ribbon, and bar forms.

Corporate Profile

JLC has been manufacturing Nickel and other speciality alloys for over four decades. The original product of the company was Nickel wires to be used as lead-in-wires for incandescent lamps. Foresight, diligence, and innovation have led JLC to emerge as a leading supplier of Nickel based speciality alloys to over 50 countries. Focus on quality and customer needs has helped the JLC name to stand for global trustworthiness. JLC is also the proud recipient of many national, international and customer awards from organizations like Engineering Export Promotion Council of India, Wire Association International, Royal Philips Electronics, etc.

Wide Product Range and Full Vertical Integration

JLC's exhaustive range of over 100+ Nickel and Nickel-based alloys is used worldwide in different industrial sectors including welding, heating and resistance, automotive, lighting, high-temperature applications, instrumentation, thermocouple, and other special industrial requirements.

JLC is a fully vertically integrated plant with in-house melting, hot-rolling, annealing, wire-drawing, cleaning, inspection, and packaging departments. The hot-rolling mill underwent major technological renovation in 2015 in order to produce superior quality wire rod. JLC also has a strong Research and Development team which is continuously focused on new alloy development and process improvements. JLC family comprises of 500+ team members that include highly qualified engineers, technicians, supervisors, and operators.

Quality Control

JLC is an ISO 9001 certified company that adheres to a fully documented Quality Management System. The plant utilizes statistical process control (SPC) tools for monitoring of critical operations. All processes are designed using Failure Mode Effect Analysis (FMEA) to ensure high quality products. Manufacturing operations are supported by fully-equipped testing laboratories that are capable of performing chemical, mechanical, electro-magnetic, and metallurgical testing.

Strengths

- Global presence in 50+ countries
- 40+ years of experience in Nickel alloys manufacturing
- Complete vertical integration from melting to packaging
- World class products at competitive prices, delivered on-time
- State-of-the-art Melting, Hot-Rolling, Wire Drawing and Heat Treatment facilities
- Dedicated Research and Development department
- Continuous improvement of products, processes, and systems
- Qualified, skilled, and highly trained manpower

VISION

Global Leader in Field of
Nickel Alloys

•

Addition of Nickel-based
Superalloys

•

Sustainable and Inclusive
Growth

Nickel Alloys
Ni 200
Ni 201
Ni 205 / Ni 205 LC
Ni 206
Ni 212 (NiMn2)
Ni 211 (NiMn5)
JLC 400 (Ni67Cu30)
JLC 500
Other Nickel alloy compositions of Nickel can be made on request

Welding Alloys
Electrode Core Wires:
Ni99 (ENi-CI)
NiFe 55:45 (ENiFe-CI)
NiFe 60:40 (ENiFe-CI)
Bimetal-NiFe
NiCu (ENiCu-3)
NiCuTi (ENiCu-7)
NiCr20Cb (ENiCr-3T-X)
Alloy 625 (NiCrMo-3)
Welding Wires - MIG/TIG:
Ni99
NiFe 55:45
NiFe 60:40
CuNiTi (ERCuNi)
CuNi10Fe
NiTi (ERNi-1)
NiCuTi (ERNiCu-7)
NiCr20Cb (ERNiCr-3)
Thermal Spray:
Ni99
Ni95Al5
NiCr 80:20
NiTi
Ni60Fe25Cr15

Copper - Nickel Resistance and Shunt Alloys
49 Alloy (CuNi44)
30 Alloy (CuNi23)
15 Alloy (CuNi11)
10 Alloy (CuNi6)
5 Alloy (CuNi2)
2.5 Alloy (CuNi1)
JLC Mang 38
JLC Mang 43
JLC Mang 47

Heating Element & Resistance Alloys
Nickel-Chromium Alloys:
NiCr 80:20
NiCr 70:30
NiCr 60:15
NiCr 50:18
NiCr 40:20
NiCr 30:20
NiCr 20:25
Iron-Chrome-Aluminum Alloys:
FeCrAl 135
FeCrAl 125
(FeCrAl alloys numbers indicate the resistivity in $\mu\Omega$ -cm at 20°C)

