
Cunext
GROUP

ABOUT US

CUNEXT GROUP is specialized in the transformation of copper and aluminium of the highest quality. We focus on continuous innovation and development of products that bring added value to the market.

CUNEXT GROUP is present in all sectors related to the transmission of energy, data or signals, electrical engines, the automotive and railway industry, windfarms, industrial motors, white goods, telecomunication, construction, etc.

With facilities in the provinces of Córdoba and Vitoria (Spain) and Brescia (Italy), we are a leading supplier of rod, wires and stranded and extruded products.

COPPER

COPPER WIRE ROD 8
- ETP-1, OF-1, ETP and alloys 9
- Railway Applications 10

PRODUCTS FOR ALLOYS & ELECTROPLATING 11
- Copper Anodes 12
- Copper Cathode Sheets 12
- Copper Ingots 14

SEMI-FINISHED PRODUCTS 12
Drawing and Stranding
- Single Wires 13
- Copper Wires for Braiding 13
- Multiwires 14
- Stranded Wires 15
- High Frequency Litz Cables 16

SEMI-FINISHED PRODUCTS 17
Flat wires and isolated conductors
- Flat Wires and Pancakes/Coils 18
- Tinned Flat Wires 19
- Busbars 20
- Isolated Flat Wires and Cables 21
- Fire Resistant Wires and Cables 22
- High Frequency Flat Litz Cables 23

ALUMINIUM

ALUMINIUM WIRE ROD 26
- Aluminium Wire Rod 27
- Aluminium Anodes 27

SEMI-FINISHED PRODUCTS 28
Drawing and Stranding
Electrical Applications
- Wires 29
- Multiwires 29
- Stranded Wires Class II 30
- Stranded Wires Class V 31
- Overhead conductors 32, 33
- Litz Cables 34

SEMI-FINISHED PRODUCTS 35
Drawing and Stranding
Mechanical and Electrical Applications
- Aluminium Conductors for Automotive Industry 36

SEMI-FINISHED PRODUCTS 38
Solid Wires and Isolated Conductors
- Flat, Round and Sectorial Wires 39
- Isolated Flat Wires and Cables 39

PARTS AND SUB-ASSEMBLIES

- Parts and Sub-Assemblies 42

1917

SOCIEDAD ESPAÑOLA DE CONSTRUCCIONES ELECTROMECÁNICAS

1984

IBERCOBRE

1990

METALCABLE

1993

FREEPORT McMORAN COPPER & GOLD/ATLANTIC COPPER

2005

CUNEXT COPPER INDUSTRIES

2009

Cunext GROUP

Cablexsur CUNEXT GROUP

Estacor CUNEXT GROUP

2013

- Cunext Copper Industries — Cunext Group
- Asturcopper — Cunext Group

2015

- Transformados Cunext Copper — Cunext Group
- ECN Trefilería — Cunext Group
- ECN Colada de Aluminio — Cunext Group
- ECN — Cunext Group

2016

- Ibermetalia — Cunext Group

2017

- Transformados Combisa — Cunext Group

2018

- TRAVARTEC — Aluminium wire-drawing and stranding

COPPER

COPPER WIRE ROD

ETP-1, OF-1, ETP AND ALLOYS

	ETP-1	OF-1	ETP
Nominal diameters	8 mm	8-12,5-16 mm	8 mm
Dimensional tolerance	±0,4		
Oxygen	180-250 ppm	< 3 ppm	200-400 ppm
Conductivity	>101 % IACS		>100 % IACS
% Elongation to (A200)	> 40 %	> 35 %	> 30 %
Max. Weight	5.200 kg		
Norm	EN1977, ASTM B49		
PACKAGING			
	Ø ext	Ø int	Height
Coil	1.785 mm	1.150 mm	900 mm
Coil + Pallet	1.800 mm	1.800 mm	1.050 mm
Strapped onto wooden pallet and protected through plastic film			

Also available different grades of oxygen free Copper alloys
(Tin, Silver, Phosphorous, Magnesium) upon customer request.

RAILWAY APPLICATIONS

Contact Wire

Contact wire has the function to transmit electrical energy from the catenary to the train pantograph. Cunext produces contact wires in different dimensions, slots and alloys.

Sections
80, 100, 107, 120 y 150

Groove
Slot type A or Slot type B

Profile
Circular or flat

Alloy
Cu, CuAg, CuSn y CuMg

Rigid Cables

Cunext produces the different railway cables installed in catenary, messenger cable and feeder cable. They are produced in copper, bronze and aluminium.

Alloy: Cu and CuMg.

Flexible Cables

Flexible cables are used in connections and key positions for catenary energy transmission.

Dropper

Droppers are cables used for connecting catenary cables with contact wires. Copper and bronze droppers are produced according to railroad features.

PRODUCTS FOR ALLOYS AND ELECTROPLATING

Copper Anodes

Ø 8, 12,5 and 16 mm

20 - 25 mm length

ETP, ETP-1, OF and DXP copper

Big-bag 1.000 kg strapped onto wooden pallet

Copper Cathode Sheets

500x500 mm; 1.000x200 mm;
1.000x333 mm; 1.000x500 mm

1 - 10 mm thickness

Strapped onto wooden pallet

Copper Ingots

Cu > 99 % with impurities and in customized sizes

1.250 mm length

90 - 100 kg/ingot

15 - 20 ingots/pack

SEMI-FINISHED PRODUCTS

DRAWING AND STRANDING

SINGLE WIRES

Norms ASTM B1, ASTM B3, ASTM B33, ASTM B355, EN 13602

Diameters and standard packaging				
mm	<0,30	0,30 a 0,75	0,75 a 1,30	> 1,30
DIN 250	■			
DIN 400		■		
DIN 500		■	■	
DIN 630			■	■
DIN 760			■	■
DIN 1200				■
Cardboard box				■

