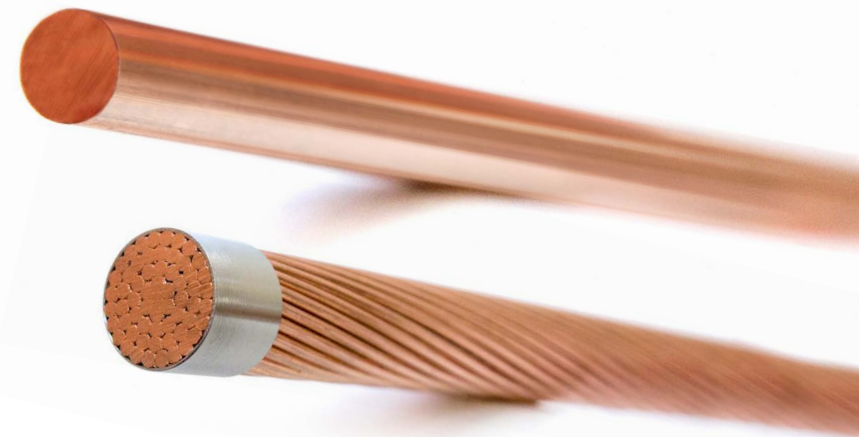




Catalogue

# WIRE ROD DRAWING SOLUTIONS WELDING WIRE

Offering the most sustainable solutions  
for future generations







# WE ARE YOUR PARTNER

## Knowledge and innovation for world progress

We are a family-owned industrial company with more than 215 years' history and expertise in the manufacturing of semi-finished copper products. A world leader in technology and copper recycling processes, with our first patent registered in 1986. Present on virtually every continent, we transform copper and transform the world.

Copper is the material par excellence as it ensures maximum conductivity and exponentially

reduces greenhouse gas emissions, contributing to the decarbonisation of our society.

Our innovative spirit and experience in the sector positions us as a world reference in technology and the processing of copper, which we get from cathode and also directly through recycling. This makes us the best partner to develop all types of efficient, sustainable and top quality solutions involving copper and its alloys.

We have an extensive portfolio of semi-finished copper and copper alloy products for various sectors such as the energy, automobile, telecommunications, railway, construction and installation and metal packaging sectors, amongst others.

We listen to our clients and understand their needs with the sole objective of providing each sector and end use with a personalised answer.

## We guarantee the highest quality standards and compliance with international standards



**ANTIMICROBIAL  
COPPER**



Wire rod, drawing solutions and welding wire / **People**

# OUR TEAM, LA FARGA'S DRIVING FORCE

At La Farga, we fully trust in our team to transform reality and to be agents of change, thus generating value. They are the driving force that moves the company and whose talent and commitment make us industry leaders.

Collaboration and teamwork have been key in allowing us to take advantage of the opportunities and face the challenges over more than 215 years. For La Farga, the way we do things is just as important as what we do.

We are a company with a purpose, which makes us unique. We are committed to people and our values. Our positioning and conviction set us apart in the metallurgical sector as an active company in the generation of shared value.

**We work with a long-term vision to ensure the viability and sustainability of the company.**





# WE CONTRIBUTE TO THE DECARBONISATION OF THE PLANET AND THE ECONOMY

At La Farga, we are aware of the environmental impact the industry has, but it is also true that our activity is essential for human development and for the energy transition.

One of our values is innovation, and from our beginnings, we have invested and worked to place innovation at the service of sustainability.

We incorporate technology that allows us to reduce the emissions throughout the value chain and work more efficiently.

**2030 goal - to reduce GHG emissions into the atmosphere by 55% (compared to 2017).**

**2050 goal - to achieve the NetZero goals with minimum compensation of greenhouse gas emissions.**



 Wire rod, drawing solutions and welding wire / **La Farga**

# SOLUTIONS WITH THE LOWEST IMPACT

Contributing to the global decarbonisation goals

OUR BRANDS



## La Farga, our legacy.

Our more than 215 years' experience has made us a recognised brand, a sign of quality with offices across almost all continents.

LA FARGA's solutions stand out both for our own manufactured products (wire rod, wire drawing, tubes, welding wires, railway and special cables, etc.), as well as for our knowledge and new copper processing technologies.

The strictest quality and efficiency processes, from raw materials and their treatment to customer service, has made us what we are today.



## 100% recycled and 100% recyclable Genius copper with the lowest carbon footprint.

We offer the most sustainable copper solutions with the lowest impact, directly producing 100% recycled copper with the lowest carbon footprint and contributing to more efficient use of natural resources.

**We ensure product traceability.** This evolution highlights the goal of offering a unique value proposal, thanks to the innovation and excellence of the company.

We are proud to be the first company in the copper industry to obtain Environmental Product Declaration (EPD) certification for its wire rod product, thus guaranteeing the GENIUS product as the most sustainable on the market.

We continue to work to certify the traceability of all of our solutions and offer our clients the lowest environmental impact.



Wire rod, drawing solutions and welding wire / Solutions / **Wire rod**

# WIRE ROD



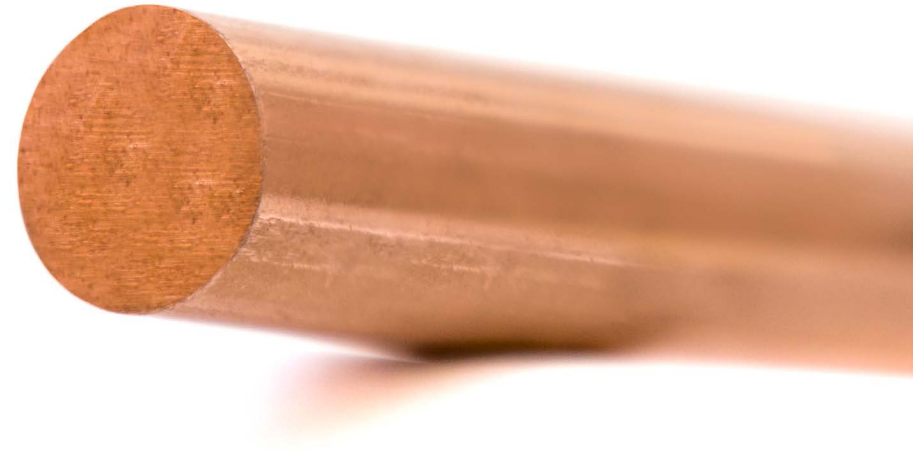


# WIRE ROD

Copper and copper alloy high conductivity and high resistance conductors for multiple uses.

We have a wide range of types of wire rod to meet the needs of our clients, ensuring **maximum performance and quality**.

Our wire rod is our semi-finished product for electrical and mechanical use requiring efficient connectivity, in a wide range of industries including energy, automobile, e-mobility, renewable energy and telecommunications, amongst others.



## Use

The main markets for our wire rod are the following:



### Electrification

Manufacture and supply of electrical cables for the transmission and distribution of high, medium and low voltage energy.



### Renewable energy

Manufacture and supply of electrical cables for wind, solar, hydroelectric and hydraulic power, amongst others.



### Automotive industry and E-mobility

Wire supply for electronics and for the electrification of vehicles and engines and associated services such as charging stations.



### Digitalisation

Manufacture and supply of wiring for data transmission.



### Construction and installation

Supply of cables and pipes for domestic or industrial installations.



### Magnet wire

Insulated electrical conductors, normally made of copper or aluminium, used in engines, transformers and other electromagnetic equipment.