Nickel-Chrome-Iron Alloys
(High Temperature Alloys for Mechanical Applications)
JLC 600 (NiCr16Fe7)
JLC 601 (NiCr23Fe14)
JLC 800 (Ni32Cr21Fe)
JLC 810 (Ni32Cr21Fe)
JLC 825 (Ni42Cr22Fe)

Lamp Components and Alloys
Lead-in-Wires
Fuse wires: NiCu30Fe, FeCrAl, FeNi43
Nickel: Ni99, NiMn2 (Ni 212), NiMn5 (Ni 211)
Nickel Plated Wires: Steel, CuSn
Sealing Wires: Ni47Cr6Fe, Ni52Fe, FeCr28
Dumet Wires: Oxidised/Borated/Bare/Nickel Plated

Glass Sealing and Controlled Expansion Alloys
Alloy 36
Alloy 41
Alloy 42
Alloy 46
Alloy 47
Alloy 48
Alloy 50
Alloy 51
(Numbers indicate Ni% in each alloy)

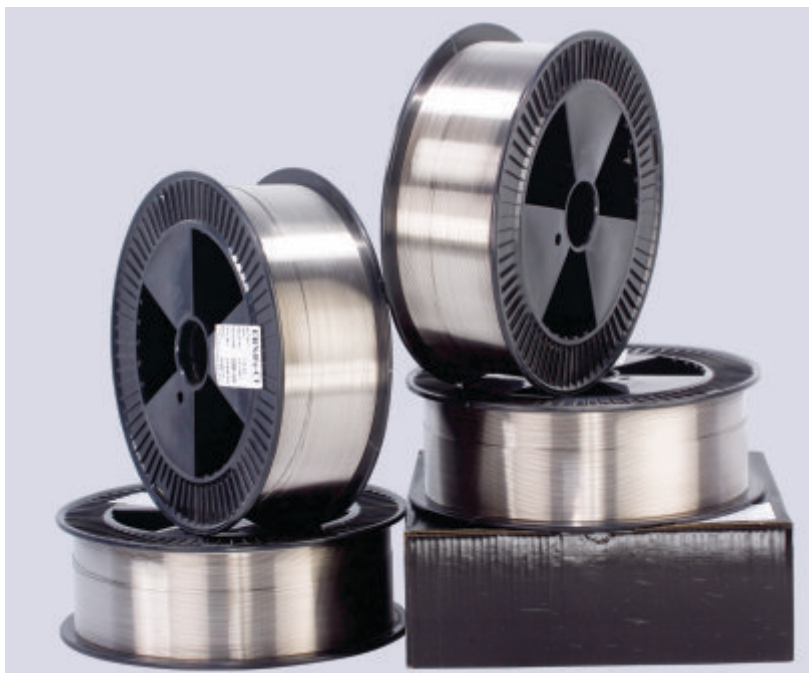
Nickel-Iron Soft Magnetic Alloys
Temperature Compensating Alloys
Ni30Fe
Ni31Fe
Ni32Fe
High Permeability Alloys
SMA 48 (Ni48Fe)
SMA 50 (Ni50Fe)
SMA 80 (Ni80Mo5Fe)
Other grades available

Dumet Wires
Lamp & Diode Grade
Core Material: Nickel Iron
Sheath Material: OFHC Copper
Types Available: Borated/Oxidised/Bare/Nickel Plated

Automotive: Spark Plug Alloys
Alloys for Earth and Central Electrodes
NiSi
NiBa
NiCr15Fe
NiCr5SiMn
NiCr2SiMn
Or as per customer specifications

