
UCI
ULUSOY COPPER INDUSTRIES

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ULUSOY BAKIR VE METAL SAN. VE TİC. A.Ş.

www.uci.com.tr

ULUSOY RAILWAY SYSTEMS

ULUSOY RAYLI SİSTEMLER A.Ş.

With 100% Domestic Design and R&D Activities, Turkey's first Overhead Line Equipment (OLE) System manufacturer produces all Console Hoban connection components in accordance with the demands of national and international railway organizations using high-quality cast and forged aluminum, making it the sole producer in Turkey.

www.ulusoyrail.com.tr

ULUSOY ENERJİ

ULUSOY ENERJİ YATIRIMLARI A.Ş.

Ulusoy Elektrik Enerji Yatırımları A.Ş. is a company that has been operating for over 40 years in the electricity generation, transmission, and distribution sectors. It combines its superior engineering infrastructure, innovative technology development capabilities, and strong financial foundation to continue investing in domestic, renewable, and sustainable energy projects in both the Turkish and international markets. Their projects include.

- ZEKERE HYDROELECTRIC POWER PLANT
- KUŞADASI WIND POWER PLANT

www.ulusoyenerji.com.tr

ULUSOY COPPER INDUSTRIES MEET UCI!

Ulusoy Copper Industries (UCI) was established with the aim of producing 100% domestic copper tubes for heating, cooling, white goods, automotive, and various other industries reflecting the over 40 years of high-tech industrial production experience of Ulusoy Investment Group

Our facility, located on a 40,000 square meter area in Ankara Anatolian Organized Industrial Zone, houses a modern factory with 26,000 square meters of enclosed space. The facility, which became operational in the last quarter of 2022, is equipped with state-of-the-art equipment investments.

UCI aims to offer high-quality, competitive products to its business partners with its experienced, expert team and knowledge of copper tube production. Embracing continuous improvement and technological investments in production, UCI carries the vision of setting quality standards for copper tubes in our country.

UCI emphasizes its goal of zero carbon emissions with a 4 MW solar energy plant installed on the roof of its facility, focusing on environmentally friendly production processes that are suitable for recycling and environmentally friendly for a sustainable future.

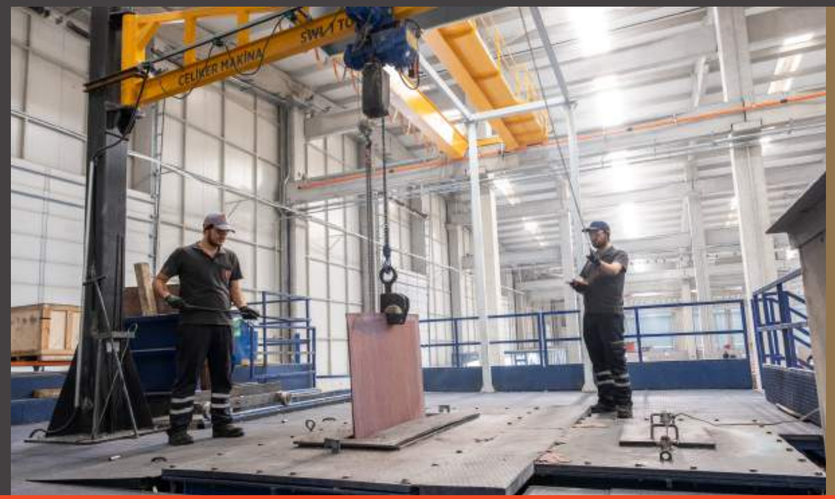
Quality is one of UCI's fundamental values. Products from our production processes, which are certified by TUV Austria with ISO 9001, ISO 14001, and ISO 45001 management systems, undergo precise controls in our laboratories equipped with high-tech, modern equipment, ensuring the supply of products that meet high-quality standards and comply with international standards.

As one of Turkey's leading companies, Ulusoy Copper Industries (UCI) operates with high quality, technological superiority, and sustainability principles. With an innovative approach and a strong management team, UCI aims to provide solutions that respond to customer demands. UCI carries the vision of shaping the future of the industry by continuously promoting innovation and offering opportunities and sustainable values to its customers and employees.