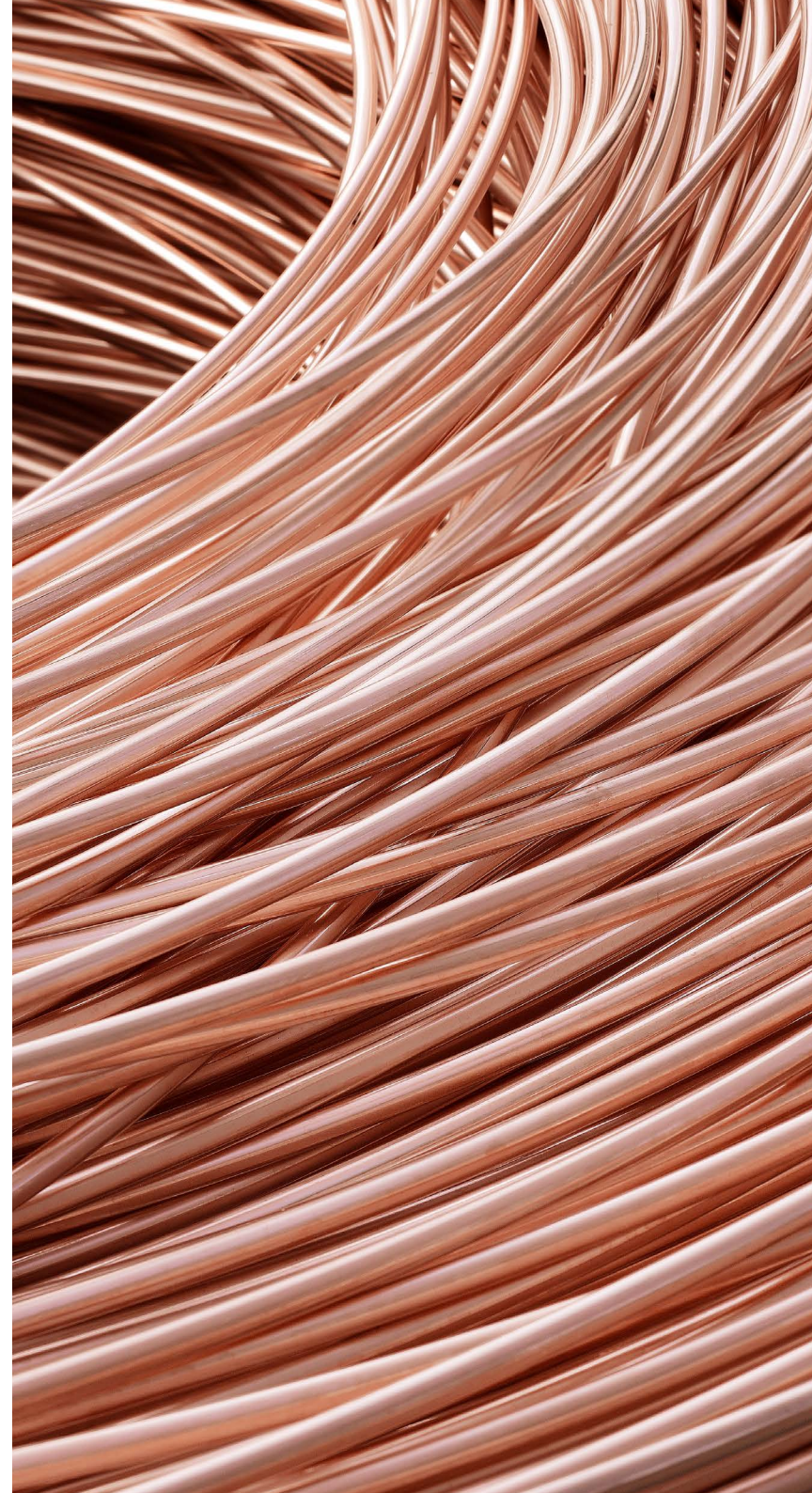
## RANGE OF PRODUCTS AVAILABLE FOR THE BRANDS



The most sustainable copper wire rod on the market,  
100% recycled with the lowest carbon footprint.



The wire rod for the most demanding specifications.





# GENIUS WIRE ROD

The most sustainable copper wire rod on the market,  
100% recycled with the lowest carbon footprint



100% RECYCLED  
AND RECYCLABLE



CO2 REDUCTION



TRACEABILITY



ROBUST AND  
RELIABLE PRODUCT



MAXIMUM  
EFFICIENCY



## Think smart, act sustainable

As part of our character of constant innovation, we have developed unique technology that allows us to offer GENIUS wire rod, a copper wire rod produced 100% from recycled copper and with the smallest carbon footprint on the market, always guaranteeing the client's product traceability.

Our GENIUS was the first copper wire rod to obtain International EPD System certification which guarantees it as a wire rod with a very low environmental impact.

The certification also complies with international standards ISO 14025 and EN15804.





**+92%**  
reduction in CO2  
emissions



**99%**  
reduced water  
consumption



**89%**  
reduced depletion  
of fossil fuels

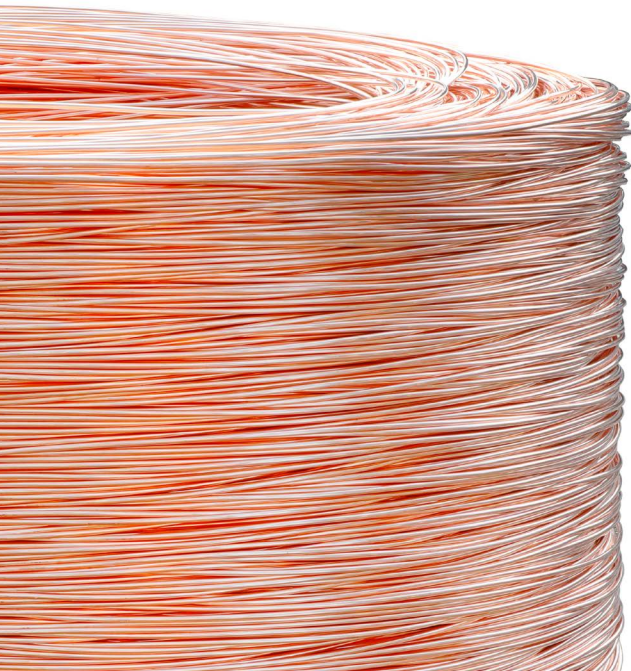


**99%**  
reduction in SO2  
emissions



EPD complies with standards ISO 14025 and EN 15804

\*Data corresponding to the EPD of GENIUS wire rod vs. the average of the official data calculated by the ICA.



