

The 75th anniversary logo for Sevojno. It features a large, stylized '75' in white and gold, followed by the word 'YEARS' in white. Below this, the words 'SOLID AS COPPER' are written in a smaller, white, sans-serif font.

75 YEARS
SOLID AS COPPER

INDEKSI

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Osnovnu delatnost kompanije Valjaonica bakra Sevojno čine prerada bakra i legura bakra valjanjem, presovanjem i izvlačenjem u standardne poluproizvode: limove, trake, folije, lamele, rondele, cevi, šipke, šine, profile i žice.

U našim pogonima lije se i prerađuje više vrsta čistog bakra, širok spektar legura bakra sa cinkom i legura bakra sa cinkom i drugim legirajućim elementima (mesinzi sa olovom, specijalni mesinzi sa kalajem, aluminijumom i niklom).

The core business of the company Copper Mill Sevojno is fabrication of copper and copper alloys through rolling, extrusion and drawing into standard semi-finished products: sheets, strips, foils, lamellae, circles, tubes, rods, bars, profiles and wire.

Within our production facilities we cast and process several types of pure copper, a wide range of copper alloys with zinc, as well as copper alloys with zinc and other alloying elements (brasses with lead, special brasses with tin, aluminium and nickel).

1

RAVNO VALJANI PROIZVODI

FLAT ROLLED PRODUCTS

ZBOG ODLIČNIH MEHANIČKIH I FIZIČKIH KARAKTERISTIKA BAKRA I MESINGA OBIM I NAČIN PRIMENE RAVNO VALJANIH POLUPROIZVODA JE VEOMA RAZLIČIT:

- U ELEKTROTEHNICI, U PROIZVODNJI OPREME ZA ELEKTROINDUSTRIJU, U PROIZVODNJI SOLARNIH PANELA, IZMENJIVAČA TOPLOTE, ELEKTRIČNIH TRANSFORMATORA, KONEKTORA, OMOTAČA ELEKTRIČNIH KABLOVA;
- U GRAĐEVINARSTVU I ARHITEKTURI;
- U PROIZVODNJI DELOVA I KOMPONENTI ZA AUTOMOBILSKU INDUSTRIJU;
- NA ŽELEZNICI I U BRODOGRADNJI;
- U PROIZVODNJI OPREME ZA RADIO TELEKOMUNIKACIONE UREĐAJE;
- U PROIZVODNJI VOJNE OPREME I MUNICIJE;
- ZA UREĐAJE I OPREMU U DOMAĆINSTVU.

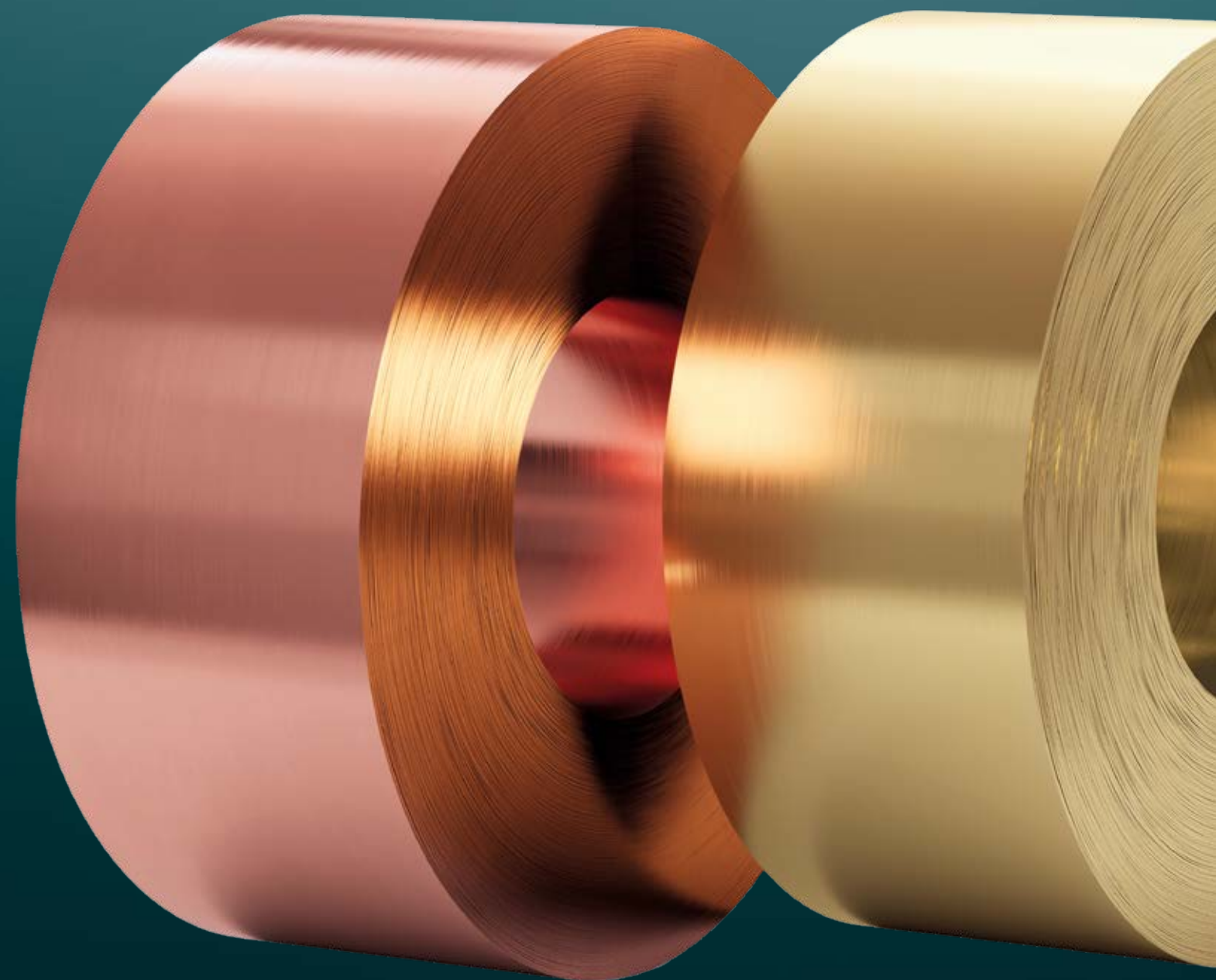
SAV ASORTIMAN RAVNO VALJANIH POLUPROIZVODA PROIZVODI SE PREMA STANDARDIMA: EN, DIN, GOST, BS I DRUGIM SVETSKIM STANDARDIMA, ALI I PREMA SPECIJALNIM ZAHTEVIMA KUPAČA. SPECIJALNI ZAHTEVI MOGU SE ODNOSITI NA: UŽE TOLERANCIJE, ZADOVOLJENJE SPECIJALNIH TEHNOLOŠKIH OSOBINA, UŽE PODRUČJE MEHANIČKIH OSOBINA, POSEBNE ZAHTEVE ZA KVALITET POVRŠINE I DRUGE OSOBINE KOJE TREBA DA ZADOVOLJE ODGOVARAJUĆU NAMENU.

DUE TO EXCELLENT MECHANICAL AND PHYSICAL PROPERTIES OF COPPER AND BRASS, THE RANGE AND WAYS OF USE OF FLAT ROLLED SEMI-FINISHED PRODUCTS ARE QUITE VARIOUS:

- *IN ELECTRICAL ENGINEERING, IN THE PRODUCTION OF EQUIPMENT FOR THE ELECTRICAL INDUSTRY, IN THE PRODUCTION OF SOLAR PANELS, HEAT EXCHANGERS, ELECTRICAL TRANSFORMERS, CONNECTORS, COVERS OF ELECTRICAL CABLES;*
- *IN CIVIL ENGINEERING AND ARCHITECTURE;*
- *IN THE PRODUCTION OF PARTS AND COMPONENTS FOR THE AUTOMOBILE INDUSTRY;*
- *IN THE RAILWAY SECTOR AND SHIPBUILDING;*
- *IN THE PRODUCTION OF EQUIPMENT FOR RADIO AND TELECOMMUNICATION DEVICES;*
- *IN THE PRODUCTION OF MILITARY EQUIPMENT AND AMMUNITION;*
- *FOR DEVICES AND EQUIPMENT IN THE HOUSEHOLD.*

THE WHOLE PORFOLIO OF SEMI-FINISHED FLAT ROLLED PRODUCTS IS MANUFACTURED ACCORDING TO THE FOLLOWING STANDARDS: EN, DIN, GOST, BS AND OTHER INTERNATIONAL STANDARDS, BUT ALSO ACCORDING TO SPECIAL REQUIREMENTS OF THE CUSTOMERS.