OUR PRODUCTS

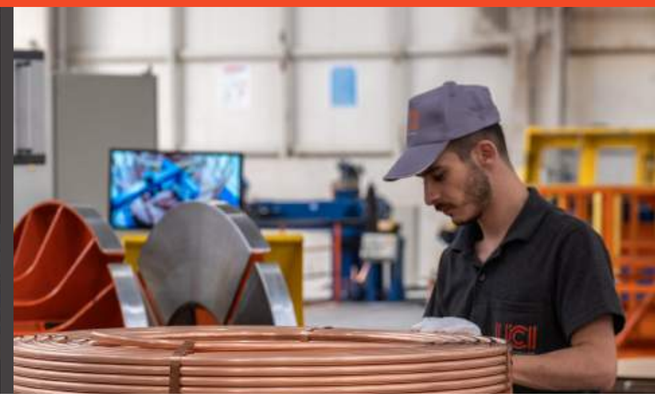
At UCI facilities, production is carried out using the Cast & Roll continuous casting technique, utilizing high-quality copper cathodes sourced from leading copper cathode manufacturers worldwide, without incorporating scrap copper usage. A wide range of copper tubes with superior properties, produced to meet the needs of different industries, is offered in product types such as LWC, straight-length, pancake coil, and grooved tube, tailored to their respective purposes.

Copper tubes, with their superior properties, find a wide range of applications in heating, cooling, gas distribution, solar energy systems, industrial applications, plumbing and medical gas line applications.



ULUSOY COPPER INDUSTRIES

THE SUPERIOR FEATURES OF COPPER TUBES:



HIGH THERMAL CONDUCTIVITY

Copper has higher thermal conductivity. This feature makes copper tubes preferred in applications that require heat transfer.

CORROSION RESISTANCE

Copper is resistant to moisture and atmospheric oxygen.
It enables the production of long-lasting products.

PURITY AND CLEAN INNER SURFACE

High-purity copper tubes have a smooth and even inner surface. These features allow fluids to flow efficiently.

HIGH STRENGTH

Copper has high mechanical strength. It allows for the production of long-lasting and durable products.

BACTERIOSTATIC PROPERTY

Copper has a natural property that inhibits the growth of bacteria and microorganisms on its surface.