Thermocouple, Extension and Compensating Grade Alloys								
<table border="1"> <tr> <td>K</td> <td>J</td> <td>T</td> <td>E</td> <td>V</td> <td>R, S</td> <td>N</td> <td>B</td> </tr> </table>	K	J	T	E	V	R, S	N	B
K	J	T	E	V	R, S	N	B	
As per ASTM E230 or IEC 584-3								

AVAILABLE DIMENSIONS			
Material	Thickness	Width/Length	Supply Condition
Strip	0.10 - 4.00 mm	max. 100 mm Continuous Coil/Spool	Condition: cold rolled, bright, bright annealed, oxidized
Wire			
Round Wire	0.05 - 12.00 mm		Condition: drawn, bright, bright annealed, oxidized
Flat Wire	0.5 x 0.1 - 6 x 0.8 mm		Condition: flat rolled, bright, bright annealed with natural rounded edges or edges as-rolled
Cold drawn bars			
Round bars	up to 25 mm	up to 6000 mm	Condition: drawn, ground, hot-treated
Hot finished bars			
Round Bars	20 - 75 mm	Coils/Lengths	Condition: as-rolled, hot-treated, peeled, ground



NICKEL ALLOYS

Wire • Bar • Strip • Ribbon

Nickel and Nickel-Copper

Welding

Thermal Spray

Electrical Resistance and Heating

Copper-Nickel Resistance and Shunt

Automotive / Spark Plug

Thermocouple, Compensating, and Extension

Glass-Sealing and Controlled Expansion

Nickel-Chrome-Iron

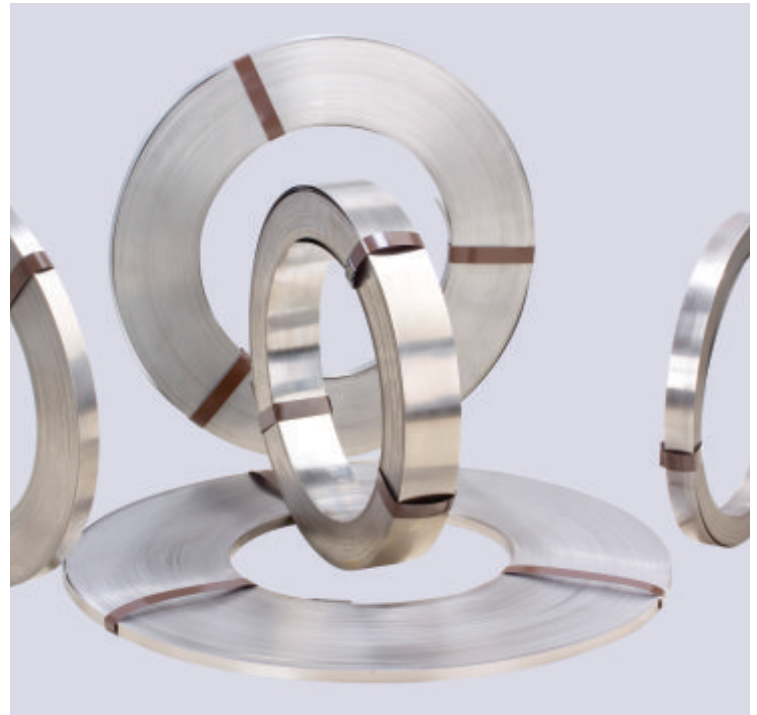
Soft Magnetic Alloys

Lamp Components and Dumet Wire

Nickel Plated Wires

Clad Wires





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World Wide Presence
North America • Europe • Asia • South America • Middle East • Africa

A world map with blue dots indicating global presence and an orange dot for India. The map is set against a blue background with a grid of lines. The text "World Wide Presence" is written in a large, white, sans-serif font, and below it, the regions "North America • Europe • Asia • South America • Middle East • Africa" are listed in a smaller, white, sans-serif font.



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The technical information in this brochure is to the best of our knowledge at the time of publication of this catalogue and is based upon our own experience and in-house database. The information is constantly upgraded/changed as part of improvement plans.