THESE SPECIAL REQUIREMENTS MAY REFER TO: REDUCED TOLERANCES, SPECIAL TECHNOLOGICAL REQUESTS, SMALLER RANGE OF MECHANICAL PROPERTIES, SPECIAL REQUESTS REGARDING SURFACE QUALITY AND OTHER PROPERTIES THAT SHOULD MEET THE INTENDED PURPOSE.





1.1

Ravno valjani proizvodi od bakra

Široko se primenjuju u proizvodnji opreme za elektroindustriju. U građevinarstvu i arhitekturi koriste se za krovne pokrivke i dekorativne elemente u eksterijeru ili enterijeru. Primenu nalaze i u proizvodnji elemenata za automobilsku industriju, u brodogradnji, u vojnoj industriji, ali i za umetničke predmete i dekoraciju enterijera.

Flat rolled copper products

They are widely used in the production of equipment intended for electrical industry. In addition, they are used in civil engineering and architecture for roofing and decorative elements in the exterior or interior. They are also used for production of elements intended for the automotive industry, in shipbuilding, military industry, but also for art objects and interior decoration.

VRSTE BAKRA OD KOJIH IZRAĐUJEMO RAVNO VALJANE PROIZVODE
TYPE OF COPPER USED FOR THE PRODUCTION OF FLAT ROLLED PRODUCTS

EN		DIN	ASTM
SLOVIMA SYMBOL	BROJEVIMA NUMBERS		
Cu-HCP	CW021A	SE-Cu57	C10300
Cu-ETP	CW004A	E-Cu58	C11000
Cu-DLP	CW023A	SW-Cu	C12000
Cu-DHP	CW024A	SW-Cu	C12200
Cu-ZN0.5	CW119C	CuZn0.5	

ASORTIMAN BAKARNIH RAVNO VALJANIH PROIZVODA
PORTFOLIO OF FLAT ROLLED COPPER PRODUCTS

ASORTIMAN
PRODUCT PORTFOLIO

1.1.1

Bakarne trake i folije

Široko se primenjuju u proizvodnji telekomunikacionih i visokofrekventnih kablova, električnih transformatora, konektora, omotača električnih kablova, u elektrotehnici, za kontaktne elemente prekidača široke primene, u proizvodnji solarnih panela. Bakarne trake su zbog svoje postojanosti najekonomičniji materijal za izradu krovnih oluka u građevinarstvu. Koriste se u proizvodnji elemenata u automobilskoj industriji, ali i u popularnoj umetnosti, dekoraciji enterijera, i mnogim drugim sektorima. Bakarne trake i folije za primenu u elektrotehnici izrađuju se prema standardu EN 13599, za opštu namenu prema standardu EN 1652, dok se za primenu u građevinarstvu izrađuju u skladu sa standardom EN 1172. Bakarne trake i folije izrađujemo prema standardima EN, DIN, GOST, BS i drugim svetskim standardima, ali i prema specijalnim zahtevima kupaca.

Specijalni zahtevi mogu se odnositi na uže tolerancije, uže područje mehaničkih osobina, zadovoljenje specijalnih tehnoloških osobina i druge specijalne zahteve za osobinama koje treba da zadovolje odgovarajuću namenu.

Copper strips and foils

They are widely used in the production of telecommunication and high-frequency cables, electrical transformers, connectors, covers of electrical cables, in electrical engineering, for contact elements of the wide application switches, in the production of solar panels. Due to their durability, copper strips are the most economical material for making roof coverings in the construction industry. They are also used for the production of elements in the automotive industry, but also in popular art, interior decoration, and many other sectors. Copper strips and foils for use in electrical engineering are produced according to EN 13599, for general use according to EN 1652, and for use in civil engineering these products are made in accordance with EN 1172. We make copper strips and foils according to EN, DIN, GOST, BS and other international standards, as well as according to special requirements of our customers.

Special requirements may refer to reduced tolerances, smaller range of mechanical properties, special technological requests and other specific requirements related to the properties that should meet the intended purpose.

PROIZVODI PRODUCTS	DIMENZIJE, mm DIMENSIONS, mm	
TRAKA STRIP	Debljina ²⁾ Thickness ²⁾	0.15 - 4.0
	Širina ²⁾ Width ²⁾	8.0 - 1000.0
	Masa kotura u kg po mm širine ³⁾ Coil weight in kg per mm of width ³⁾	do 5.0 up to 5.0
	Unutrašnji prečnik kotura ⁴⁾ Inside coil diameter ⁴⁾	75, 100, 150, 200, 300, 400, 500 ili po zahtevu 75, 100, 150, 200, 300, 400, 500 or as requested
FOLIJA FOIL	Debljina ³⁾ Thickness ³⁾	0.07 - 0.15 za bakar 0.07 - 0.15 for copper
	Širina ³⁾ Width ³⁾	10.0 - 600.0
	Unutrašnji prečnik kotura Inside coil diameter	75, 100 ili po zahtevu 75, 100 or as requested

²⁾ Širina odgovara porudžbini debljine.
³⁾ Zavisno od vrste legure, debljine i širine trake.
⁴⁾ Na zahtev kupca isporuka na metalnom jezgru ili kartonskoj hilzni.

²⁾ The width corresponds to the ordered thickness.
³⁾ Depending on the type of alloy, thickness and width of strip.
⁴⁾ As requested by the buyer, delivery can be done on metal spools or cardboard reels.



1.1.2

Bakarni limovi i ploče

Koriste se najčešće u građevinarstvu i arhitekturi jer su savršen materijal za pokrivanje krovnih konstrukcija zahvaljujući svojim odličnim fizičkim osobinama. Koriste se i za oblaganje spoljnih, fasadnih površina, dajući impresivan estetski efekat brojnim crkvama, spomenicima, muzejima i drugim objektima. Koriste se i u elektrotehnici i mašinogradnji. Bakarni limovi i ploče za primenu u elektrotehnici izrađuju se prema standardu EN 13599, za primenu u građevini izrađuju se prema standardu EN 1172, a za opštu namenu prema standardu EN 1652. Bakarne limove i ploče izrađujemo prema standardima EN, DIN, GOST, BS i drugim svetskim standardima, ali i prema specijalnim zahtevima kupaca.

Specijalni zahtevi mogu se odnositi na uže tolerancije, uže područje mehaničkih osobina, zadovoljenje specijalnih tehnoloških osobina i druge specijalne zahteve za osobinama koje treba da zadovolje odgovarajuću namenu.

Copper sheets and plates

These products are mainly used in the construction industry and architecture, because they are the perfect material for covering the complex roof structures due to their excellent physical properties. They are also used for coating the external facade surfaces, giving an impressive aesthetic effect to numerous churches, monuments, museums and other buildings. In addition, they are used in electrical engineering and machine building. Copper sheets and plates for electrical purposes are manufactured according to standard EN 13599, for building purposes according to standard EN 1172 and for general purposes according to EN 1652. We make copper sheets and plates according to EN, DIN, GOST, BS and other international standards, as well as according to special requirements of our customers.

Special requirements may refer to reduced tolerances, smaller range of mechanical properties, special technological requests and other specific requirements related to the properties that should meet the intended purpose.



ASORTIMAN
PRODUCT PORTFOLIO

PROIZVODI PRODUCTS	DIMENZIJE, mm DIMENSIONS, mm	
LIM SHEET	Debljina Thickness	0.3 - 10.0
	Širina Width	500.0 - 1000.0
	Dužina Length	500.0 - 4000.0
PLOČA PLATE	Debljina Thickness	>10.0 (max 150.0)
	Širina Width	500.0 - 1100.0
	Dužina Length	po zahtevu as requested
PASS, LAMELA SECTION, LAMELLA	Debljina Thickness	0.3 - 10.0
	Širina Width	50.0 - 500.0
	Dužina Length	500.0 - 3000.0

1.1.3

Bakarni diskovi, rondela
i višeuugaonici

Bakarni diskovi, rondela i višeuugaonici koriste se za izradu kotlova, posuda i pribora u domaćinstvu, za dekorativne i umetničke predmete. Proizvode se u skladu sa standardom EN 1652 za opštu namenu, ali mogu se izrađivati i prema specijalnim zahtevima kupaca.

Specijalni zahtevi mogu se odnositi na uže tolerancije, uže područje mehaničkih osobina, zadovoljenje specijalnih tehnoloških osobina i druge specijalne zahteve za osobinama koje treba da zadovolje odgovarajuću namenu.