FORMING

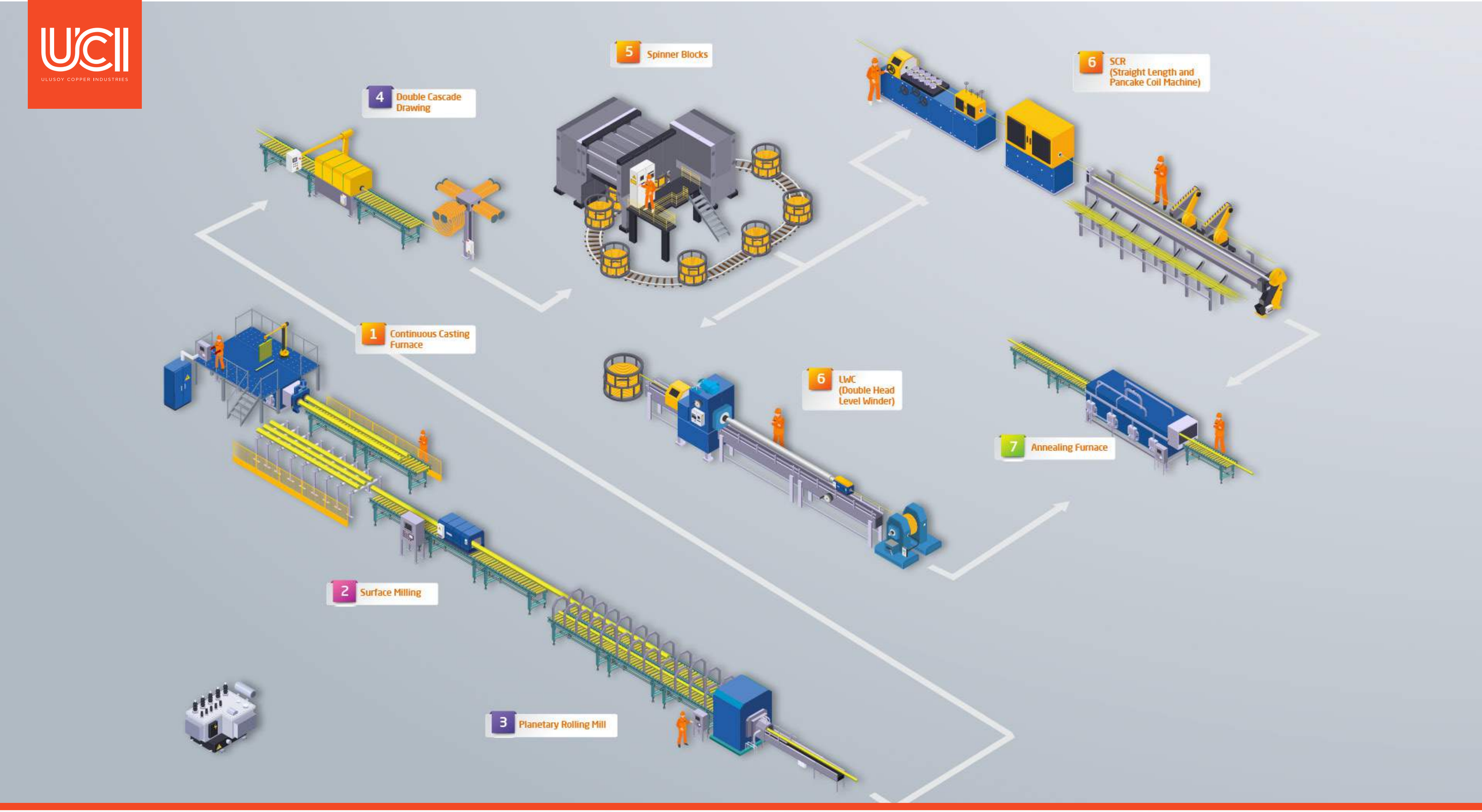
Copper is highly formable metal and has high soldering and welding capabilities. With these features, it can be easily assembled in various plumbing and piping systems.

LOW CARBON FOOTPRINT

Copper has a lower carbon footprint compared to other materials. Therefore, it is considered an environmentally friendly option.

ELECTRICAL CONDUCTIVITY

Due to its high electrical conductivity, it is preferred in current-carrying applications.


ULUSOY COPPER INDUSTRIES
4 Double Cascade Drawing
5 Spinner Blocks
6 SCR (Straight Length and Pancake Coil Machine)
1 Continuous Casting Furnace
6 LWC (Double Head Level Winder)
7 Annealing Furnace
2 Surface Milling
3 Planetary Rolling Mill

LWC COPPER TUBE

UCI copper tube production is carried out with diameters ranging from 4.76 to 22.70 mm and wall thicknesses between 0.30 to 1.20 mm, in annealed and hard tempers.

Outside diameter : 4,76 mm - 22,70 mm
Wall Thickness : 0,30 mm - 1,20 mm
Condition : R220 - R290

CHEMICAL COMPOSITION

Tanım	EN No.	ASTM No
Cu-DHP	CW024A	C12200

MECHANICAL PROPERTIES

Temper	Tensile Strength (Mpa)	Elongation (%)
Annealed	min. 220	min. 40
Hard	min. 290	min. 3

LWC PACKAGING: Both ends of LWC coils are sealed with plastic caps. 3-7 coils are placed on a pallet with separator cardboard in between, strapped, and stretch-wrapped with PE nylon. Depending on customer demand, packaging can be done on cardboard or wooden spools. LWC coils mounted on cardboard or wooden spools are placed on a pallet, strapped, and stretch-wrapped with PE nylon.