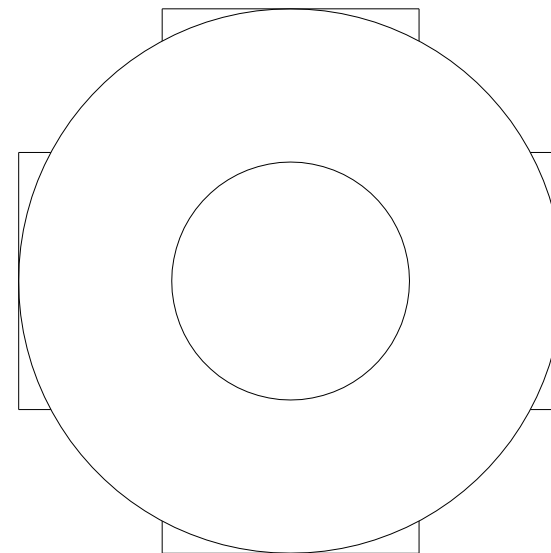
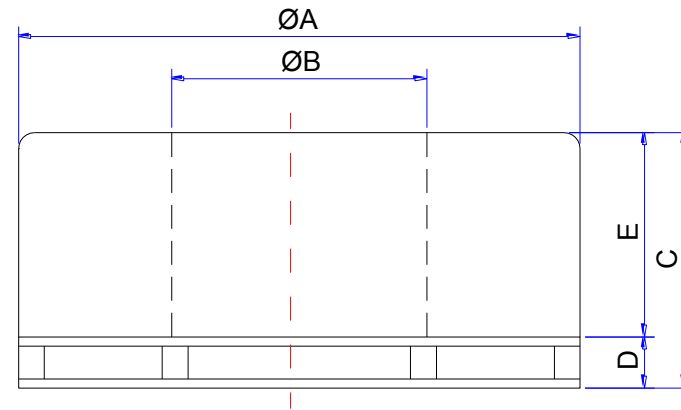
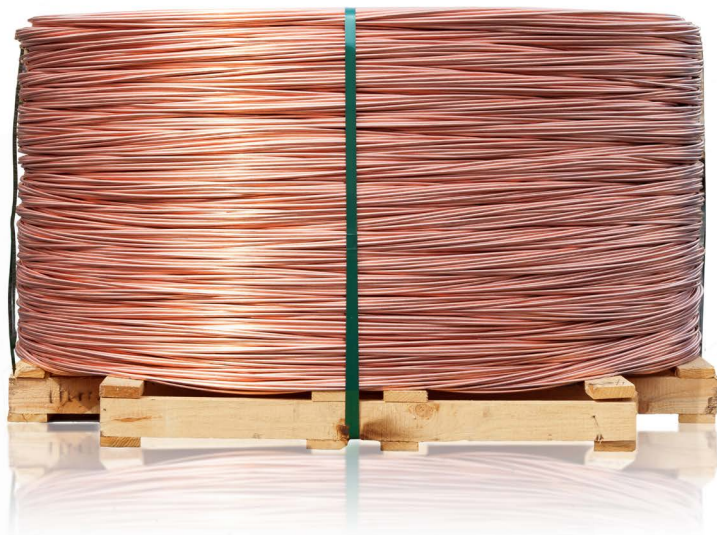
	PRODUCT SPECIFICATIONS
Standard	ASTM B-49, EN 1977
Conductivity (%IACS)	≥100.8% IACS (CW005A)
Elongation /%A100)	>40
Diameter Tolerance (mm)	Ø 8mm
	*Consult for more specifications



## Packaging

### COIL DIMENSIONS (mm)

A	B	C	D	E
1780	800	800	160	640





# LA FARGA WIRE ROD

Wire rod for the most demanding specifications



TRACEABILITY



MAXIMUM  
CONDUCTIVITY



MAXIMUM  
EFFICIENCY



HIGH  
PERFORMANCE



ROBUST AND  
RELIABLE PRODUCT

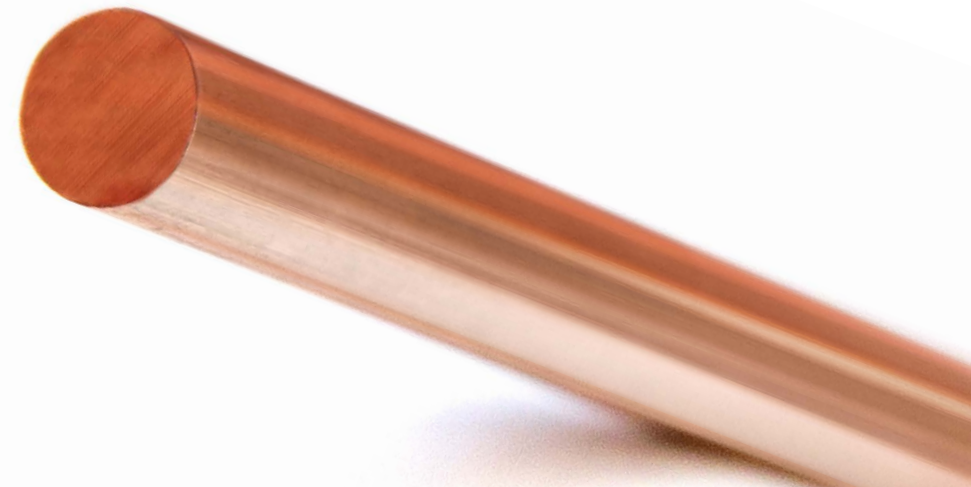
La Farga  WIRE ROD

A wide range of electrolytic copper wire rods for uses that require high conductivity. Within this family you will find our electrolytic copper, oxygen-free copper and copper alloy (magnesium, tin and silver) wire rod.

Thanks to our R+D team and our commitment to innovation, we can offer the most demanding conductivity solutions in various sectors with a wide range of electrolytic wire rods for different uses:

- **LA FARGA Electrolytic copper wire rod.**
- **LA FARGA Oxygen Free copper wire rod.**
- **LA FARGA Copper alloy wire rod: CuMg, CuSn, CuAg and the Oxygen Free versions.**

This wide range of families offers high performance solutions to the demanding automotive and electronic component industries, amongst others.



### LA FARGA

Electrolytic copper wire rod that is ideal for the production of drawn wire for electrical cables and signal cables, fine wire drawing, enamelling and laminating and engines and transformers, as well as for electrical and mechanical use that requires high conductivity.

### LA FARGA CuMg

Copper-Magnesium wire rod for electrical use where high resistance is required.

### LA FARGA CuSn

Bronze wire rod used for applications requiring high mechanical performance. Wire rod obtained through continuous casting or the use of Upcast technology (CuSnOF).

<b>Standard</b>	<b>ASTM B-49, EN 1977</b>	<b>EN 50149</b>	<b>EN 50149</b>
<b>Conductivity (%IACS)</b>	<b>101 – 101,6 IACS% (CW003A)</b>	<b>CuMg 0,2 – 77%IACS CuMg 0,2 (high conductivity) - 80%IACS CuMg 0,5 – 62%IACS</b>	<b>CuSn 0,2 – 72%IACS CuSn 0,2 (high conductivity) - 80%IACS</b>
<b>Elongation (%A100)</b>	<b>&gt;47</b>		
<b>Diameter Tolerance (mm)</b>	<b>Ø 8 mm Ø 12,5 mm Ø 23 mm Ø 24 mm</b>	<b>Ø 8 mm Ø 12,5 mm Ø 16 mm Ø 28 mm</b>	<b>8 mm Ø 12,5 mm Ø 23 mm</b>
	<b>*Consult for more specifications</b>	<b>*Consult for more specifications</b>	<b>*Consult for more specifications</b>

### LA FARGA CuAg

Copper Silver (CuAg) wire rod for electrical and mechanical use requiring high conductivity and/ or good mechanical performance at high temperatures. Wire rod obtained through continuous casting or the use of Upcast technology (CuAgOF).

### LA FARGA CuOF

Oxygen Free copper wire rod for use where high conductivity and purity are required. The absence of oxygen allows excellent drawability and a low recrystallisation temperature. Additionally, it avoids weakening due to hydrogen. Ideal for fire-resistant cables, cables for the automotive industry, electronic cables, class 6 and 7 audio and video cables and for the manufacture of micro wires, for subsequent extrusion through Conform®.

Wire rod obtained using vertical casting technology.