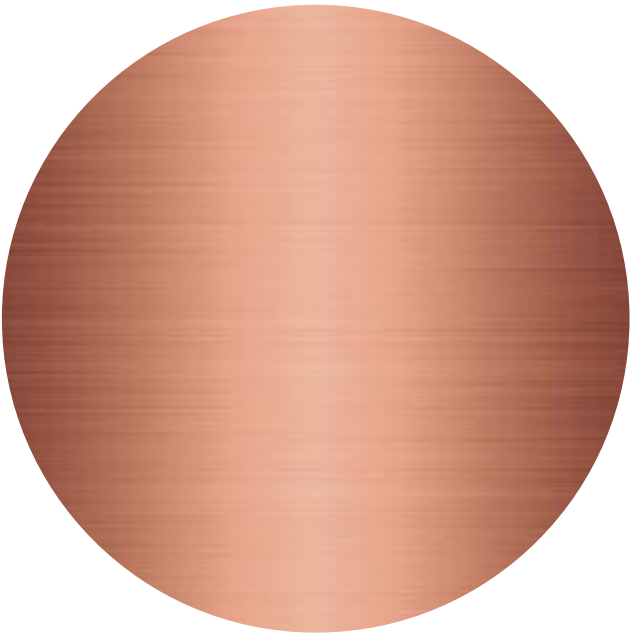
Copper discs, circles
and polygons

Copper discs, circles and polygons are used for making boilers, pots and household utensils, as well as for making decorative arts and objects. They are manufactured in accordance with standard EN 1652 for general purposes, but they can also be made according to special requirements of our customers.

Special requirements may refer to reduced tolerances, smaller range of mechanical properties, special technological requests and other specific requirements related to the properties that should meet the intended purpose.

ASORTIMAN
PRODUCT PORTFOLIO

PROIZVODI PRODUCTS	DIMENZIJE, mm DIMENSIONS, mm	
DISK (štancovan/sečen) DISC (punched/cut)	Debljina Thickness	0.25 - 3.0
	Prečnik Diameter	40.0 - 1000.0
RONDELA CIRCLE	Debljina Thickness	2.5 - 25.0
	Prečnik Diameter	12.0 - 300.0
VIŠEUGAONIK POLYGON	Debljina Thickness	>3.0 (max 30.0)
	Prečnik kruga / broj uglova Circle diameter / No. of angles	po zahtevu as requested





1.2

Ravno valjani proizvodi od mesinga

Koriste se za najrazličitije namene u elektrotehnici, automobilske industriji, građevinarstvu, vojnoj industriji, brodogradnji i umetnosti.

Flat rolled brass products

These products are used for a wide variety of purposes in electrical engineering, automotive industry, construction and military industry, shipbuilding and art.

VRSTE MESINGA OD KOJIH SE IZRAĐUJU RAVNO VALJANI PROIZVODI
TYPE OF BRASS USED FOR THE PRODUCTION OF FLAT ROLLED PRODUCTS

EN		DIN	ASTM
SLOVIMA SYMBOL	BROJEVIMA NUMBERS		
CuZn5	CW500L	CuZn5	C21000
CuZn10	CW501L	CuZn10	C22000
CuZn15	CW502L	CuZn15	C23000
CuZn20	CW503L	CuZn20	C24000
CuZn28	CW504L	CuZn28	C25600
CuZn30	CW505L	CuZn30	C26000
CuZn33	CW506L	CuZn33	C26800
CuZn36	CW507L	CuZn36	C27000
CuZn37	CW508L	CuZn37	C27200
CuZn40	CW509L	CuZn40	C28000

ASORTIMAN MESINGANIH RAVNO VALJANIH PROIZVODA
PORTFOLIO OF FLAT ROLLED BRASS PRODUCTS

ASORTIMAN
PRODUCT PORTFOLIO

1.2.1

Mesingane trake i folije

Zbog svojih odličnih karakteristika imaju široku primenu u elektrotehnici, vojnoj industriji, građevinarstvu, automobilske industriji, za izradu kućnih aparata i dekorativnih elemenata u enterijerima. Mesingane trake i folije za opštu namenu izrađuju se prema standardu EN 1652, a za primenu u građevinarstvu prema standardu EN 1172. Mesingane trake i folije izrađuje se prema standardima EN, DIN, GOST, BS i drugim svetskim standardima, ali i prema specijalnim zahtevima kupaca.

Specijalni zahtevi mogu se odnositi na uže tolerancije, uže područje mehaničkih osobina, zadovoljenje specijalnih tehnoloških osobina i druge specijalne zahteve za osobinama koje treba da zadovolje odgovarajuću namenu.

PROIZVODI PRODUCTS	DIMENZIJE, mm DIMENSIONS, mm	
TRAKA STRIP	Debljina ²⁾ Thickness ²⁾	0,1 - 4,0
	Širina ²⁾ Width ²⁾	8.0 - 1000.0
	Masa kotura u kg po mm širine ³⁾ Coil weight in kg per mm of width ³⁾	do 5.0
	Unutrašnji prečnik kotura ⁴⁾ Inside coil diameter ⁴⁾	75, 100, 150, 200, 300, 400, 500 ili po zahtevu 75, 100, 150, 200, 300, 400, 500 or as requested
FOLIJA FOIL	Debljina Thickness	0.1 - 0.15
	Širina Width	10.0 - 400.0
	Unutrašnji prečnik kotura Inside coil diameter	75, 100 ili po zahtevu 75, 100 or as requested

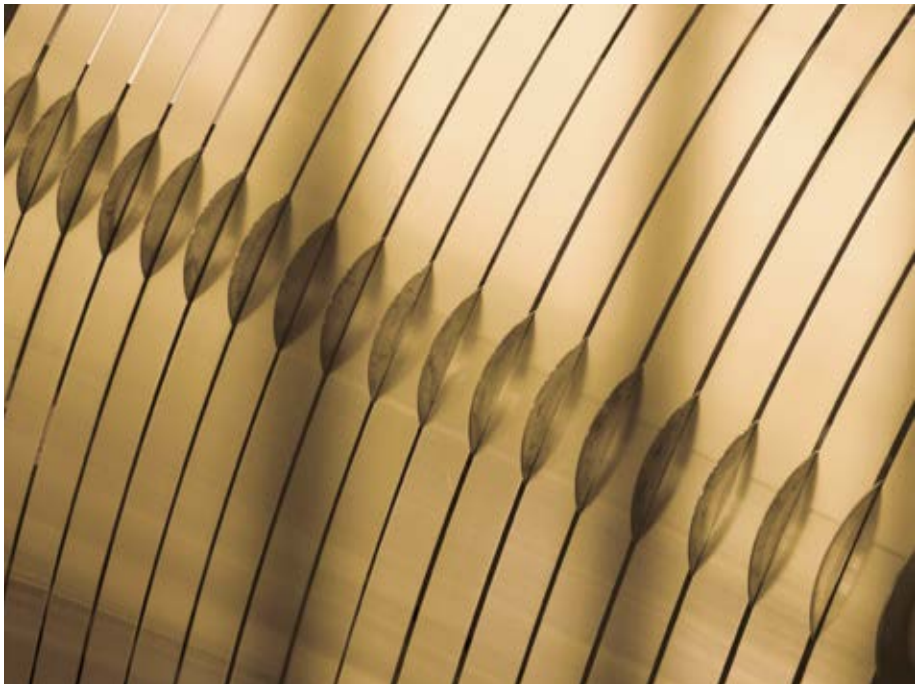
²⁾ Širina odgovara porudžbini debljine.
³⁾ Zavisno od vrste legure, debljine i širine trake.
⁴⁾ Na zahtev kupca isporuka na metalnom jezgri ili kartonskoj hilzni.

²⁾ The width corresponds to the ordered thickness.
³⁾ Depending on the type of alloy, thickness and width of strip.
⁴⁾ As requested by the buyer, delivery can be done on metal spools or cardboard reels.

Brass strips and foils

Due to their excellent properties, these products are widely used in electrical engineering, military industry, construction industry, automotive industry, for the production of household appliances and decorative elements in interiors. Brass strips and foils for general purposes are manufactured according to standard EN 1652, and for building purposes (civil engineering) according to standard EN 1172. We make brass strips and foils according to EN, DIN, GOST, BS and other international standards, as well as according to special requirements of our customers.

Special requirements may refer to reduced tolerances, smaller range of mechanical properties, special technological requests and other specific requirements related to the properties that should meet the intended purpose.



1.2.2

Mesingani limovi i ploče

Koriste se u građevinskoj industriji za oblaganje različitih fasadnih površina u eksterijeru kao i za unutrašnju dekoraciju. Mesingane ploče i limovi imaju primenu i u elektrotehnici, brodogradnji, petrohemiji, proizvodnji postrojenja za desalinizaciju, izmenjivače toplote, itd. Mesingani limovi i ploče za opštu namenu izrađuju se prema standardu EN 1652, a za primenu u građevinarstvu prema standardu EN 1172. Mesingane trake i folije izrađujemo prema standardima EN, DIN, GOST, BS i drugim svetskim standardima, ali i prema specijalnim zahtevima kupaca.