Bare or tinned copper

COPPER WIRES FOR BRAIDING

Number of wires: from 4 up to 16
Ø from 0,10 up to 0,20 mm
Bare or tinned copper

	Width (mm)	Height (mm)	Weight (kg)
SPI 80/10/100S	80	80	2

Packaging: 2.250 kg/cardboard box, strapped onto wooden pallets

	Width (mm)	Height (mm)	Weight (kg)
DIN 250	200	250	25
DIN 400	300	400	150
DIN 500	315	500	225
DIN 630	440	630	500
DIN 760	480	760	700
DIN 800	540	800	1.000

	Width (mm)	Height (mm)	Weight (kg)
DIN 630	440	630	500
DIN 1200	730	1.200	2.500

	Height (mm)	External radious (mm)	Internal radious (mm)	Weight (kg)
Cardboard box	1.300	1.000	630	2.000

MULTIWIRES

Compositions									
Diameter (mm)	Number of wires								
	6	8	10	12	16	20	24	32	36
0,70									
0,50									
0,40									
0,30									
0,25									
0,20									
0,10									

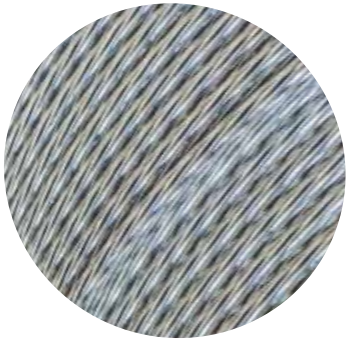
● Bare or tinned
Metallic drums

- DIN 630, DIN 800 / Static winding / Annealed or tinned
- DIN 630, DIN 800 / Static or dynamic winding / Annealed or tinned
- DIN 630, DIN 800 / Static or dynamic winding/ Annealed or tinned; DIN 250 or DIN 400 / Dynamic winding / Annealed or tinned
- DIN 630, DIN 800 / Static or dynamic winding / Annealed or tinned; DIN 1000 / Static winding / Annealed
- DIN 630, DIN 800 / Static or dynamic winding / Annealed or tinned; DIN 1000 / Static winding / Annealed; DIN 250, DIN 400 / Dynamic winding Annealed or tinned
- DIN 630, DIN 800 / Dynamic winding / Annealed or tinned; DIN 630, DIN 800, DIN 1000 / Static winding / Annealed
- DIN 630 / Dynamic winding / Annealed or tinned; DIN 800 Static or dynamic winding / Annealed or tinned; DIN 1000 Static winding / Annealed
- DIN 630, DIN 800 / Static or dynamic winding / Annealed; DIN 1000 / Static winding / Annealed
- DIN 630, DIN 800 / Static or dynamic winding / Annealed
- DIN 250, DIN 400, DIN 500, DIN 630 / Dynamic winding / Annealed or tinned

	Width (mm)	Height (mm)	Weight (kg)
DIN 250	200	250	25
DIN 400	300	400	150
DIN 500	315	500	225
DIN 630	440	630	500
DIN 800	540	800	1.000
DIN 1000	675	1.000	2.000

STRANDED WIRES






	Width (mm)	Height (mm)	Weight (kg)
DIN 630	440	630	350/500
DIN 800	540	800	800
DIN 1000	675	1.000	1.000
DIN 1250	950	1.250	1.200
DIN 1600	1.000	1.600	1.250

	Width (mm)	Height (mm)	Weight (kg)
DIN 630_C	442	630	350/500
DIN 1200	730	1.200	1.100

mm²	> 0,50	> 35	> 95	> 1200
Class II	■	■	■	■
Class V and VI	■	■	■	■

mm²	0,35	0,5	0,75	1	1,5	4	6	10	25	50	1200	Weight (kg)
DIN 630	■	■	■	■	■	■	■					350/500
DIN 800				■	■	■	■	■	■	■		800
DIN 1000						■	■	■	■	■		1000
DIN 1250						■	■	■	■	■		1200
DIN 1600									■	■	■	1250

* * Wooden or metallic coils. Bigger spools for higher sections available on request

Standards	**ASTM B174, ASTM B8, ASTM B286, EN 60228, EN 20701 5, C34-110-3, BS7884**