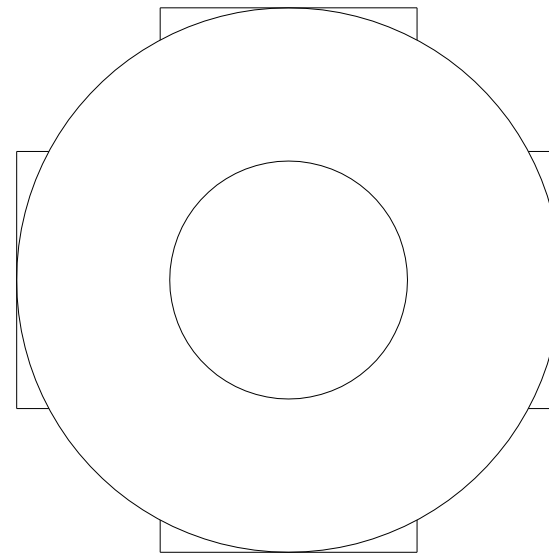
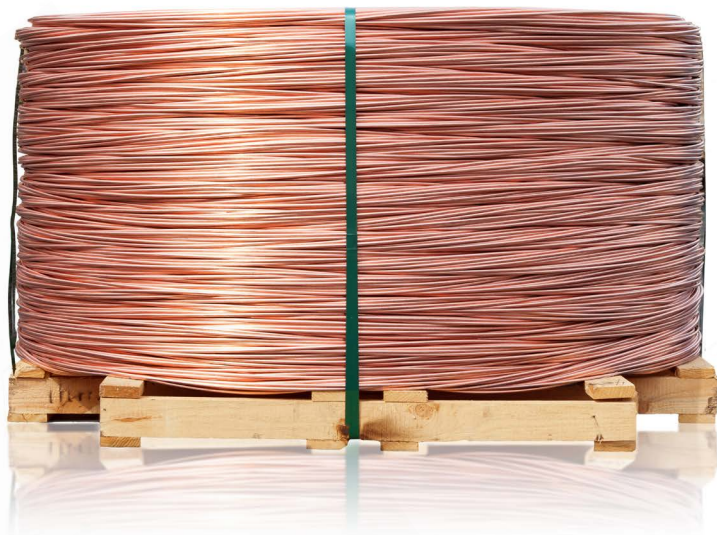
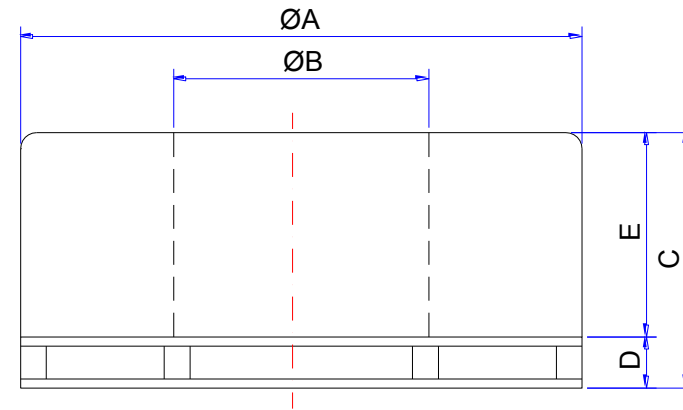
<b>Standard</b>	<b>ASTM B-49, EN 1977</b>	<b>ASTM B-49, EN 1977</b>
<b>Conductivity (%IACS)</b>	<b>Cu-Ag 0,04 (CW0011A) Cu-Ag 0,07 (CW0012A) Cu-Ag 0,1 (CW0013A) – 100% IACS</b>	<b>101% IACS</b>
<b>Elongation (%A100)</b>		
<b>Diameter Tolerance (mm)</b>	<b>Ø 8 mm Ø 12,5 mm Ø 23 mm</b>	<b>Ø 8 mm Ø 12,5 mm Ø 16 mm Ø 20 mm</b>
	<b>*Consult for more specifications</b>	<b>*Consult for more specifications</b>



## Packaging

### COIL DIMENSIONS (mm)

A	B	C	D	E
1780	800	800	160	640







Wire rod, drawing solutions and welding wire / Solutions / **Drawing solutions**

# DRAWING SOLUTIONS





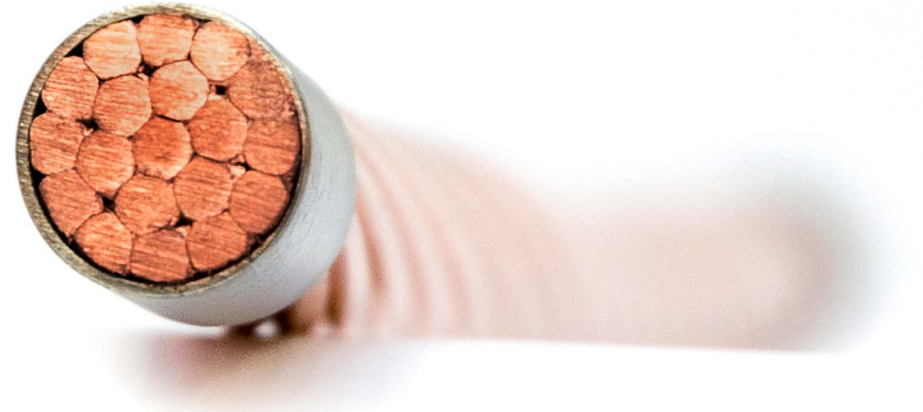


# DRAWING SOLUTIONS

At La Farga we offer our clients the most personalised solution, with a wide range of drawn wire including our tinned range which is mainly in demand in the renewable energy industry, as well as our range of copper alloys such as Copper Silver (CuAg), Copper-Magnesium (CuMg) and Bronze (CuSn).

We also produce Oxygen Free drawn wire (CuOF) to cover other speciality sectors. We produce our products according to the technical specifications provided by our clients. Our drawn wire meets the requirements for the manufacture of class 1, 2, 5 and 6 electrical cables.

Our drawing solutions are a semi-finished copper product that is used in the industrial process of electrical cable manufacturers. The main markets for our wire rod and drawing solutions are the following:



## Use



### Electrification

Manufacture and supply of electrical cables for the transmission and distribution of high, medium and low voltage energy.



### Renewable energy

Manufacture and supply of electrical cables for wind, solar, hydroelectric and hydraulic power, amongst others.



### Automotive industry and E-mobility

Wire supply for electronics and for the electrification of vehicles and engines and associated services such as charging stations.



### Digitalisation

Manufacture and supply of wiring for data transmission.



### Construction and installation

Supply of cables and pipes for domestic or industrial installations.



### Magnet wire

Insulated electrical conductors, normally made of copper or aluminium, used in engines, transformers and other electromagnetic equipment.





Wire rod, drawing solutions and welding wire / Solutions / **Drawing solutions**

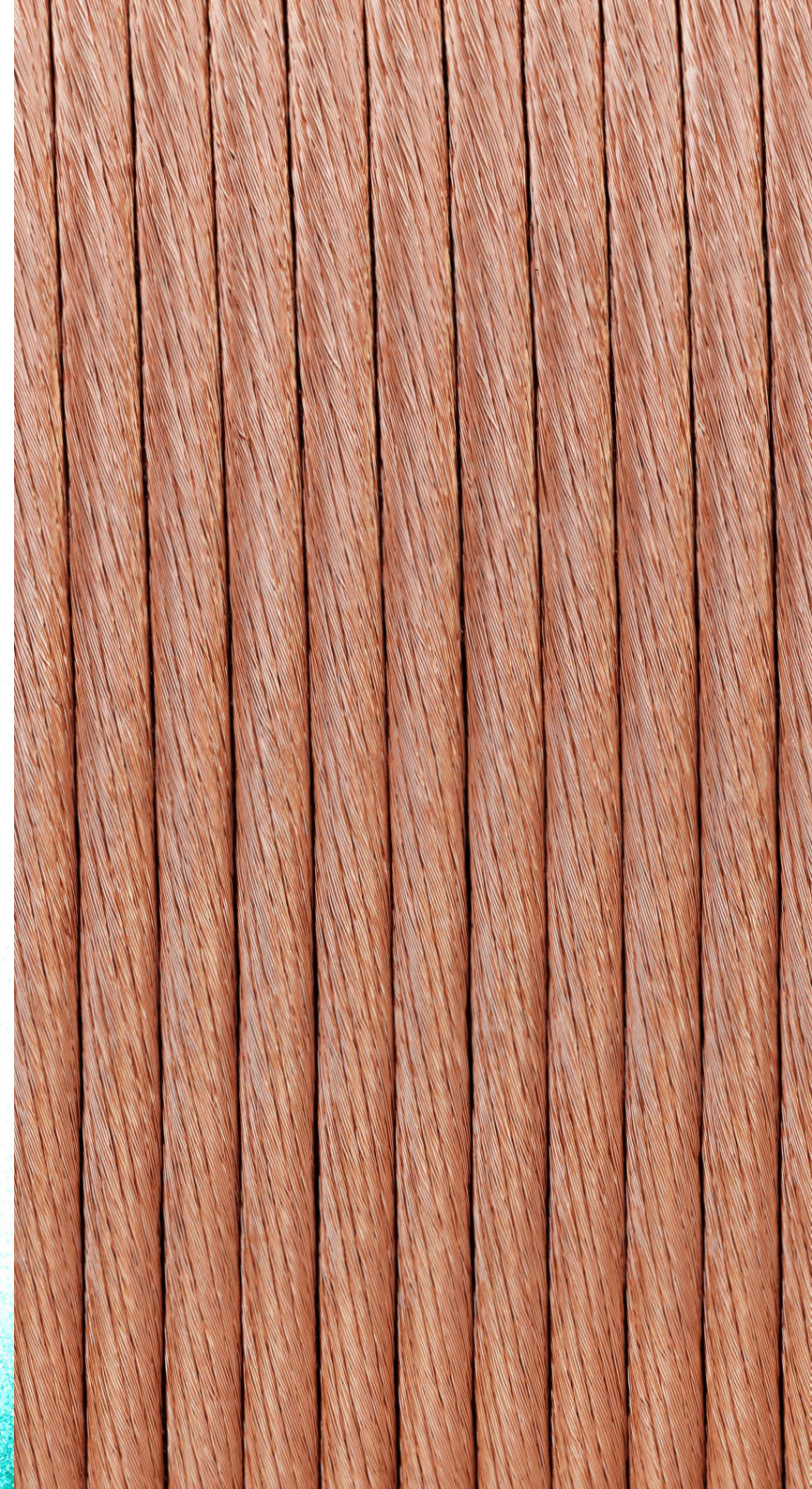
## RANGE OF PRODUCTS AVAILABLE FOR THE BRANDS