Specijalni zahtevi mogu se odnositi na uže tolerancije, uže područje mehaničkih osobina, zadovoljenje specijalnih tehnoloških osobina i druge specijalne zahteve za osobinama koje treba da zadovolje odgovarajuću namenu.

Brass sheets and plates

These products are used in the construction industry for coating various facade surfaces in exterior design, as well as in interior design decoration. Brass plates and sheets are also used in electrical engineering, shipbuilding, petrochemicals, production of desalination plants, heat exchangers, etc. Brass sheets and plates for general purposes are manufactured according to standard EN 1652, and for building purposes (civil engineering) according to standard EN 1172. We make brass strips and foils according to EN, DIN, GOST, BS and other international standards, as well as according to special requirements of our customers.

Special requirements may refer to reduced tolerances, smaller range of mechanical properties, special technological requests and other specific requirements related to the properties that should meet the intended purpose.



ASORTIMAN
PORTFOLIO

PROIZVODI PRODUCTS	DIMENZIJE, mm DIMENSIONS, mm	
LIM SHEET	Debljina Thickness	0.3 - 10.0
	Širina Width	500.0 - 1000.0
	Dužina Length	500.0 - 4000.0
PLOČA PLATE	Debljina Thickness	>10.0 (max 150.0)
	Širina Width	500.0 - 1100.0
	Dužina Length	po zahtevu as requested
PASS, LAMELA SECTION, LAMELLA	Debljina Thickness	0.3 - 10.0
	Širina Width	50.0 - 500.0
	Dužina Length	500.0 - 3000.0

1.2.3

Mesingani diskovi, rondela
i višaugaonici

Diskovi, rondela i višaugaonici od mesinga se koriste za različite namene u vojnoj i drugim industrijama, a najčešće za izradu dekorativnih elemenata u enterijeru i za raznovrsne predmete u domaćinstvu. Mesingani diskovi, rondela i višaugaonici za opštu namenu proizvode se prema standardu EN 1652 kao i prema specijalnim zahtevima kupaca.

Specijalni zahtevi mogu se odnositi na uže tolerancije, uže područje mehaničkih osobina, zadovoljenje specijalnih tehnoloških osobina i druge specijalne zahteve za osobinama koje treba da zadovolje odgovarajuću namenu. Mesingane rondela isporučuju se samo u tvrdom stanju.

Brass discs, circles
and polygons

Discs, circles and polygons made from brass are used for a variety of purposes in military and other industries, and most often for production of decorative elements in interiors and various household objects. Brass discs, circles and polygons for general purpose are manufactured according to standard EN 1652, as well as according to special requirements of the customers.

Special requirements may refer to reduced tolerances, smaller range of mechanical properties, special technological requests and other specific requirements related to the properties that should meet the intended purpose. Brass circles are delivered in hard temper only.



ASORTIMAN
PRODUCT PORTFOLIO

PROIZVODI PRODUCTS	DIMENZIJE, mm DIMENSIONS, mm	
DISK (štancovan/sečen) DISC (punched/cut)	Debljina Thickness	0.25 - 2.0
	Prečnik Diameter	40.0 - 1,000.0
RONDELA CIRCLE	Debljina Thickness	2.4 -24.0
	Prečnik Diameter	12.0 - 306.0
VIŠEUGAONIK POLYGON	Debljina Thickness	>3.0 (max 30.0)
	Prečnik kruga / broj uglova Circle diameter / No. of angles	po zahtevu as requested





1.3

Proizvodni program
Čanče

Proizvodni asortiman linije za čanče čine čančići proizvedeni od CuZn30 trake na ekscentar presama za više kalibara, i to:

9x19 mm

Čanče kalibra 9x19 mm se proizvodi u tvrdom i mekom kvalitetu od CuZn30 trake sa tolerancijama navedenim u tabeli:

9x19 mm

The case cups for caliber 9x19 mm are manufactured in hard and soft temper from CuZn30 strip with tolerances as specified in the following table:

Product portfolio of the Case
Cups

The product portfolio within the case cups production line includes the case cups manufactured from CuZn30 strip on the eccentric presses for several calibres as follows:

Masa Weight	4.6 – 4.8 g
Ekscentričnost Eccentricity	0.06 mm
Visina Height	10.9 – 11.9 mm
Debljina danceta Dome thickness	3.10 – 3.30 mm

5.56x45 mm

Čanče kalibra 5.56x45 mm se proizvodi u tvrdom i mekom kvalitetu od CuZn30 trake sa tolerancijama navedenim u tabeli:

5.56x45 mm

The case cups for caliber 5.56x45 mm are manufactured in hard and soft temper from CuZn30 strip with tolerances as specified in the following table:

Masa Weight	7.1 – 7.4 g
Ekscentričnost Eccentricity	0.06 mm
Visina Height	13 – 14 mm
Debljina danceta Dome thickness	3.47 – 3.53 mm

7.62x39 mm

Čanče kalibra 7,62x39 mm se proizvodi u tvrdom i mekom kvalitetu od CuZn30 trake sa tolerancijama navedenim u tabeli:

7.62x39 mm

The case cups for caliber 7,62x39 mm are manufactured in hard and soft temper from CuZn30 strip with tolerances as specified in the following table:

Masa Weight	8.9 g	9.7 g
Ekscentričnost Eccentricity	0.06 mm	0.06 mm
Visina Height	13.6 – 14.6 mm	10.25 – 11.25 mm
Debljina danceta Dome thickness	2.95 – 3.15 mm	3.36 – 3.44 mm

7.62x51 mm

Čanče kalibra 7,62x51 mm se proizvodi u tvrdom i mekom kvalitetu od CuZn30 trake sa tolerancijama navedenim u tabeli:

7.62x51 mm

The case cups for caliber 7,62x51 mm are manufactured in hard and soft temper from CuZn30 strip with tolerances as specified in the following table:

Masa Weight	13 g	13.5 g
Ekscentričnost Eccentricity	0.06 mm	0.06 mm
Visina Height	15.7 – 16.5 mm	16.5 – 17.5 mm
Debljina danceta Dome thickness	3.66 – 3.74 mm	3.55 – 3.65 mm

2

CEVI TUBES AND PIPES

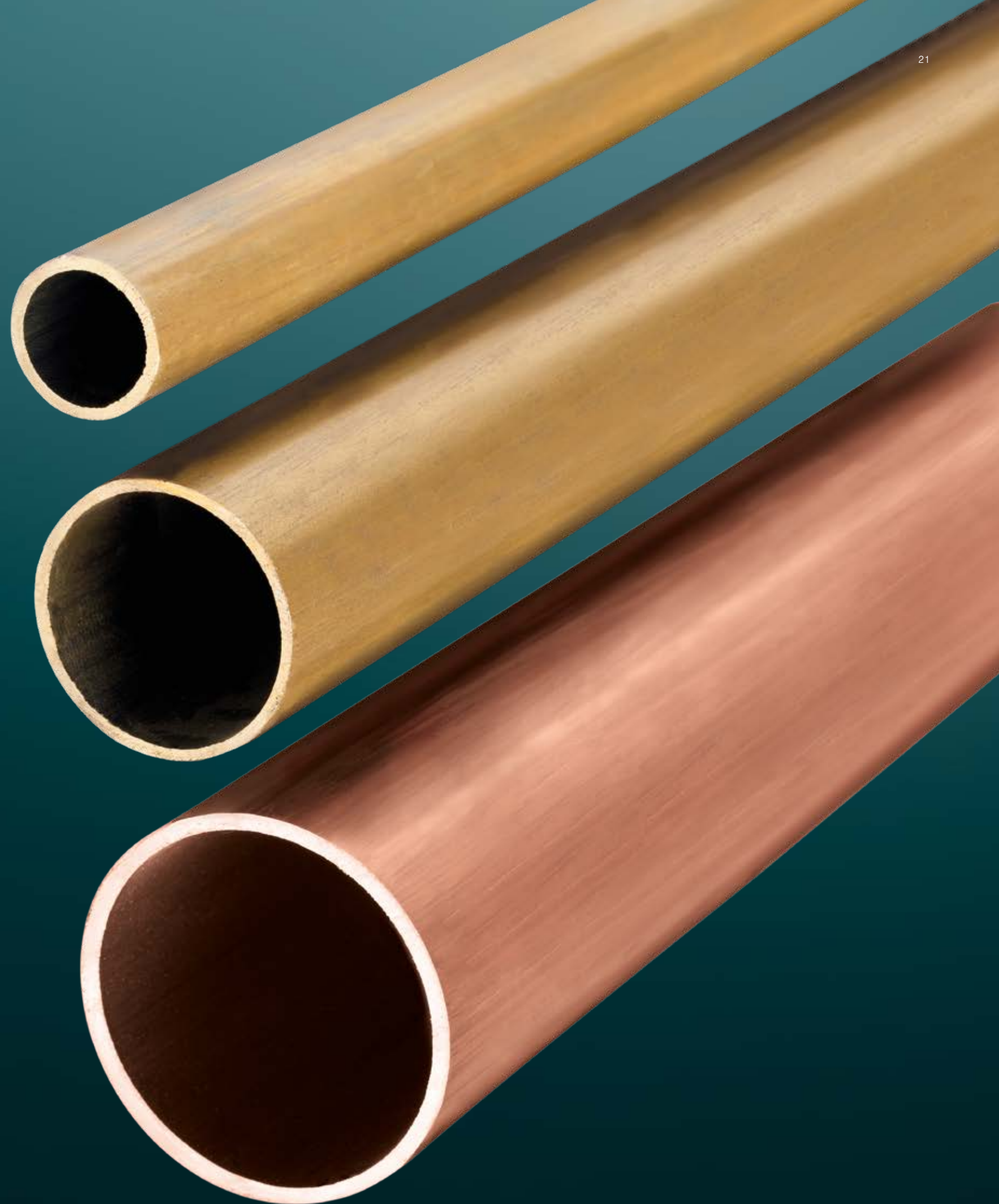
VALJAONICA BAKRA SEVOJNO
IZRAĐUJE CEVI OD BAKRA I LEGURA
BAKRA.