Up to 800 mm² and DIN 2600

- Bare or tinned

HIGH FREQUENCY LITZ CABLES

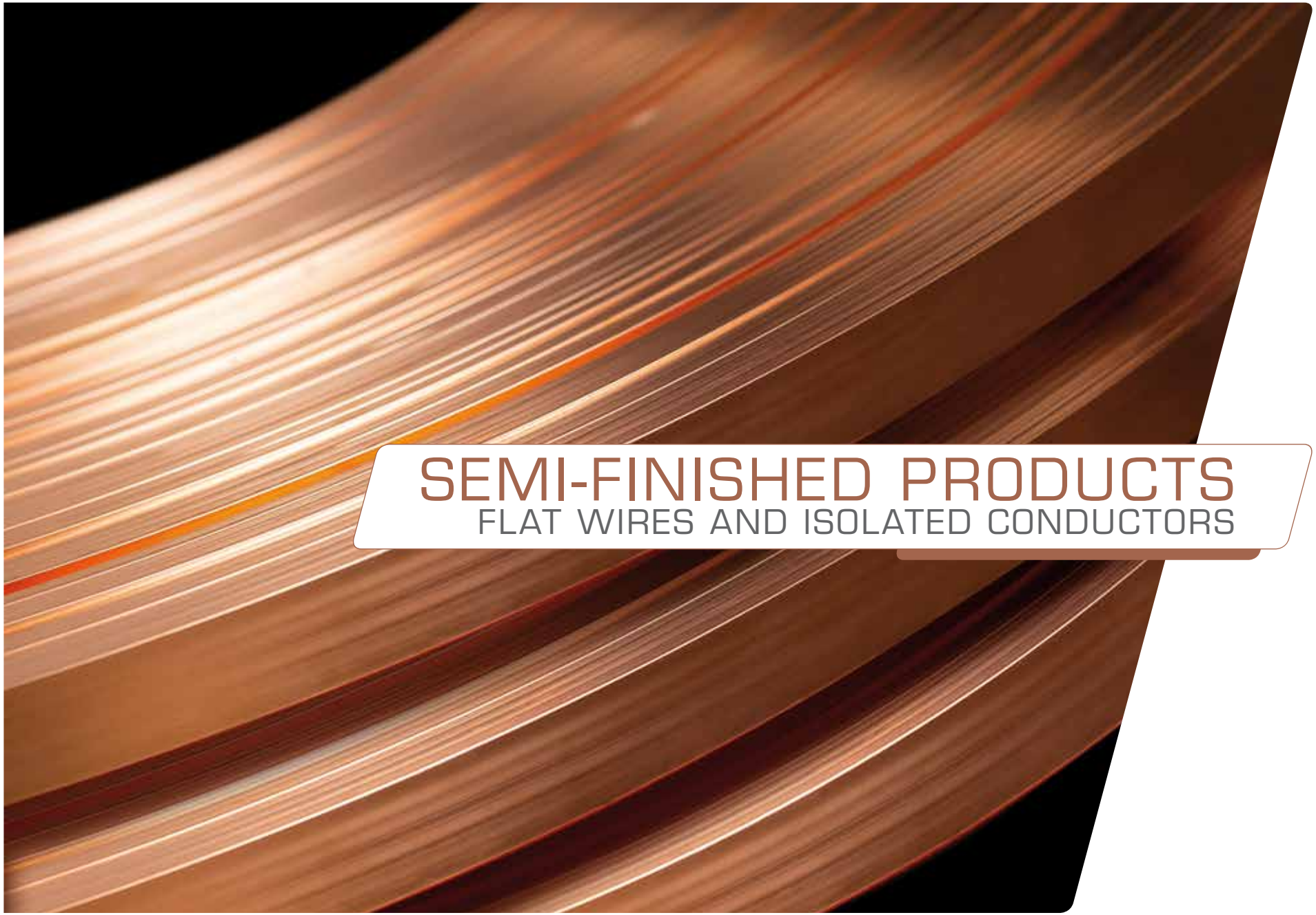
Number of single wires: from 10 up to 120
Ø from 0,18 up to 0,50 mm
Pitch 20 - 60 mm

Constructions

- Single step construction
- Concentric design
- Multistep concentric design

Also available customized taping

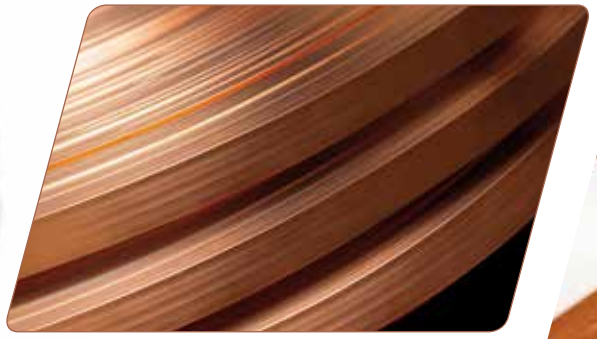
	Width (mm)	Height (mm)	Weight (kg)
DIN 355	440	355	50
DIN 500	250	500	80



SEMI-FINISHED PRODUCTS

FLAT WIRES AND ISOLATED CONDUCTORS

FLAT WIRES AND PANCAKES/COILS



CHEMICAL COMPOSITION: Cu ETP1 or Cu OF1 according to standard EN 1977.
NORMATIVE REFERENCES: EN 13601 / EN 60317 / EN 60228.

FLAT WIRES

Hardness	Tensile strength (N/mm²)	Elongation 100 mm (%)	Resistivity (Ω·mm²/m)
R200 (soft)	200 (min)	35 (min)	0,01724 (max)
R250 (half-hard)	250 - 270 (1)	24 (min)	0,01724 (max)

(1) Maximum value depending on the dimension of the product.

	Width (mm)	Height (mm)	Weight (kg)
DIN 630	440	630	500
DIN 800	540	800	1.000
DIN 1000	630	1.000	2.000

	Width (mm)	Height (mm)	Weight (kg)
DIN 630	230	630	200
DIN 710	250	710	250
DIN 750	180/220	750	300
DIN 1000	400	1.000	800

	Width (mm)	Height (mm)	Weight (kg)
DIN 500	186	500	60
DIN 630	314	630	200

Nominal Width (mm)

Nominal Thickness (mm)	4	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
1,2																
2																
3																
4																
5																
6																
7																
8																
10																
12																

Shapes in lengths (up to 6 meters in length) or spools (up to 6 Tm, 1800 mm flange diameter)
Shapes in spools (up to 6 Tm, 1800 mm flange diameter)
Shapes in pancakes

TINNED FLAT WIRES

According to standard EN 13601

Parameter	Required value	Tolerance	Actual value
Width (mm)	30,00	0,15	30,00 ± 0,15
Thickness (mm)	2,00	0,05	2,00 ± 0,05
Tin coating thickness (µm)	-	-	1,5 - 2,0
Tensile strength (N/mm^2)	200	(Mín)	210 - 250
Elongation (%)	32	(Mín)	38 - 50

Length 50 and 100 m
Width and thickness, also customized, also available in 8 mm diameter round

BUSBARS

CHEMICAL COMPOSITION: Cu ETP1 or Cu OF1 according to standard EN 1977.
NORMATIVE REFERENCES: EN 13601 / EN 60317 / EN 60228.