The most sustainable drawing copper solutions on the market, 100% recycled with the lowest carbon footprint.



Drawing solutions for the most demanding specifications.



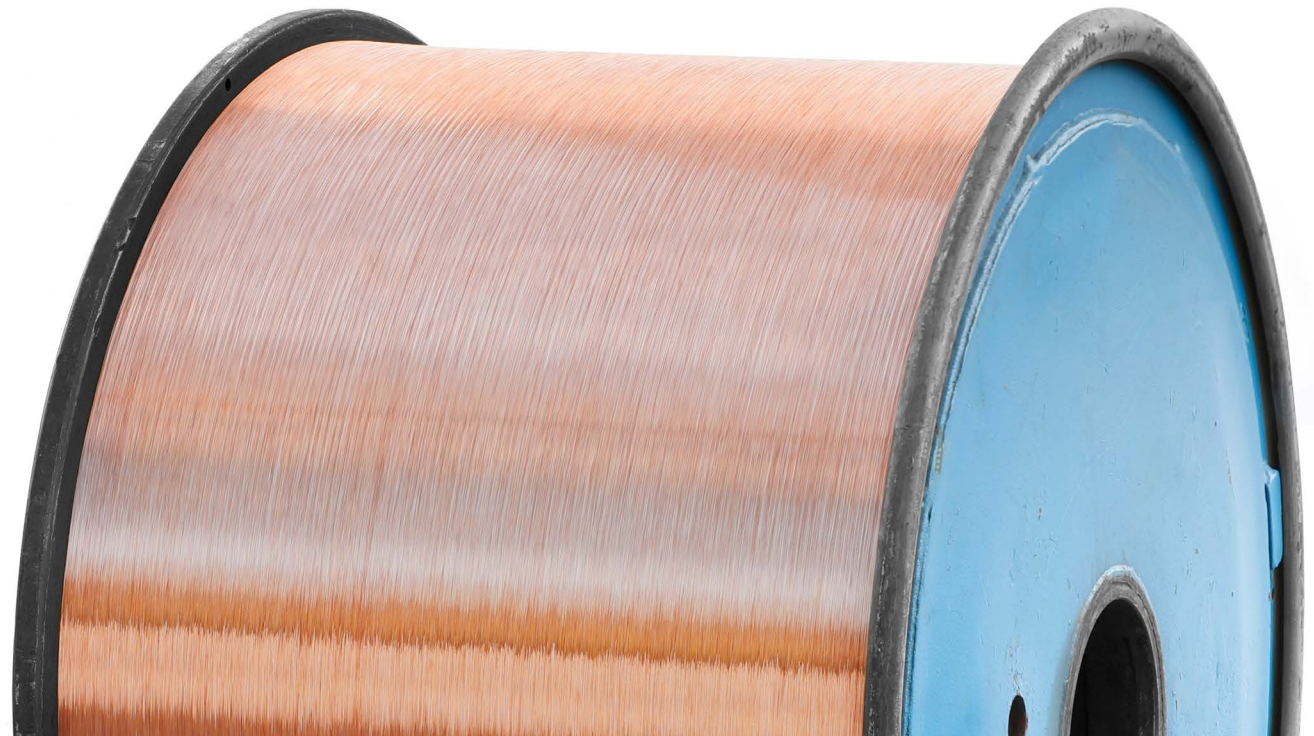




Wire rod, drawing solutions and welding wire / Solutions / **Genius Drawing solutions**

# GENIUS DRAWING SOLUTIONS

The most sustainable drawing copper solutions on the market,  
100% recycled with the lowest carbon footprint



### GENIUS SINGLE WIRE

GENIUS single core 100% recycled and recyclable copper wire.

Rigid copper wire, also available in its tinned version for the production of class 1 electrical cables for subsequent drawing.

We also supply the intermediate semi-finished product (soft wire) so that our clients can finish the drawing process.



### GENIUS MULTI-WIRE

Multi core 100% recycled and recyclable copper wire.

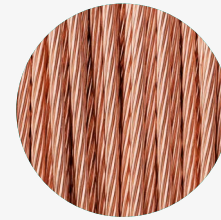
Parallel copper wires, also available in their tinned version for the production of class 5 and 6 cables for electrical use.



### GENIUS RIGID CABLES

100% recycled and recyclable rigid copper rope.

Rigid copper rope, also available in its tinned version, manufactured especially for the production of class 2 electrical cable and grounding rope.



### GENIUS FLEXIBLE CABLES

100% recycled and recyclable flexible copper rope.

Flexible and extra flexible copper rope, also available in its tinned version and especially manufactured for the production of class 5 and class 6 electrical cable.



<b>Standard</b>	<b>ASTM B-1, B-3, EN 13602</b>	<b>ASTM B-3, EN 13602</b>	<b>ASTM B-8, EN 60228</b>	<b>ASTM B-172, EN 60228</b>
<b>Condition</b>	<b>Hard or annealed</b>	<b>Annealed</b>	<b>Hard or annealed</b>	<b>Annealed</b>
<b>Surface condition</b>	<b>Bare or tinned wires</b>	<b>Bare or tinned wires</b>	<b>Bare or tinned wires</b>	<b>Bare or tinned wires</b>
<b>Diameters and sections</b>	· Ø 0,40 mm – Ø 5,00 mm	· Ø 0,15 mm – Ø 1,00 mm	· 0,5 mm <sup>2</sup> – 1000 mm <sup>2</sup> · Sections 16, 25, 35, 50, 70, 95, 120, 150 and 200 mm <sup>2</sup> · Grounding cables in rolls up to 25 kg of 50 and 100 m	· Class 5: 0,5 mm <sup>2</sup> – 1000 mm <sup>2</sup> · Class 6: 6 mm <sup>2</sup> – 300 mm <sup>2</sup>
<b>Groupings of wires</b>	-	<b>In groups of 2 to 32 wires</b>	-	-
<b>Type</b>	-	-	<b>Compacted / Non-compacted</b>	-
<b>Packaging</b>	· Din 630 · Din 800 · Cardboard baskets for diameters exceeding Ø 1,10 mm	· Din 630 · Din 800	· X630 (430 Kg) · Reel 1200 – 1250 – 1600 · DIN 630 · DIN 800	· DIN 630 · DIN 800 · Reel 1200 – 1250 – 1600
	*Consult for more specifications	*Consult for more specifications	*Consult for more specifications	*Consult for more specifications