ZAHVALJUJUĆI VELIKOM IZBORU
BAKRA I LEGURA, KAO I ŠIROKOM
PROIZVODNOM ASORTIMANU*
NAŠE CEVI SU POGODNE ZA RAZNE
INDUSTRIJSKE NAMENE, A ISTO TAKO
I ZA PRIMENU U GRAĐEVINARSTVU
ZA INSTALACIJE, KAO I ZA
ENTERIJER I EKSTERIJER.

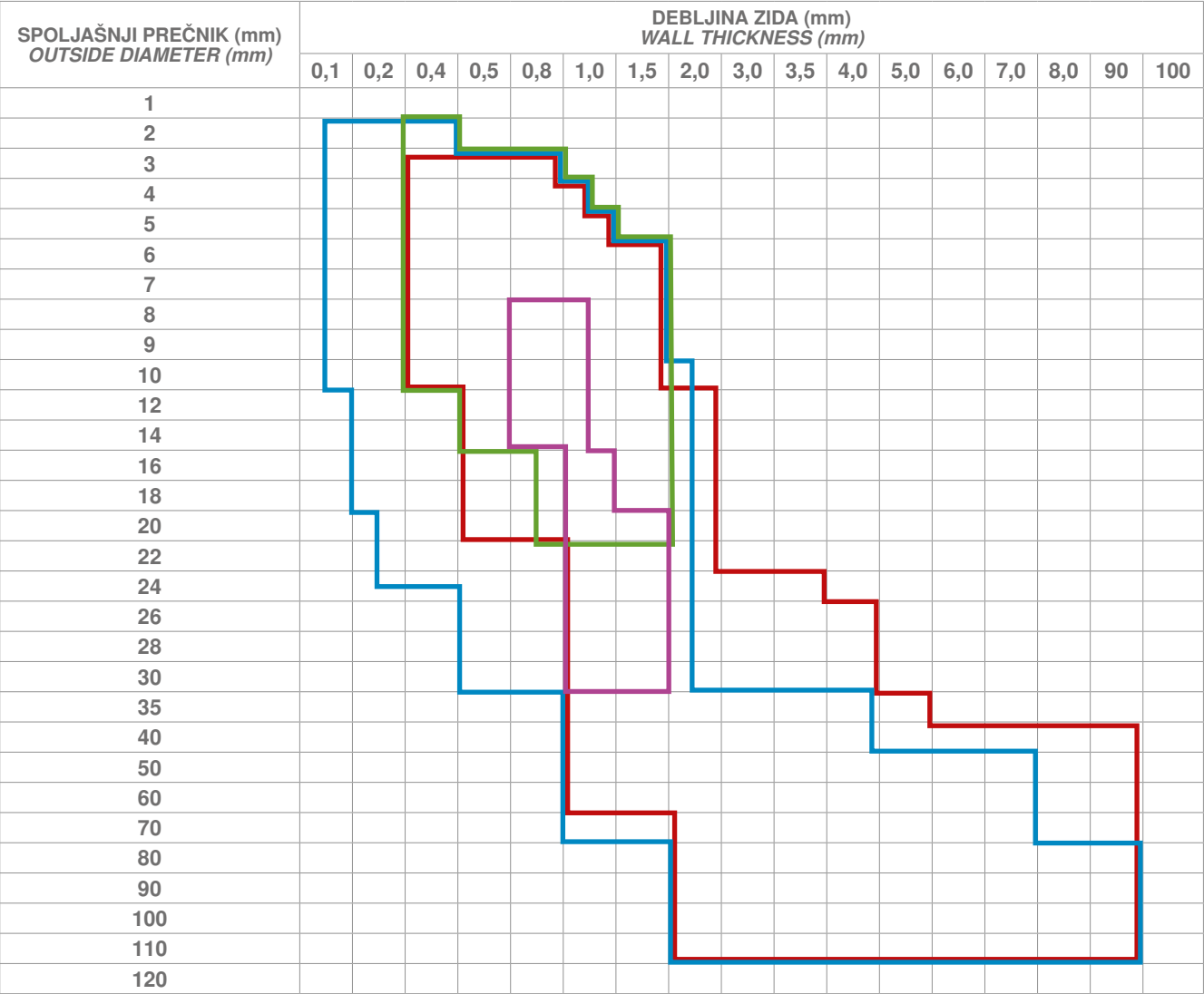
CEVI PROIZVODIMO PREMA
STANDARDIMA EN, DIN, GOST, BS
KAO I PREMA DRUGIM SVETSKIM
STANDARDIMA, ALI I PREMA
SPECIJALNIM ZAHTEVIMA KUPACA.
SPECIJALNI ZAHTEVI SE MOGU
ODNOSITI NA UŽE TOLERANCIJE,
ZADOVOLJENJE SPECIJALNIH
TEHNOLOŠKIH OSOBINA, UŽE
PODRUČJE MEHANIČKIH OSOBINA,
POSEBNE ZAHTEVE ZA KVALITET
POVRŠINE I OSTALE OSOBINE
KOJE TREBA DA ZADOVOLJE
ODGOVARAJUĆU NAMENU.

*COPPER MILL SEVOJNO
MANUFACTURES TUBES
FROM COPPER AND COPPER ALLOYS.
DUE TO A WIDE SELECTION
OF COPPER AND COPPER ALLOYS,
AS WELL AS A LARGE
PRODUCT PORFOLIO*,
OUR TUBES ARE SUITABLE FOR
VARIOUS INDUSTRIAL PURPOSES
AND FOR USE IN THE CONSTRUCTION
INDUSTRY, IN INSTALLATIONS, AS
WELL AS FOR USE IN EXTERIOR AND
INTERIOR DESIGNS.*

*WE PRODUCE TUBES ACCORDING
TO STANDARDS EN, DIN, GOST, BS,
AS WELL AS OTHER INTERNATIONAL
STANDARDS, BUT ALSO ACCORDING
TO SPECIAL REQUIREMENTS OF OUR
CUSTOMERS. SPECIAL REQUIREMENTS
MAY INCLUDE REDUCED TOLERANCES,
SPECIAL TECHNOLOGICAL REQUESTS,
SMALLER RANGE OF MECHANICAL
PROPERTIES, SPECIAL REQUESTS
REGARDING SURFACE QUALITY AND
OTHER PROPERTIES THAT SHOULD
MEET THE INTENDED PURPOSE.*



*PROIZVODNI ASORTIMAN CEVI
*PRODUCT PORTFOLIO OF TUBES



- Bakarnih cevi u
pravim dužinama

Straight lengths
copper tubes
- Mesingane cevi u
pravim dužinama

Straight lengths
brass tubes
- Bakarne cevi
u koturu

Copper tubes
in coil
- Kondenzatorske
cevi

Condenser
tubes

2.1

Bakarne cevi

Bakarne cevi su zbog izuzetne izdržljivosti, lakoće oblikovanja, odlične toplotne i električne provodljivosti pogodne za najrazličitije namene u industriji, građevinarstvu, kao i za opšte namene. Izrada uređaja i instalacija za klimatizaciju i hlađenje, grejnih, vodovodnih i sanitarnih instalacija, kao i instalacija za medicinske gasove, izrada kondenzatora, izrada elemenata za elektrotehniku, samo su neke od mnogobrojnih primena.