BUSBARS

Hardness	Tensile strength (N/mm²)	Elongation 100 mm (%)	Resistivity (Ω·mm²/m)
R200 (soft)	200	35 (min)	0,01724 (max)
R250 (half-hard)	250	12 (min)	0,01724 or 0,01754 (max)*
R300 (hard)	300	8 (min)	0,01754 (max)

* Rmax = 0,01754 Ω·mm²/m from R260
Bare or tinned
Sharp, rounded and round edges

	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
BOX	4.000	300	160	1.000
	5.000	300	160	
BOARD	4.000	300	300	
	5.000	120	120	

CHEMICAL COMPOSITION: Cu ETP1 or Cu OF1 according to standard EN 1977
NORMATIVE REFERENCES: EN 60317 / EN 60228

Nominal Width (mm)

Nominal Thickness (mm)	4	5	6	7	8	9	10	12	14	16	18	20	22	24	26
1,2	■	■	■	■	■	■	■	■	■	■	■	■			
2	■	■	■	■	■	■	■	■	■	■	■	■			
3	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
4	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
5		■	■	■	■	■	■	■	■	■	■	■	■	■	
6			■	■	■	■	■	■	■	■	■	■	■	■	
7				■	■	■	■	■	■	■	■	■	■	■	
8					■	■	■	■	■	■	■	■	■	■	
10							■	■	■	■	■	■	■	■	
12								■	■	■	■	■	■		
14									■	■	■	■	■		

Shapes in spools (up to 1 Tm)

	Width (mm)	Height (mm)	Weight (kg)
DIN 630	230	630	200
DIN 710	250	710	250
DIN 750	180/220	750	300
DIN 1000	400	1.000	800

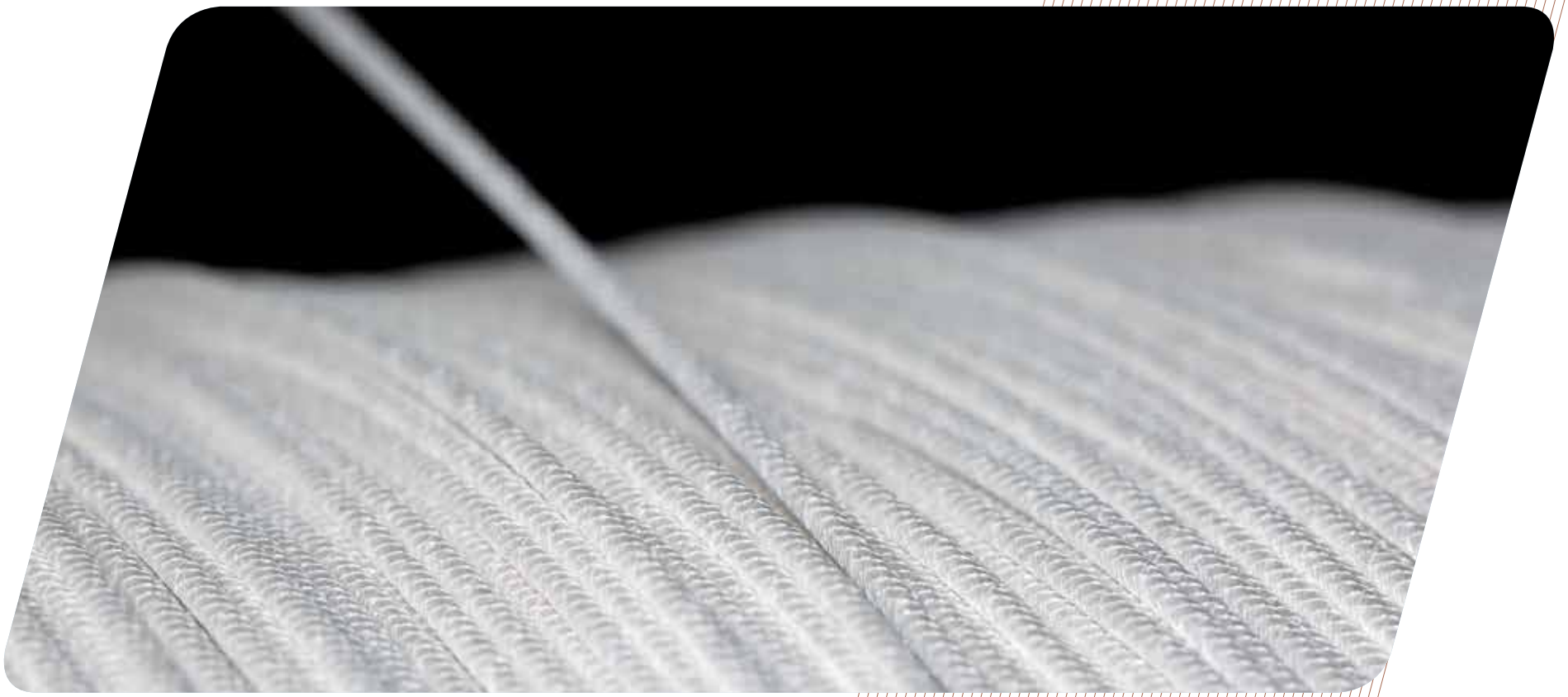
	Width (mm)	Height (mm)	Weight (kg)
DIN 500	186	500	60
DIN 630	314	630	200