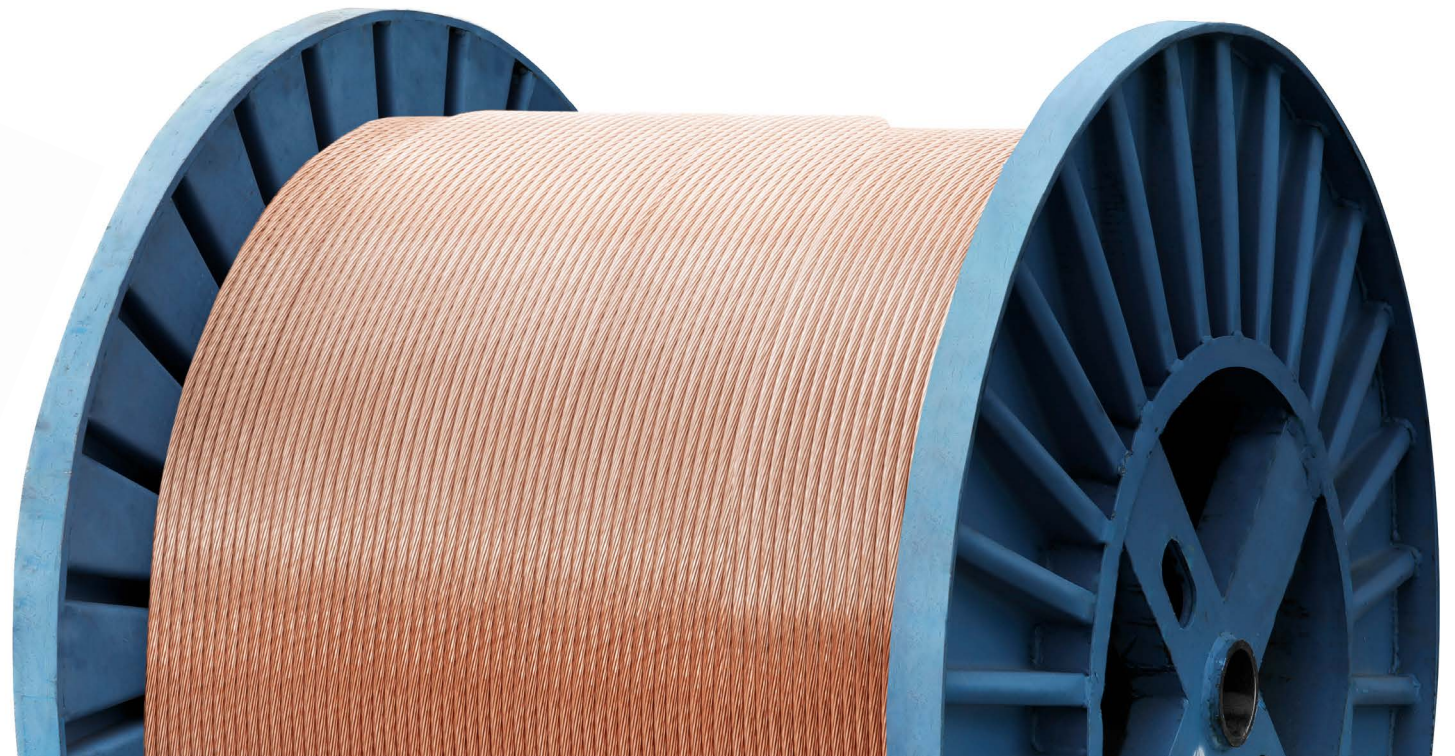




Wire rod, drawing solutions and welding wire / Solutions / **La Farga Drawing solutions**

# LA FARGA DRAWING SOLUTIONS

Drawing solutions for the most demanding specifications



### LA FARGA SINGLE WIRE

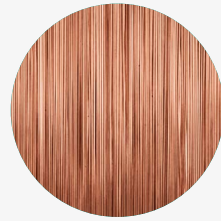
Rigid copper wire, also available in the tinned and Oxygen Free versions for the production of class 1 electrical cables for subsequent drawing.

We also supply the intermediate semi-finished product (soft wire) so that our clients can finish the drawing process.



### LA FARGA MULTI-WIRE

Parallel copper wires, also available in the tinned and Oxygen Free versions for the production of class 5 and 6 cables for electrical use.



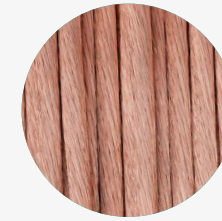
### LA FARGA RIGID CABLES

Rigid copper rope, also available in the tinned and Oxygen Free versions and especially manufactured for the production of class 2 electrical cable and grounding cable.



### LA FARGA FLEXIBLE CABLES

Flexible and extra flexible copper rope, also available in the tinned version and especially manufactured for the production of class 5 and class 6 electrical cable.



<b>Standard</b>	<b>ASTM B-1, B-3, EN 13602</b>	<b>ASTM B-3, EN 13602</b>	<b>ASTM B-8, EN 60228</b>	<b>ASTM B-172, EN 60228</b>
<b>Condition</b>	<b>Hard or annealed</b>	<b>Annealed</b>	<b>Hard or annealed</b>	<b>Annealed</b>
<b>Surface condition</b>	<b>Bare or tinned wires</b>	<b>Bare or tinned wires</b>	<b>Bare or tinned wires</b>	<b>Bare or tinned wires</b>
<b>Diameters and sections</b>	<b>· Ø 0,40 mm – Ø 5,00 mm</b>	<b>· Ø 0,15 mm – Ø 1,00 mm</b>	<b>· 0,5 mm<sup>2</sup> – 1000 mm<sup>2</sup> · Sections 16, 25, 35, 50, 70, 95, 120, 150 y 200 mm<sup>2</sup> · Grounding cables in rolls up to 25 kg of 50 and 100 m</b>	<b>· Class 5: 0,5 mm<sup>2</sup> – 1000 mm<sup>2</sup> · Class 6: 6 mm<sup>2</sup> – 300 mm<sup>2</sup></b>
<b>Groupings of wires</b>	<b>-</b>	<b>In groups of 2 to 32 wires</b>	<b>-</b>	<b>-</b>
<b>Type</b>	<b>-</b>	<b>-</b>	<b>Compacted / Non-compacted</b>	<b>-</b>
<b>Packaging</b>	<b>· Din 630 · Din 800 · Cardboard baskets for diameters greater than Ø 1,10 mm</b>	<b>· Din 630 · Din 800</b>	<b>· X630 (430 Kg) · Reel 1250 · Reel 1200 – 1250 – 1600 · DIN 630 · DIN 800</b>	<b>· DIN 630 · DIN 800 · Reel 1200 – 1250 – 1600</b>
	<b>*Consult for more specifications</b>	<b>*Consult for more specifications</b>	<b>*Consult for more specifications</b>	<b>*Consult for more specifications</b>

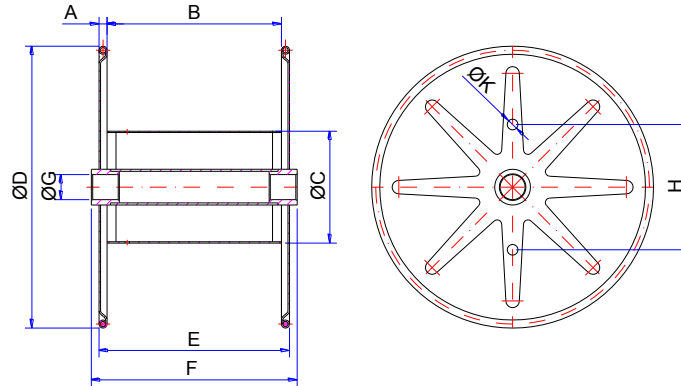


## Packaging Genius / La Farga

### Embedded plate spool

TYPES	DIMENSIONS (mm)								
	A	B	C	D	E	F	G	H	K
X630	20	400	550	630	440	440	127	280	28
H800	22	500	400	800	540	600	80	320	40