Copper tubes and pipes

Due to their exceptional durability, ease of formability, excellent thermal and electrical conductivity properties, copper tubes and pipes are suitable for a wide variety of uses in industry, civil engineering, and for general purposes. Production of devices and installations for air conditioning and refrigeration, heating, plumbing and sanitary installations, as well as installations for medical gases, production of condensers, compounds for electrical engineering, are just some of their many applications.

ASORTIMAN BAKARNIH CEVI

PRODUCT PORTFOLIO OF COPPER TUBES AND PIPES

2.1.1

Bakarne instalacione cevi

Instalacije od bakarnih cevi su efikasne i ekonomične, zadržavaju svoje osobine dug vremenski period pa samim tim imaju i produženo vreme servisa.

Installation copper tubes and pipes
Installations made of copper tubes and pipes are efficient and cost-effective, they retain their properties for a long period of time and therefore have an extended service life.

OZNAČAVANJE BAKRA I STANDARDI PREMA KOJIMA SE PROIZVODE BAKARNE INSTALACIONE CEVI

COPPER DESIGNATIONS AND STANDARDS ACCORDING TO WHICH THE COPPER INSTALLATION TUBES AND PIPES ARE PRODUCED

EN OZNAKA / EN DESIGNATION		EN KOJI DEFINIŠU PROIZVODE EN STANDARDS SPECIFYING THE PRODUCTS	OZNAKE PREMA DRUGIM STANDARDIMA DESIGNATIONS ACCORDING TO OTHER STANDARDS		
SLOVIMA / SYMBOL BROJEVIMA / NUMBERS			DIN		ASTM
			SLOVIMA SYMBOL	BROJEVIMA NUMBERS	
Cu-DHP	CW024A	EN 1057	SF-Cu	2.0090	C 122 00
		EN 12735-1			
		EN 13348			

Dimenzije koje nisu prikazane u tabeli razmatramo po posebnom upitu.
Dimensions not shown in the table shall be considered upon special requests.



ASORTIMAN BAKARNIH INSTALACIONIH CEVI

PRODUCT PORTFOLIO OF INSTALLATION COPPER TUBES AND PIPES

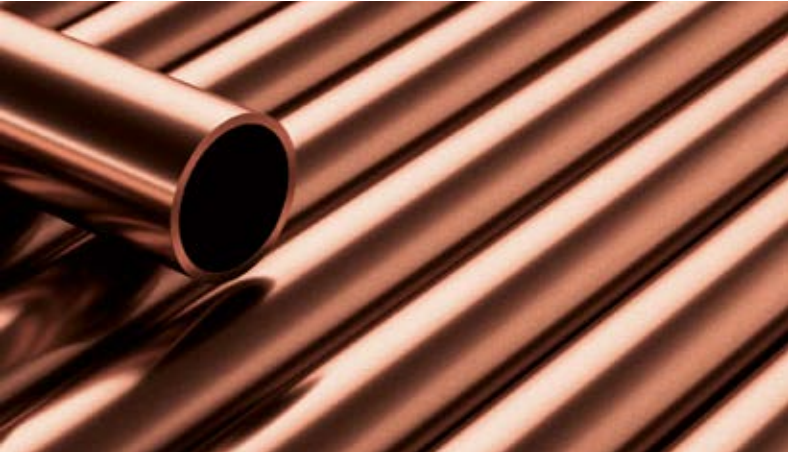
2.1.1.1

Cevi za grejanje i sanitarije

Cevi za grejanje i sanitarije proizvodimo u svemu prema standardu EN 1057. Bakarne cevi proizvedene prema ovom standardu namenjene su za izradu razvodne mreže za hladnu i toplu vodu, za sisteme grejanja toplom vodom uključujući i panele za zidno i podno grejanje. Takođe su pogodne za distributivne mreže za tečna goriva i gas za domaćinstvo, kao i za sisteme otpadnih voda (slivnici i slično). Cevi proizvodimo prema standardima EN, DIN, GOST, BS kao i prema drugim svet-skim standardima, ali i prema specijalnim zahtevima kupaca.

Tubes for heating and sanitary applications
We produce tubes for heating and sanitary applications fully in line with standard EN 1057. Copper tubes produced according to this standard are intended for the production of hot and cold water distribution networks, for hot water heating systems, including panels for wall and floor heating systems. They are also suitable for distribution networks for liquid fuels and household gas, as well as for waste water systems (sinks and the like). We produce tubes according to EN, DIN, GOST, BS and other international standards, but also according to special requirements of our customers.

Special requirements may refer to reduced tolerances, special technological requests in terms of properties, smaller range of mechanical properties, special requests regarding surface quality and other properties that should meet the intended purpose.



ASORTIMAN CEVI ZA GREJANJE I SANITARIJE PREMA EN 1057

PRODUCT PORTFOLIO OF TUBES FOR HEATING AND SANITARY APPLICATIONS ACCORDING TO EN 1057

VRSTA BAKRA TYPE OF COPPER	DIMENZIJE, mm / DIMENSIONS, mm		OBLIK ISPORUKE FORM OF DELIVERY
	SPOLJAŠNJI PREČNIK OUTSIDE DIAMETER	DEBLJINA ZIDA WALL THICKNESS	
Cu-DHP	6.0 - 22.0	0.5 - 2.0	kotur, spirala (u mekom kvalitetu) <i>coil, spiral (soft temper)</i>
	6.0 - 120.0	0.5 - 3.0*	fabričke dužine (2-6 m) i fiksne (1-6 m) dužine <i>Standard lengths (2-6 m) and ordered lengths (1-6 m)</i>

* u zavisnosti od spoljašnjeg prečnika
** Depending on the outside diameter*



ASORTIMAN BAKARNIH CEVI
PRODUCT PORTFOLIO OF COPPER TUBES

2.1.1.2

Cevi za klimatizaciju i hlađenje

Cevi za klimatizaciju i hlađenje proizvodi-mo u svemu prema standardu EN 12735-1. Bakarne cevi proizvedene prema ovom standardu namenjene su za izradu cevovo-da za klimatizaciju vazduha, kao i cevovoda za hlađenje prostora u kojima se zahtevaju niske temperature.

Cevi proizvodimo prema standardima EN, DIN, GOST, BS i drugim svetskim standardima, ali i prema specijalnim zahtevima kupca.

Specijalni zahtevi se mogu odnositi na uže tolerancije, zadovoljenje specijalnih tehnoloških osobina, uže područje mehaničkih osobina, posebne zahteve za kvalitet površine i ostale osobine koje treba da zado-volje odgovarajuću namenu.

Tubes for air conditioning and refrigeration

We produce tubes for air conditioning and refrigeration fully in line with standard EN 12735-1. Copper tubes produced in line with this standard are used in the air-conditioning piping systems, as well as in the refrigeration piping systems in which low temperatures are required.

We make copper tubes according to EN, DIN, GOST, BS and other international stan-dards, but also according to special require-ments of our customers.

Special requirements may refer to reduced tolerances, special technological requests in terms of properties, smaller range of mecha-nical properties, special requests regarding surface quality and other properties that should meet the intended purpose.



ASORTIMAN CEVI ZA KLIMATIZACIJU I HLAĐENJE PREMA EN 12735-1
PRODUCT PORTFOLIO OF TUBES FOR AIR CONDITIONING AND REFRIGERATION ACCORDING TO EN 12735-1

VRSTA BAKRA TYPE OF COPPER	DIMENZIJE, mm / DIMENSIONS, mm		OBLIK ISPORUKE FORM OF DELIVERY
	SPOLJAŠNJI PREČNIK OUTSIDE DIAMETER	DEBLJINA ZIDA WALL THICKNESS	
Cu-DHP	6.0 - 22.0	0.5 - 2.0	kotur, spirala (u mekom kvalitetu) coil, spiral (soft temper)
	6.0 - 120.0	0.5 - 2.5*	fabričke dužine (2-6 m) i fiksne (1-6 m) dužine Standard lengths (2-6 m) and ordered lengths (1-6 m)

* u zavisnosti od spoljašnjeg prečnika
* Depending on the outside diameter

Dimenzije koje nisu prikazane u tabeli razmatramo po posebnom upitu.
Dimensions not shown in the table shall be considered upon special requests.

2.1.1.3

Cevi za medicinske gasove i vakuum

Cevi za medicinske gasove i vakuum proizvodimo prema standardu EN 13348. Bakarne cevi proizvedene prema ovom standardu namenjene su za izradu cevovoda za distribuciju gasova u medicinskim ustanovama i laboratorijama koji se koriste pri radnom pritisku do 2000 kPa i za sisteme pod vakuumom.