FIRE RESISTANT WIRES AND CABLES

From 0,5 mm² up 300 mm², Class I, II, V and VI
INSULATION (TAPES): mica/glass cloth (muscovite and phlogopite)

	Width (mm)	Height mm)
DIN 630	440	630
DIN 800	540	800

Length (m) depends on cable composition



HIGH FREQUENCY FLAT LITZ CABLES

From 3 mm² up 50 mm²

Number of single wires: from 10 up to 120
Ø from 0,18 up to 0,50 mm

Final rectangular dimensions:
Width: from 3 up to 10 mm
Thickness: from 1 up to 5 mm

Tolerances:

- ≤ 3 mm: ± 0,03 mm
- 3 – 6 mm: ± 0,06 mm
- ≥ 6 mm: ± 0,10 mm

	Width (mm)	Height (mm)	Weight (kg)
DIN 250	200	250	25
DIN 355	200	355	60
DIN 500	250	500	80

ALUMINIUM

ECN
CUNEXT GROUP

TRAVARTEC
ALUMINIUM WIRE-DRAWING AND STRANDING

ALUMINIUM WIRE ROD

ALUMINIUM WIRE ROD

Alloy designation	AW1370 (min 99,7 % Al), AW1350 (min 99,5 % Al), AW1350 (min 99,5 % Al)
Nominal diameter	9,5 mm
Maximum weight	2.500 kg +/- 100 Kg
Norm	EN 573-3, EN 1715-1, EN 1715-2, ASTM B233

PACKAGING AND DIMENSIONS			
	Ø ext (mm)	Ø int (mm)	Height (mm)
Coil	1.450	570	850
Coil + pallet	1.450		1.000
Strapped onto wooden pallet and protected by plastic film			

Treatment	Tensile strength		Elongation A100mm (%)	Resistivity Max (μΩ cm)	Conductivity Min (%IACS)
	Min (Mpa)	Max (Mpa)			
H14	115	130	14	2,801	61,5
H13	105	120	16	2,801	61,5
H12	95	110	20	2,801	61,5
H11	80	95	25	2,785	61,9
O	60	80	40	2,725	63,3

s/n 1715-2

Treatment	Tensile strength		Resistivity Max (μΩ cm)	Conductivity Min (%IACS)
	Min (Mpa	Max (Mpa)		
H16	117	152	2,8126	61,3
H14	103	138	2,808	61,4
H12	83	117	2,8035	61,5
O	59	97	2,7899	61,8

s/n B233

ALUMINIUM ANODES

Ø 9,5 mm
10 - 25 mm length
AW1370 (min 99,7 % Al) or AW1350 (min 99,5 % Al)
Big-bag 500 kg strapped onto wooden pallet

SEMI-FINISHED PRODUCTS

DRAWING AND STRANDING

ELECTRICAL APPLICATIONS

WIRES

Norm	EN 1301-1, EN 1301-2, EN 1301-3, ASTM B-230, ASTM B-609

Diameter and standard packaging*	
mm	1,25 - 5,00
DIN 630 wooden drum	
Cardboard box	

*Possibility of metallic drums

	Width (mm)	Height (mm)	Weight (kg)
DIN 630	630	475	190
Cardboard box	1.000	1.500	750

MULTIWIRES

Norm	ISO 6722-2

Composition		
Diameter (mm)	Number of wires	
From 0,2 up to 0,50	8	16

Hard or annealed

	Width (mm)	Height (mm)	Weight (kg)
DIN 630	630	570	150
DIN 800	800	570	260

STRANDED WIRES CLASS II

Low and medium voltaje

Norm	EN 60228, IEC 60228		
	Sections Class II (mm²)		
mm²	From 10 up to 50	From 50 up to 185	From 185 up to 630
Class II UNILAY			
Class II CROSSED LAY			

Compacted or not compacted

WOODEN			METALLIC	
Section mm²	Drum	Length (m)	Drum	Length (m)
10	138/76	40.000		
16		22.000		
25		15.000		
35		10.000		
50		8.000		
70	186/117	18.000		
95		14.500		
120		12.000		
150		8.000		
185		6.900	CF	12.600
240		5.600		10.000
300		4.200		7.600
400		3.300		6.000
500		2.200	AD	3.900
630		2.000		3.500

	Width (mm)	Height (mm)	Weight (kg)
DIN 1320	1.320	560	100
DIN 1800	1.800	1.150	100

STRANDED WIRES CLASS V

Flexible aluminium conductors

Norm **ISO 6722-2**

NOMINAL SECTION	SECTION (mm²)		Electric resistance at 22ºC	STRUCTURE						Length per coil (km)	
				A		B		C			
	max	min		Number of wires	Max wire Ø (mm)	Number of wires	Max wire Ø (mm)	Number of wires	Max wire Ø (mm)	DIN 1080	DIN 630
0,75	0,754	0,698	41,2	7	0,38	11	0,30	19	0,23		55,00
1	1,01	0,932	30,8	7	0,43	16	0,29	19	0,27		40,00
1,25	1,25	1,16	24,8	19	0,30	16	0,32	12	0,37		32,00
1,5	1,47	1,36	21,2	19	0,32	16	0,35	37	0,23		27,00
2	1,98	1,83	15,7	19	0,37	15	0,42	37	0,27		20,00
2,5	2,45	2,27	12,7	19	0,43			37	0,30		16,00
3	3,03	2,80	10,2	19	0,46	23	0,42	37	0,33		13,00
4	3,95	3,66	7,85	37	0,38	30	0,42	47	0,33		10,00
5	4,73	4,38	6,57	37	0,41	36	0,42	58	0,33		8,00
6	5,93	5,49	5,23	37	0,46	45	0,42	70	0,33	33,00	
8	7,82	7,24	3,97			59	0,42	98	0,33	25,00	
10	10,2	9,47	3,03			50	0,52	126	0,33	19,00	
12	12,3	11,3	2,53			60	0,52	154	0,33	16,00	
16	16,1	14,9	1,93			78	0,52	209	0,33	12,00	
20	19,5	18,1	1,59			95	0,52	247	0,33	10,00	
25	25,1	23,2	1,24			122	0,52	323	0,33	7,00	
30	28,8	26,6	1,08			141	0,52	361	0,33	6,80	
35	35,3	32,7	0,878	121	0,62	172	0,52	456	0,33	5,50	
40	39,4	36,5	0,788	134	0,62	193	0,52	494	0,33	4,90	
50	50,6	46,9	0,613	172	0,62	247	0,52	646	0,33	3,80	
60	59,1	54,7	0,525	201	0,62	289	0,52	741	0,33	3,30	
70	71,9	66,6	0,432	180	0,72	351	0,52	855	0,33	2,70	
85	85	78,7	0,365	213	0,72	420	0,52	1.064	0,33	2,30	
95	95	88	0,327	238	0,72	463	0,52	1.178	0,33	2,00	
120	122	113	0,255	234	0,82	305	0,72			1,60	
160	159	147	0,195	243	0,92	398	0,72			1,20	