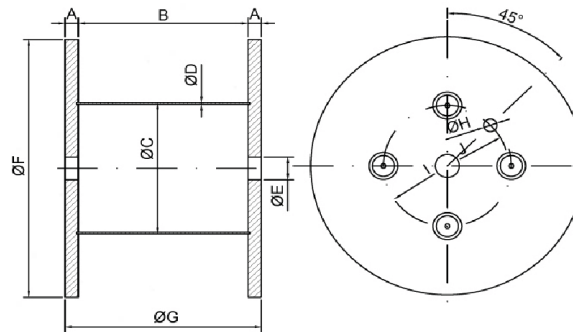
- FLEXIBLE CABLES



### Plywood spool

TYPES	DIMENSIONS (mm)									
	A	B	C	D	E	F	G	H	I	J
620	30	385	315	3,9	56	620	445	30	145	138

- RIGID CABLES
- FLEXIBLE CABLES



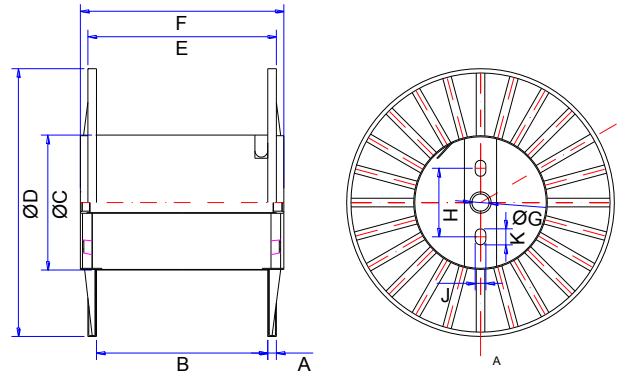




### Metal spool

TYPES	DIMENSIONS (mm)									
	A	B	C	D	E	F	G	H	K	J
H1200	40	600	630	1200	680	730	82	320	75	50
H1250	50	800	630	1250	900	940	82	320	75	50
H1600	60	1000	800	1600	1120	1180	82	320	75	50

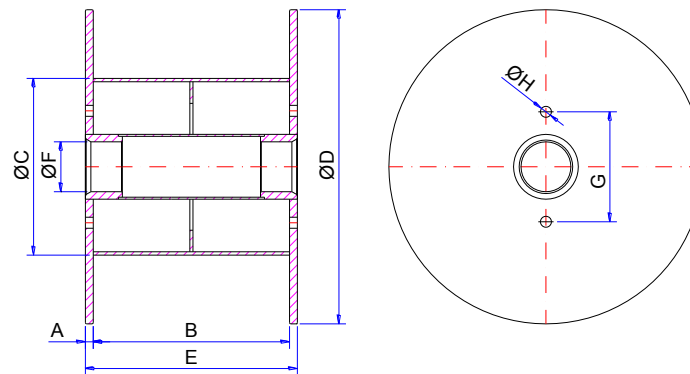
- RIGID CABLES
- FLEXIBLE CABLES



### Balanced spool

TYPES	DIMENSIONS (mm)							
	A	B	C	D	E	F	G	H
DIN630	20	400	355	630	440	127	280	28
DIN800	20	500	450	800	540	127	280	28

- SINGLE WIRE
- MULTI-WIRE
- RIGID CABLES
- FLEXIBLE CABLES

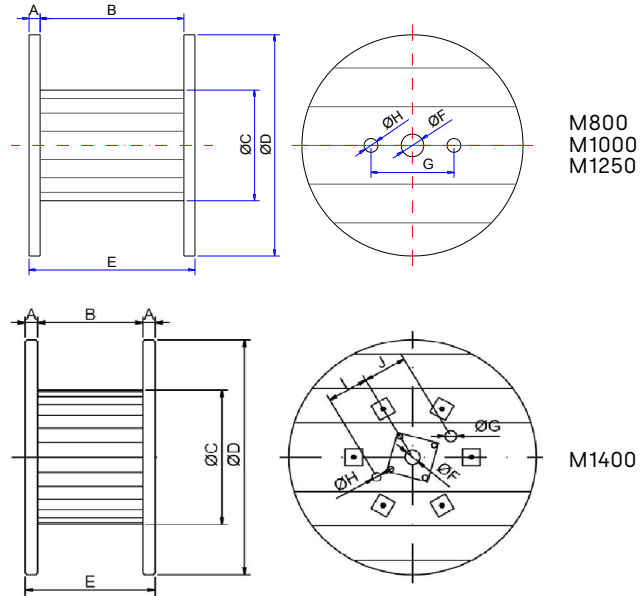




**Wooden spool**

TYPES	DIMENSIONS (mm)									
	A	B	C	D	E	F	G	H	I	J
M800	40	520	400	800	600	82	300	50	150	150
M1250 / 750	50	650	630	1250	750	84	410	50	160	250
M1250 / 900	65	770	690	1250	900	84	410	50	160	250
M1400	66	595	1000	1400	727	83,6	65	50	235	250

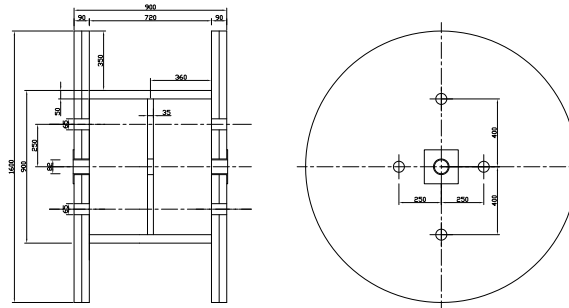
- RIGID CABLES
- FLEXIBLE CABLES



**Wooden spool**

TYPES	DIMENSIONS (mm)										
	A	B	C	D	E	F	G	H	J	K	L
M1600	90	720	900	1600	900	82	65	800	500	360	35

- RIGID CABLES
- FLEXIBLE CABLES



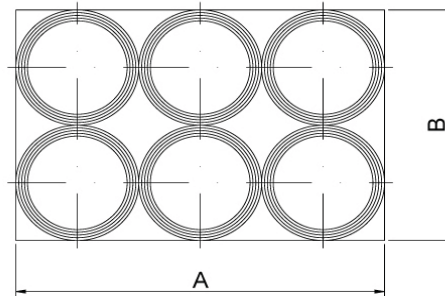
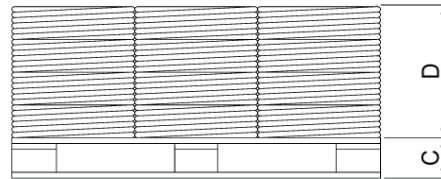


### Coils in pallets

DIMENSIONS (mm)			
A	B	C	D
1200	800	140	300-600*

\*Depending on the requested diameter.

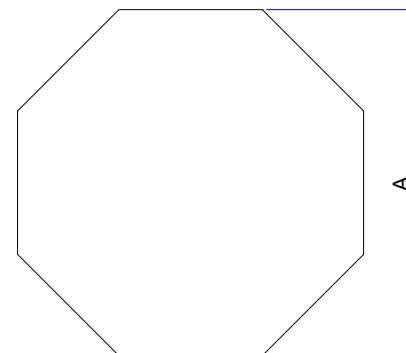
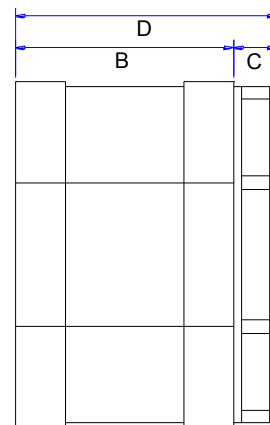
- RIGID CABLES



### Cardboard basket

	DIMENSIONS (mm)			
TYPE	A	B	C	D
SMALL	1110	700	140	840
STANDARD	1110	940	140	1080
LARGE	1110	1110	140	1250

- SINGLE WIRE







Wire rod, drawing solutions and welding wire / Solutions / **Welding wire**

# WELDING WIRE





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La Farga has developed **polymicroalloyed copper wire specifically designed for the welding of metal containers.**

Our copper wire enhances the quality of the welds thanks to its greater resistance to traction and high temperatures. As a result, it guarantees greater dimensional stability during the welding process.