Cevi proizvodimo prema standardima EN, DIN, GOST, BS kao i prema drugim svetskim standardima, ali i prema specijalnim zahtevima kupaca.

Specijalni zahtevi se mogu odnositi na uže tolerancije, zadovoljenje specijalnih tehnoloških osobina, uže područje mehaničkih osobina, posebne zahteve za kvalitet površine i ostale osobine koje treba da zadovolje odgovarajuću namenu.

Tubes for medical gases and vacuum

We produce tubes for medical gases and vacuum according to standard EN 13348. Copper tubes produced according to this standard are used for distributing the gases in medical facilities and laboratories intended to be used at operating pressures up to 2 000 kPa, as well as for the pipeline systems under vacuum.

We produce tubes according to EN, DIN, GOST, BS and other international standards, but also according to special requirements of our customers.

Special requirements may refer to reduced tolerances, special technological requests in terms of properties, smaller range of mechanical properties, special requests regarding surface quality and other properties that should meet the intended purpose.



ASORTIMAN CEVI ZA MEDICINSKE GASOVE I VAKUUM PREMA EN 13348
PORTFOLIO OF TUBES FOR MEDICAL GASES AND VACUUM ACCORDING TO EN 13348

VRSTA BAKRA TYPE OF COPPER	DIMENZIJE, mm / DIMENSIONS, mm		OBLIK ISPORUKE FORM OF DELIVERY
	SPOLJAŠNJI PREČNIK OUTSIDE DIAMETER	DEBLJINA ZIDA WALL THICKNESS	
Cu-DHP	8.0 - 22.0	0.5 - 2.0	kotur, spirala (u mekom kvalitetu) coil, spiral (soft temper)
	6.0 - 120.0	0.5 - 3.0*	fabričke dužine (2-6 m) i fiksne (1-6 m) dužine Standard lengths (2-6 m) and ordered lengths (1-6 m)

* u zavisnosti od spoljašnjeg prečnika
* Depending on the outside diameter

Dimenzije koje nisu prikazane u tabeli razmatramo po posebnom upitu.
Dimensions not shown in the table shall be considered upon special requests.

2.1.2

Bakarne industrijske cevi

Bakarne cevi zbog svojih izuzetnih osobina i odlične mogućnosti prerade nalaze primenu u elektrotehnici, u industriji izmenjivača toplote i u raznim drugim granama industrije za niz različitih upotreba.

Industrial copper tubes

Due to their exceptional properties and excellent fabrication properties, copper tubes are used in electrical engineering, in the heat exchanger industry and in various other branches of industry with a number of different uses.



ASORTIMAN BAKARNIH INDUSTRIJSKIH CEVI
PRODUCT PORTFOLIO OF INDUSTRIAL COPPER TUBES

2.1.2.1

Cevi za elektrotehniku

Cevi koje su namenjene za primenu u elektrotehnici izrađuju se prema standardu EN 13600.

Cevi proizvodimo prema standardima EN, DIN, GOST, BS kao i prema drugim svet-skim standardima, ali i prema specijalnim zahtevima kupaca.

Specijalni zahtevi se mogu odnositi na uže tolerancije, zadovoljenje specijalnih tehnoloških osobina, uže područje mehaničkih osobina, posebne zahteve za kvalitet površine i ostale osobine koje treba da zadovolje odgovarajuću namenu.

Tubes for electrical purposes

The tubes intended for use in electrical engineering are manufactured according to standard EN 13600.

We produce tubes according to EN, DIN, GOST, BS and other international standards, but also according to special requirements of our customers.

Special requirements may refer to reduced tolerances, special technological requests in terms of properties, smaller range of mechanical properties, special requests regarding surface quality and other properties that should meet the intended purpose.

ASORTIMAN CEVI ZA ELEKTOTEHNIKU PREMA EN 13600
PRODUCT PORTFOLIO OF TUBES FOR ELECTRICAL PURPOSES ACCORDING TO EN 13600

VRSTA BAKRA TYPE OF COPPER	DIMENZIJE, mm / DIMENSIONS, mm		OBLIK ISPORUKE FORM OF DELIVERY
	SPOLJAŠNJI PREČNIK OUTSIDE DIAMETER	DEBLJINA ZIDA WALL THICKNESS	
Cu-ETP Cu-HCP	6.0 - 22.0	0.5 - 2.0	kotur, spirala (u mekom kvalitetu) coil, spiral (soft temper)
	6.0 - 120.0	0.5 - 10.0*	fabričke dužine (2-6 m) i fiksne (1-6 m) dužine standard lengths (2-6 m) and ordered lengths (1-6 m)

* u zavisnosti od spoljašnjeg prečnika
* depending on the outside diameter

Dimenzije koje nisu prikazane u tabeli razmatramo po posebnom upitu.
Dimensions not shown in the table shall be considered upon special requests.

OZNAČAVANJE BAKRA I STANDARDI PREMA KOJIMA SE PROIZVODE CEVI ZA ELEKTROTEHNIKU
COPPER DESIGNATIONS AND STANDARDS ACCORDING TO WHICH THE TUBES FOR ELECTRICAL ENGINEERING ARE PRODUCED

EN OZNAKA EN DESIGNATION		EN KOJI DEFINIŠU PROIZVODE EN STANDARDS SPECIFYING THE PRODUCTS	OZNAKE PREMA DRUGIM STANDARDIMA DESIGNATIONS ACCORDING TO OTHER STANDARDS		ASTM
			DIN		
SLOVIMA SYMBOL	BROJEVIMA NUMBERS		SLOVIMA SYMBOL	BROJEVIMA NUMBERS	
Cu-HCP	CW021A	EN 13600	SE-Cu	2,0700	C 103 00
Cu-ETP	CW004A	EN 13600	E-Cu58	2,0065	C 110 00



2.1.2.2

Bakarne cevi za izmenjivače toplote

Cevi od bakra za izmenjivače toplote, kondenzatore, isparivače i opremu za desalaciju proizvode se po standardu EN 12451. Izmenjivače toplote izrađujemo i prema EN 12735-2. Bakarne cevi za klimatizaciju i hlađenje proizvedene prema ovom standardu namenjene su za izradu ocevljenih sklopova izmenjivača toplote koji se ugrađuju u uređaje za klimatizaciju i hlađenje.

Copper tubes for heat exchangers

Copper tubes for heat exchangers, condensers, evaporators and desalination equipment are manufactured according to standard EN 12451. We also manufacture heat exchangers according to EN 12735-2. Copper tubes for air conditioning and refrigeration manufactured according to this standard are intended for the production of tubular heat exchanger assemblies that are installed in the air conditioning and refrigeration devices.

ASORTIMAN CEVI ZA IZMENJIVAČE TOPLOTE PREMA EN 12451
PORTFOLIO OF TUBES FOR HEAT EXCHANGERS ACCORDING TO EN 12451

VRSTA BAKRA TYPE OF COPPER	DIMENZIJE, mm / DIMENSIONS, mm		OBLIK ISPORUKE FORM OF DELIVERY
	SPOLJAŠNJI PREČNIK OUTSIDE DIAMETER	DEBLJINA ZIDA WALL THICKNESS	
Cu-DHP	6.0 - 22.0	0.5 - 2.0	kotur, spirala (u mekom kvalitetu) coil, spiral (soft temper)
	6.0 - 76.0	0.5 - 3.0*	fabričke dužine (2-6 m) i fiksne (1-6 m) dužine Standard lengths (2-6 m) and ordered lengths (1-6 m)

* u zavisnosti od spoljašnjeg prečnika
* Depending on the outside diameter

Dimenzije koje nisu prikazane u tabeli razmatramo po posebnom upitu.
Dimensions not shown in the table shall be considered upon special requests.

ASORTIMAN CEVI PREMA EN 12735-2
PRODUCT PORTFOLIO OF TUBES ACCORDING TO EN 12735-2

VRSTA BAKRA TYPE OF COPPER	DIMENZIJE, mm / SIZES, mm		OBLIK ISPORUKE FORM OF DELIVERY
	SPOLJAŠNJI PREČNIK OUTSIDE DIAMETER	DEBLJINA ZIDA WALL THICKNESS	
Cu-DHP	6.0 - 22.0	0.5 - 2.0	kotur*, spirala (u mekom kvalitetu) coil*, spiral (in soft temper)
	6.0 - 76.0	0.5 - 3.0	fabričke dužine (2-6 m) i fiksne (1-6 m) dužine standard lengths (2-6 m) and ordered lengths (1-6 m)

* do spoljašnjeg prečnika 18 mm i debljine zida do 1.5 mm možemo isporučivati LWC kotur
* up to outside diameter of 18 mm and up to wall thickness of 1.5 mm, we can deliver LWC coil.