Outside Diameter		Wall Thickness		Coil Weight
mm	inç	Min (mm)	Max (mm)	Kg
4,76	3/16	0,30	1,00	130-500
5,00		0,30	1,00	130-500
6,00		0,30	1,00	130-500
6,35	1/4	0,30	1,00	130-500
7,00		0,30	1,00	130-500
7,93	5/16	0,30	1,00	130-500
8,00		0,30	1,00	130-500
9,52	3/8	0,30	1,00	130-500
10,00		0,30	1,00	130-500
11,00		0,30	1,00	130-500
12,00		0,30	1,00	130-500
12,70	1/2	0,30	1,00	130-500
13,00		0,40	1,00	130-500
13,50		0,40	1,00	130-500
14,00		0,40	1,00	130-500
15,00		0,40	1,00	130-500
15,87	5/8	0,40	1,00	130-500
16,00		0,50	1,00	130-500
17,00		0,50	1,00	130-500
18,00		0,50	1,00	130-500
19,00		0,50	1,20	130-500
19,05	3/4	0,50	1,20	130-500
20,00		1,00	1,20	130-500
22,00		1,00	1,20	130-500
22,22	7/8	1,00	1,20	130-500
22,70		1,00	1,20	130-500

• Please contact our Sales Department for dimensions not available in the table.

STRAIGHT COPPER TUBE

UCI straight copper tube production is carried out with diameters ranging from 4.76 to 28.00 mm and wall thicknesses between 0.30 to 1.50 mm, in annealed, half hard and hard tempers.

Outside diameter : 4,76 mm - 28,00 mm
Wall Thickness : 0,30 mm - 1,50 mm
Condition : R220 - R250 - R290

CHEMICAL COMPOSITION

Definition	EN No.	ASTM No
Cu-DHP	CW024A	C12200

MECHANICAL PROPERTIES

Temper	Tensile Strength (MPA)	Elongation (%)
Annealed	min. 220	min. 40
Half Hard	min. 250	min. 30
Hard	min. 290	min. 3

STRAIGHT COPPER TUBE PACKAGING: Both ends of straight copper tubes are sealed with plastic caps. The tubes are wrapped in PE nylon to protect them from external conditions and shipped in wooden crates tailored to the order length. Upon request, shipments can be made on customers' recyclable metal pallets.

Outside Diameter		Wall Thickness		Lenght
mm	inç	Min (mm)	Max (mm)	m
4,76	3/16	0,30	1,00	2,0-6,0
6,00	-	0,30	1,00	2,0-6,0
6,35	1/4	0,30	1,00	2,0-6,0
7,93	5/16	0,30	1,00	2,0-6,0
8,00	-	0,30	1,00	2,0-6,0
9,52	3/8	0,30	1,00	2,0-6,0
10,00	-	0,30	1,00	2,0-6,0
11,00	-	0,30	1,00	2,0-6,0
12,00	-	0,30	1,00	2,0-6,0
12,70	1/2	0,30	1,00	2,0-6,0
13,00	-	0,40	1,00	2,0-6,0
13,50	-	0,40	1,00	2,0-6,0
14,00	-	0,40	1,00	2,0-6,0
15,00	-	0,40	1,00	2,0-6,0
15,87	5/8	0,40	1,00	2,0-6,0
16,00	-	0,50	1,00	2,0-6,0
17,00	-	0,50	1,00	2,0-6,0
18,00	-	0,50	1,00	2,0-6,0
19,00	-	0,50	1,20	2,0-6,0
19,05	3/4	0,50	1,20	2,0-6,0
20,00	-	1,00	1,20	2,0-6,0
22,00	-	1,00	1,20	2,0-6,0
22,22	7/8	1,00	1,20	2,0-6,0
25,00	-	1,00	1,50	2,0-6,0
28,00	-	1,00	1,50	2,0-6,0

• Please contact our Sales Department for dimensions not available in the table.

PANCAKE COPPER TUBE

UCI manufactures pancake coils with diameters ranging from 4.76 to 22.22 mm and thicknesses between 0.30 to 1.20 mm.