Our copper wire manufacturing process is subject to a patent that covers the chemical composition necessary to offer copper wire that is suitable for welding with better mechanical properties and greater temperature resistance than conventional copper wire, which gives it greater dimensional stability during the welding process. A total of 20 alloys are used that give the material the properties that set it apart from conventional wire.

Our copper wire plays a key role: **welding the metal containers for foods, aerosols and cosmetic products of our clients in a safe and hermetic way.**

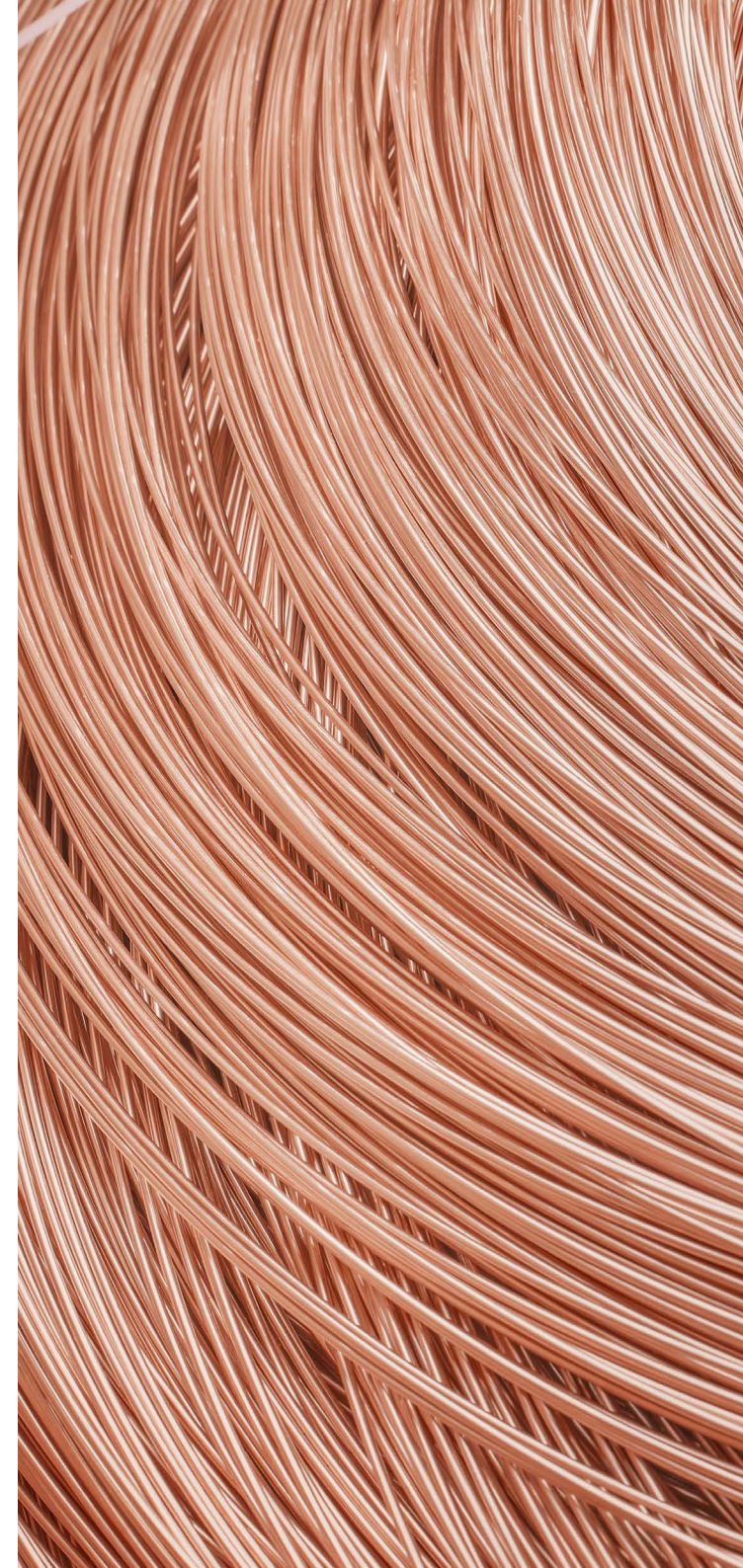
## Use

The main markets for our welding wire are the following:



### **Metal containers**

Copper wire for welding in the metal packaging industry.



## RANGE OF PRODUCTS AVAILABLE FOR THE BRAND



### LA FARGA WELDING WIRE



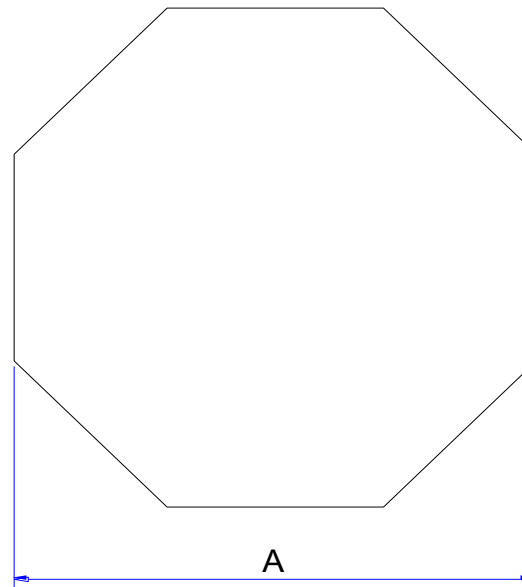
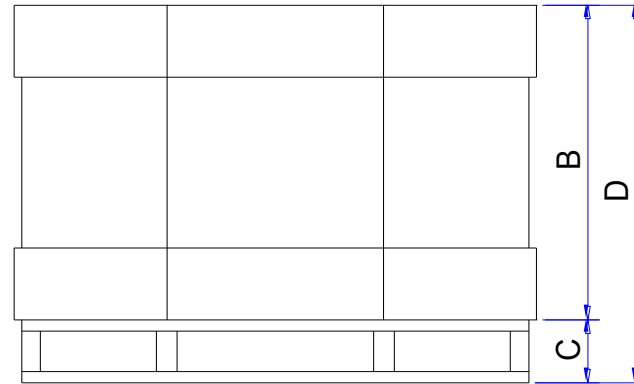
Standard	RoHS directive
CAS number	7440-50-8
REACH number	01-2119480154-42-0061
Chemical composition	Cu+Ag > 99.90% Oxygen < 0.0400 %
State	Hard or annealed
Diameters	Ø 1.20 Ø 1.25 Ø 1.32 Ø 1.35 Ø 1.38 Ø 1.48 Ø 1.50 Ø 1.80 Ø 2
Packaging	In cardboard baskets of 500 – 2000 KG
*Consult for more specifications	



## Packaging

### CARDBOARD BASKET

TYPE	DIMENSIONS (mm)			
	A	B	C	D
SMALL	1110	800	140	840
STANDARD	1110	940	140	1080
LARGE	1110	1110	140	1250





LA FARGA yourcoppersolutions, S.A.

Colònia Lacambra S/N

08508 / Les Masies de Voltregà (Barcelona) Spain

lafarga@lafarga.es / [www.lafarga.es](http://www.lafarga.es) /  Follow us