DIN630 hasta la sección 12 mm²
DIN1000-1250-1400-1600 desde la sección 16 mm² en adelante

OVERHEAD CONDUCTORS

INTERNATIONAL DESIGNATION	FEATURES	APPLICATIONS
ACSR	Conductors	Steel core aluminium conductors Composed by various aluminium and galvanized steel wires stranded in concentric layers
	Main applications	In medium, high and very high voltage overhead lines
	Norms	EN 50182, IEC 61089, ASTM B232
AAC	Conductors	Aluminium conductors Composed by various aluminium wires stranded in concentric layers
	Main applications	In low voltage overhead lines and substations connections
	Norms	EN 50182, IEC 61089, ASTM B231
AAAC	Conductors	Aluminium alloy conductors Composed by various aluminium alloy wires stranded in concentric layers
	Main applications	In low, medium, high and very high voltage overhead lines
	Norms	EN 50182, IEC 61089, ASTM B399
ACAR	Conductors	Steel core aluminium conductors Composed by various aluminium and galvanized steel wires stranded in concentric layers
	Main applications	In low, medium, and high voltage overhead lines
	Norms	EN 50182, IEC 61089, ASTM B524

AACSR	Conductors	Steel core aluminium alloy conductors Composed by various aluminium alloy and galvanized steel wires stranded in concentric layers
	Main applications	In low, medium, and high and very high voltage overhead lines, as cross-over or guard cable
	Norms	EN 50182, IEC 61089, ASTM B711
ACSR/AW	Conductors	Aluminium-clad steel core aluminium conductors (ARAWELD)
	Main applications	In medium, and high and very high voltage overhead lines, especially in corrosive environments
	Norms	EN 50182, IEC 61089, ASTM B549
CABLES ARAWELD	Conductors	Aluminium-clad steed conductors (ARAWELD) Composed by various aluminium-clad steed wires stranded in concentric layers
	Main applications	Earthing cables in distribution lines, conductors in large cross-over, and electrification lines.
	Norms	EN 50182, IEC 61089, ASTM B416
ACSS	Conductors	Aluminium conductors steel supported
	Main applications	Existing lines. Increased transport capacity due to the substitution of the conductors maintaining the mechanical tension and security distances. New lines. The poles may prove more economical due to the reduced deflection of the conductor. In case of high emergency surcharges, or when facing excessive wind vibration. Increased distance between poles.
	Norms	EN 50540, ASTM B856-B857
OPGW	Conductors	The OPGW conductor is usually composed of a central non-metallic tubular structure containing optical fibres, situated inside the aluminium tube. The tube is surrounded by one or more layers of steel or aluminium, aluminium alloy and steel alloy wires. The specific type, size and number of these wires are selected to suit each individual application.
	Main applications	These cables can carry both electrical power and optical transmissions, fully utilising the capabilities of new or existing low and medium tensión network structures.
	Norms	UNE-EN 61.232, IEC 60.793, IEC 60.794

	Width (mm)	Height mm)
DIN 1270	1.270	700
DIN 1320	1.320	560
DIN 1600	1.600	820
DIN 1800	1.800	820
	1.800	1.130
	1.800	1.150

	Width (mm)	Height mm)
DIN 1800	1.800	1.015
DIN 2290	2.290	1.346
DIN 2425	2.425	1.560
DIN 2600	2.600	1.560

Length (m) depends on cable composition

LITZ CABLES

Number of single wires: from 10 up to 120
Ø from 0,25 up to 0,70 mm
Pitch 20 - 60 mm

Constructions:
- Single step construction
- Concentric design
- Multistep concentric design