Outside diameter : 4,76 mm - 22,22 mm
Wall Thickness : 0,30 mm - 1,20 mm
Condition : R220

CHEMICAL COMPOSITION

Definition	EN No.	ASTM No
Cu-DHP	CW024A	C12200

MECHANICAL PROPERTIES

Temper	Tensile Strength (Mpa)	Elongation (%)
Annealed	min. 220	min. 40

PANCAKE COİL COPPER TUBE PACKAGİNG:

Both ends of coils, produced in lengths ranging from 15 to 100 meters depending on the order, are sealed with plastic caps. Each coil is shrink-wrapped and placed in cardboard boxes that fit its size. The boxes are placed on pallets, secured with straps, and stretch-wrapped with PE nylon.

Outside Diameter		Wall Thickness		Lenght
mm	inç	Min (mm)	Max (mm)	m
4,76	3/16	0,30	1,00	15-100
5,00	-	0,30	1,00	15-100
6,00	-	0,30	1,00	15-100
6,35	1/4	0,30	1,00	15-100
7,00	-	0,30	1,00	15-100
7,93	5/16	0,30	1,00	15-100
8,00	-	0,30	1,00	15-100
9,52	3/8	0,30	1,00	15-100
10,00	-	0,30	1,00	15-100
11,00	-	0,30	1,00	15-100
12,00	-	0,30	1,00	15-50
12,70	1/2	0,30	1,00	15-50
13,00	-	0,40	1,00	15-50
13,50	-	0,40	1,00	15-50
14,00	-	0,40	1,00	15-50
15,00	-	0,40	1,00	15-50
15,87	5/8	0,40	1,00	15-50
16,00	-	0,50	1,00	15-50
17,00	-	0,50	1,00	15-50
18,00	-	0,50	1,00	15-50
19,00	-	0,50	1,20	15-25
19,05	3/4	0,50	1,20	15-25
20,00	-	1,00	1,20	15-25
22,00	-	1,00	1,20	15-25
22,22	7/8	1,00	1,20	15-25

• Please contact our Sales Department for dimensions not available in the table.

INNER GROOVED COPPER TUBES

Ulusoy Copper Industries (UCI) produces inner grooved copper tubes in the diameter range of Ø 7.00 to 9.52 mm and with a root thickness range of 0.22 to 0.41 mm. inner grooved copper tubes offer a range of advantages in various applications due to their unique design. Some of the advantages of using UCI internally grooved copper tubes include:

Outside diameter : 7,00 mm - 9,52 mm
Wall Thickness : 0,22 mm - 0,41 mm
Condition : R220