Also available laminated and isolated

	Width (mm)	Height (mm)	Weight (kg)
DIN 355	440	355	10
DIN 500	250	500	25

SEMI-FINISHED PRODUCTS

DRAWING AND STRANDING

MECHANICAL AND ELECTRICAL APPLICATIONS

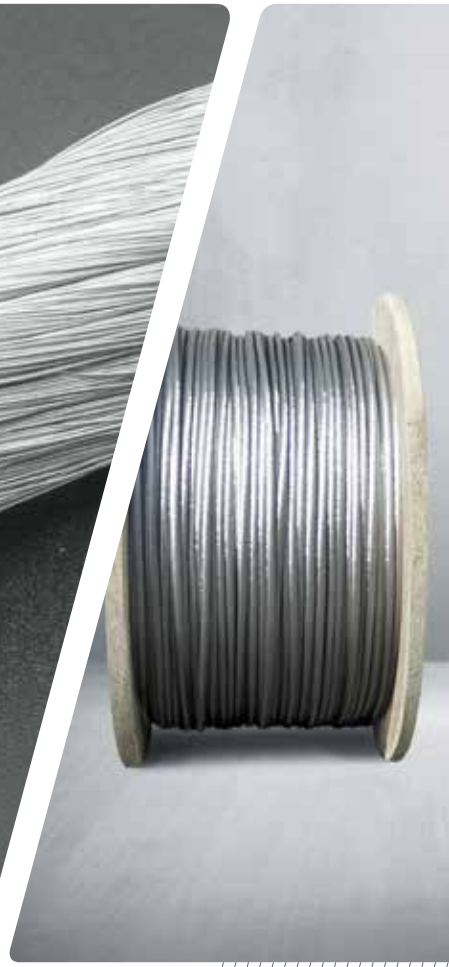
TRAVARTEC

ALUMINIUM WIRE-DRAWING AND STRANDING

ALUMINIUM CONDUCTORS FOR AUTOMOTIVE INDUSTRY

Norm **ISO 6722-2**

NOMINAL CROSS-SECTION	CALCULATED CROSS-SECTION		MAXIMUM RESISTANCE AT 20° C AT 20° C	
	max.	min.	Aluminium	Aluminium alloy
mm^2	mm^2	mm^2	Ω / km	Ω / km
0,75	0,754	0,698	41,2	43,6
1	1,01	0,932	30,8	32,7
1,25	1,25	1,16	24,8	26,3
1,5	1,47	1,36	21,2	22,4
2	1,98	1,83	15,7	16,6
2,5	2,45	2,27	12,7	13,4
3	3,03	2,80	10,2	10,9
4	3,95	3,66	7,85	8,32
5	4,73	4,38	6,57	6,96
6	5,93	5,49	5,23	5,55
8	7,82	7,24	3,97	4,20
10	10,2	9,47	3,03	3,21
12	12,3	11,3	2,53	2,68
16	16,1	14,9	1,93	2,05
20	19,5	18,1	1,59	1,69
25	25,1	23,2	1,24	1,31
30	28,8	26,6	1,08	1,14
35	35,3	32,7	0,878	0,931
40	39,4	36,5	0,788	0,835
50	50,6	46,9	0,613	0,650
60	59,1	54,7	0,525	0,556
70	71,9	66,6	0,432	0,457
85	85	78,7	0,365	0,387
95	95	88	0,327	0,346
120	122	113	0,255	0,270
160	159	147	0,195	0,207



CONSTRUCTION						Weight (kg/km)
Structure A		Structure B		Structure C		
Number of wires	Maximum wire diameter (mm)	Number of wires	Maximum wire diameter (mm)	Number of wires	Maximum wire diameter (mm)	
7	0,38	11	0,30	19	0,23	2,0
7	0,43	16	0,29	19	0,27	2,7
19	0,30	16	0,32	12	0,37	3,4
19	0,32	16	0,35	37	0,23	4,0
19	0,37	15	0,42	37	0,27	5,4
19	0,43			37	0,30	6,6
19	0,46	23	0,42	37	0,33	8,2
37	0,38	30	0,42	47	0,33	10,7
37	0,41	36	0,42	58	0,33	12,8
37	0,46	45	0,42	70	0,33	16,0
		59	0,42	98	0,33	21,1
		50	0,52	126	0,33	27,6
		60	0,52	154	0,33	33,2
		78	0,52	209	0,33	43,5
		95	0,52	247	0,33	52,7
		122	0,52	323	0,33	67,8
		141	0,52	361	0,33	77,8
121	0,62	172	0,52	456	0,33	95,4
134	0,62	193	0,52	494	0,33	106,5
172	0,62	247	0,52	646	0,33	136,8
201	0,62	289	0,52	741	0,33	159,7
180	0,72	351	0,52	855	0,33	194,3
213	0,72	420	0,52	1064	0,33	229,8
238	0,72	463	0,52	1178	0,33	256,8
234	0,82	305	0,72			329,8
243	0,92	398	0,72			429,8

SEMI-FINISHED PRODUCTS

SOLID WIRES AND ISOLATED CONDUCTORS

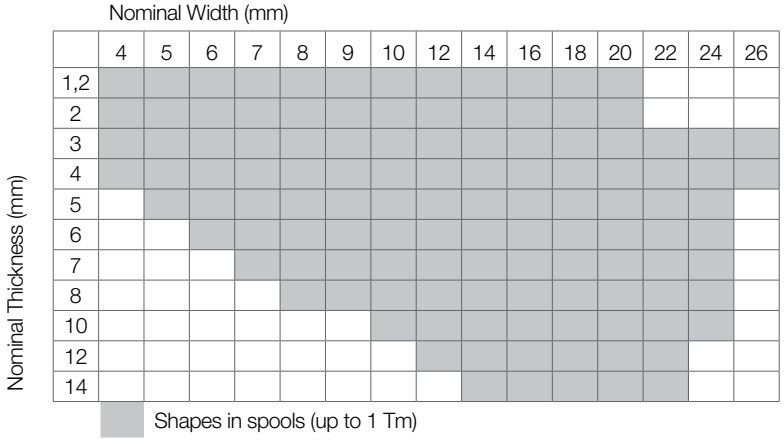
ECN
CUNEXT GROUP

FLAT, ROUND AND SECTORIAL WIRES

Norm	**Based on customer technical specifications**
Cross section	3-1.200 mm²
Width	5-75 mm
Max thickness	20 mm
Max diameter	50 mm
Max ratio	35:1
Packaging	DIN 2000 / 3.000 kg

ISOLATED FLAT WIRES AND CABLES

Norm	**EN 60317-09**



PARTS AND SUB-ASSEMBLIES

We are specialized in the manufacturing of small lots up to large series of parts and sub-assemblies (copper, aluminium and alloys) on customer's drawing, with the possibility to perform surface treatment using an electrolytic process (copper, tin, nickel, etc), thereby offering solutions that fully comply with our customers' production requirements.