CHEMICAL COMPOSITION

Definition	EN No.	ASTM No
Cu-DHP	CW024A	C12200

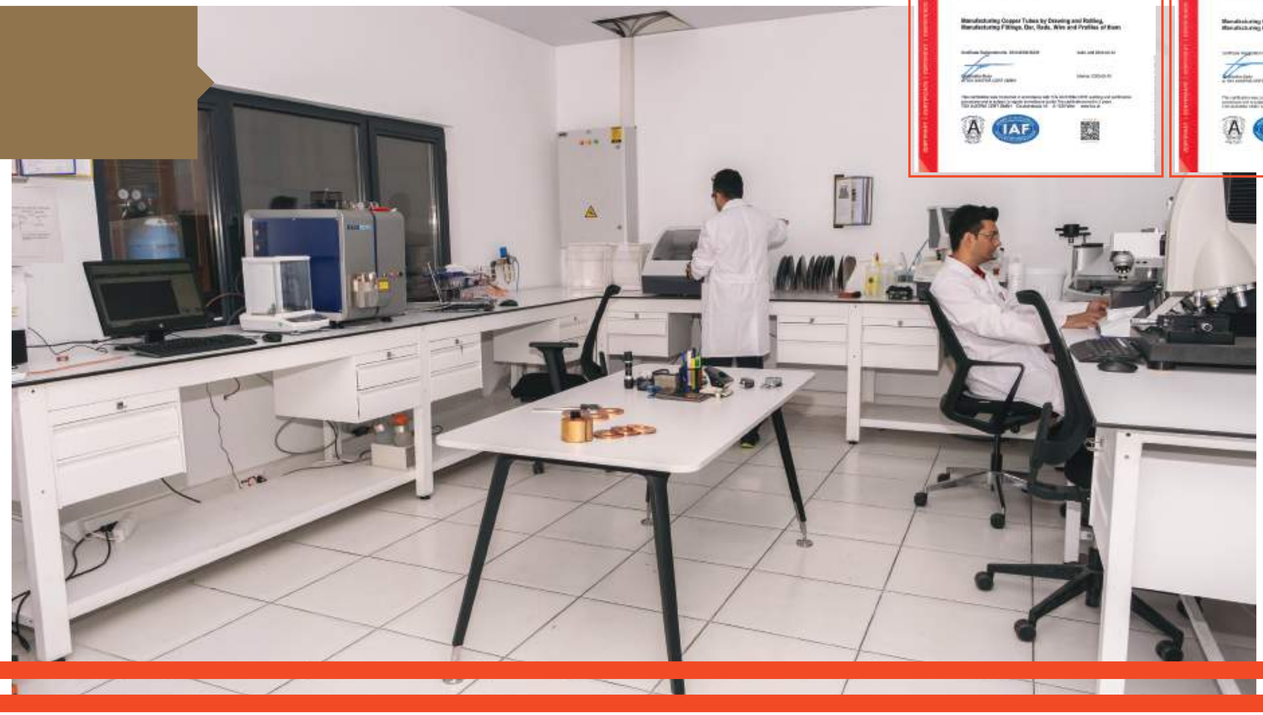
MECHANICAL PROPERTIES

Temper	Tensile Strength (MPA)	Elongation (%)
Annealed	min. 220	min. 40

- **Improved Heat Transfer Efficiency:** The grooves on the inner surfaces of copper tubes disrupt the smooth flow of the fluid passing through the tube. The resulting turbulence enhances the heat transfer efficiency between the fluid and the tube surface, improving overall heat exchange performance.
- **Reduced Fouling and Scaling:** The grooves on the inner surface of the tube help prevent the formation of scale, deposits, and biological buildup. This feature reduces fouling and scaling that can lead to decreased efficiency and increased energy consumption over time. Internally grooved copper tubes are particularly beneficial in applications where water or other liquids prone to buildup are used.
- **Greater Surface Area:** Grooved copper tubes effectively increase the inner surface area of the tube. The resulting larger surface area promotes better heat transfer by increasing contact between the fluid and the tube.
- **Enhanced Condensation Performance:** Inner grooved copper tubes are especially beneficial in condensation applications, such as HVAC systems. The grooves aid in achieving a more uniform distribution of condensate along the tube surface, thereby increasing heat transfer and overall efficiency.
- **Compact and Lightweight Design:** By encouraging the use of smaller or narrower tubes due to improved heat transfer capabilities, grooved copper tubes enable compact and lightweight designs.
- **Energy Efficiency:** By shortening the heat exchange processes through improved heat efficiency, they contribute to energy savings.
- **Optimized Performance:** Grooved copper tubes are designed for optimized heat transfer performance. Therefore, they are a preferred choice in applications requiring efficient thermal exchange, such as HVAC, cooling, heat pumps, and similar applications.

PACKAGİNG FOR INNER GROOVED LWC COPPER TUBES: Packaging can be done on cardboard or wooden spools depending on customer demand. Internally grooved LWC coils, mounted on cardboard or wooden spools, are placed on a pallet, strapped, and stretch-wrapped with PE nylon.

QUALITY



UCI operates with a mission to be a leader in the industry through its high-quality products. It aims not only to set quality standards for its own copper tube products but also to establish higher quality standards across the industry as a whole. UCI is committed to providing its customers with a competitive advantage through its dedication to quality and the production of high-quality products.

UCI's copper tube products are produced in full compliance with national and international standards and are certified accordingly. Our experienced quality control teams meticulously monitor every stage of our products' production, working diligently to achieve excellent results. They receive continuous training and embrace new technologies to maintain the highest standards of product quality.

Our laboratories are equipped with modern devices to ensure the highest level of precision and confidence when conducting metallographic, physical, chemical, and mechanical tests on our products.

UCI offers high-quality products to its customers not only as a commitment but also as a core value at the heart of its mission.

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