Cunext GROUP

Cablexsur
CUNEXT GROUP

Estacor
CUNEXT GROUP

Transformados Cunext Copper
CUNEXT GROUP

ECN
CUNEXT GROUP

Ibermetalia
CUNEXT GROUP

Transformados Combisa
CUNEXT GROUP

TRAVARTEC
ALUMINIUM WIRE-DRAWING AND STRANDING

CÓRDOBA

Cunext Copper Industries
Cablexsur
Transformados Cunext
Avd. de la Fábrica s/n
14005 Córdoba
+34 957 499 300
+34 957 499 319

Estacor
P.I. EL Caño II, Calle C
14220 Espiel (Córdoba)
+34 957 363 357

MADRID ESTANCOR

Calle Nuñez de Balboa, nº 122
28006 Madrid
+34 913 193 730
+34 913 195 116

BARCELONA

Avda. Josep Tarradellas,
8-10, 2° 3°
08029 Barcelona
+34 938 445 130
+34 938 439 919

VITORIA

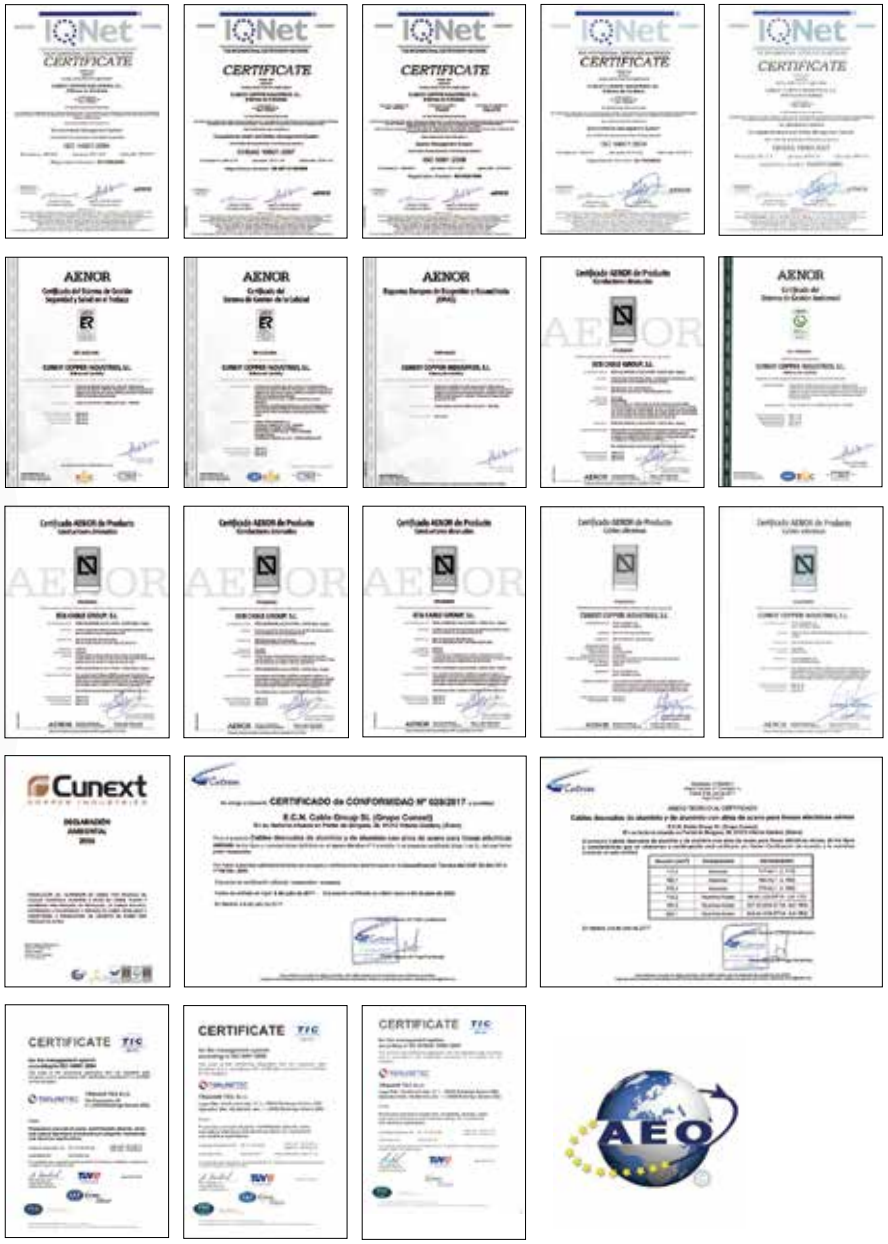
ECN
Transformados Combisa
Calle Portal de Vergara, 36
01013 Vitoria-Gasteiz
+34 674 323 893

ZARAGOZA

Ibermetalia
Ctra. de Logroño, km 17
50629 Sobradiel (Zaragoza)

TRAVARTEC

Travar Tec SRL
Via Bertoli 17A
25050 Rodengo Saiano (BS)
Tel. +39 030 6810728
Fax +39 030 61130
info@travartec.com
www.travartec.com
ITALIA



Cunext
GROUP

Headquarters:
Avda. de la Fábrica, S/N
14005 Córdoba · Spain
(+34) 957 499 300
www.cunext.com