Dimenzije koje nisu prikazane u tabeli razmatramo po posebnom upitu.
Dimensions not shown in the table shall be considered upon special requests.



2.1.1.2.3

Bakarne cevi za opštu industrijsku namenu

Cevi od bakra se mogu koristiti u industriji za veliki broj najrazličitijih primena. Bakarne cevi za opštu namenu u industriji izrađuju se prema standardu EN 12449.

Cevi proizvodimo prema standardima EN, DIN, GOST, BS kao i prema drugim svet-skim standardima, ali i prema specijalnim zahtevima kupaca.

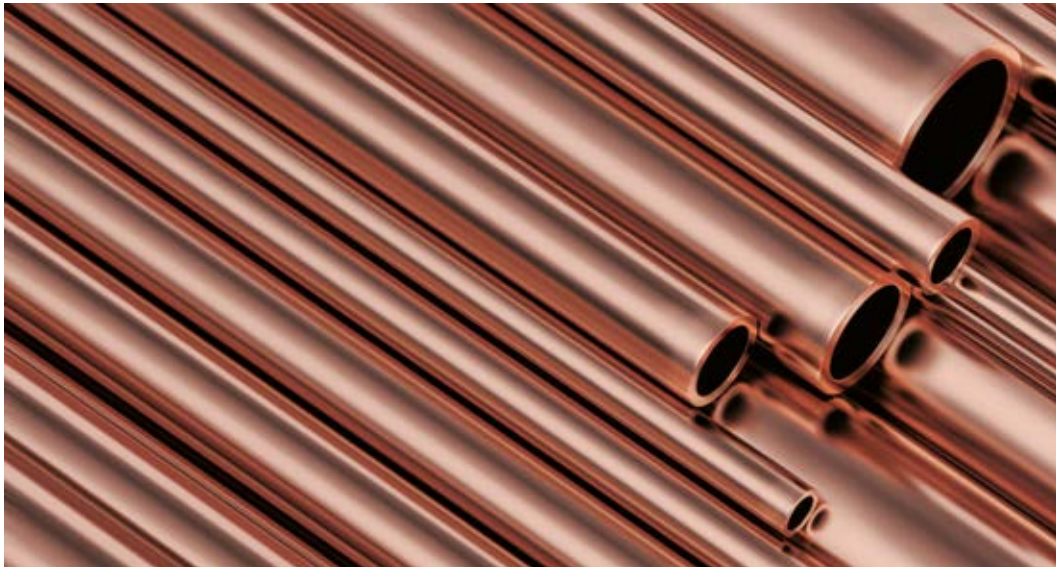
Specijalni zahtevi se mogu odnositi na uže tolerancije, zadovoljenje specijalnih tehnoloških osobina, uže područje mehaničkih osobina, posebne zahteve za kvalitet površine i ostale osobine koje treba da zadovolje odgovarajuću namenu. Proizvodimo bakarne cevi pogodne za savi-janje koje se mogu naručiti prema tehničkim uslovima fabrike.

Copper tubes for general industrial application

Copper tubes can be used in industry for a wide variety of applications. Copper tubes for general industrial application are produced according to standard EN 12449.

We produce tubes according to EN, DIN, GOST, BS and other international standards, but also according to special requirements of our customers.

Special requirements may refer to reduced tolerances, special technological requests in terms of properties, smaller range of mechanical properties, special requests regarding surface quality and other properties that should meet the intended purpose. We produce copper tubes suitable for bending which can be ordered according to technical specifications of the factory.



ASORTIMAN BAKARNIH CEVI ZA OPŠTU PRIMENU U INDUSTRIJI PREMA EN 12449
PRODUCT PORTFOLIO OF COPPER TUBES FOR GENERAL INDUSTRIAL PURPOSE ACCORDING TO EN 12449

VRSTA BAKRA TYPE OF COPPER	DIMENZIJE, mm / DIMENSIONS, mm		OBLIK ISPORUKE FORM OF DELIVERY
	SPOLJAŠNJI PREČNIK OUTSIDE DIAMETER	DEBLJINA ZIDA WALL THICKNESS	
Cu-DHP	6.0 - 22.0	0.5 - 2.0	kotur, spirala (u mekom kvalitetu) coil, spiral (soft temper)
	6.0 - 120.0	0.5 - 10.0*	fabričke dužine (2-6 m) i fiksne (1-6 m) dužine standard lengths (2-6 m) and ordered lengths (1-6 m)

* u zavisnosti od spoljašnjeg prečnika
* Depending on the outside diameter

Dimenzije koje nisu prikazane u tabeli razmatramo po posebnom upitu.
Dimensions not shown in the table shall be considered upon special requests.

2.1.1.3

Bakarne tankozidne cevi

Bakarne tankozidne cevi se primenjuju u industriji rashladnih uređaja, industriji izmenjivača toplote (hladnjaci i uređaji za klimatizaciju), za razvod fluida (slobodan ili pod pritiskom), instalacije za korišćenje sunčeve energije, za grejače, za bakarne zakovice (nitne).

Bakarne tankozidne cevi proizvodimo, u zavisnosti od njihove namene, prema standardima EN 1057, EN 12735-1, EN 12735-2, EN 12449, DIN, GOST, BS kao i prema drugim svetskim standardima, ali i prema specijalnim zahtevima kupaca.

Specijalni zahtevi se mogu odnositi na uže tolerancije, zadovoljenje specijalnih tehnoloških osobina, uže područje mehaničkih osobina, posebne zahteve za kvalitet površine i ostale osobine koje treba da zadovolje odgovarajuću namenu.

Thin-wall copper tubes

Thin-wall copper tubes are used in the industry of refrigeration devices, heat exchangers (refrigerators and air conditioning devices), for fluid distribution (free or under pressure), installations for the solar energy use, for heaters, for copper rivets.

Depending on their intended use, we produce thin-wall copper tubes according to standards EN 1057, EN 12735-1, EN 12735-2, EN 12449, DIN, GOST, BS, as well as according to other international standards, but also according to special requirements of our customers.

Special requirements may refer to reduced tolerances, special technological requests in terms of properties, smaller range of mechanical properties, special requests regarding surface quality and other properties that should meet the intended purpose.

STANDARDNI (OSNOVNI) ASORTIMAN TANKOZIDNIH CEVI
STANDARD (BASIC) PORTFOLIO OF THIN-WALL TUBES

PROIZVODI PRODUCTS	DIMENZIJE, mm / DIMENSIONS, mm		OBLIK ISPORUKE DELIVERY FORM
	SPOLJAŠNJI PREČNIK OUTSIDE DIAMETER	DEBLJINA ZIDA WALL THICKNESS	
BAKARNE Cu-DHP CEVI COPPER Cu-DHP TUBES	1.5 - 12.0	0.35 - 0.5	slobodan kotur* (O.D. < 5 mm), spirala** (O.D. 3 -12 mm) free coil* (O.D. < 5 mm), spiral ** (O.D. 3 -12 mm)
	3.0 - 12.0	0.35 - 0.5	prave dužine*** straight lengths***

* spoljašnji prečnik kotura 500-800 mm
* Outside coil diameter 500-800 mm
** spoljašnji prečnik spirale 400-800 mm
** Outside spiral diameter 400-800 mm
*** fabričke (2000-6000 mm) i fiksne (20-6000 mm) dužine.
*** Standard lengths (2000-6000 mm) and ordered lengths (20-6000 mm).



2.1.4

Bakarne kapilarne cevi

Bakarne kapilarne cevi se primenjuju u industriji rashladnih uređaja, kao i na mernim linijama za tečnosti ili gasove u sklopu uređaja za regulaciju i upravljanje gde se zahtevaju stroge kontrole preko mera otvora da bi se obezbedile ujednačene karakteristike protoka i u druge svrhe.

Bakarne kapilarne cevi proizvodimo, prema standardu EN 12450 i prema drugim svetskim standardima, ali i prema specijalnim zahtevima kupaca.

Specijalni zahtevi se mogu odnositi na ispitivanje protoka fluida, uže tolerancije, uže područje mehaničkih osobina, posebne zahteve za kvalitet površine i ostale osobine koje treba da zadovolje odgovarajuću namenu.

Capillary copper tubes

Capillary copper tubes are used in the refrigeration industry, as well as on the measuring lines for liquids or gases in regulation and control devices where strict controls over orifice sizes are required to ensure uniform flow characteristics, as well as for other purposes.

We produce capillary copper tubes according to EN 12450 and other international standards, but also according to special requirements of our customers.

Special requirements may refer to fluid flow testing, reduced tolerances, smaller range of mechanical properties, special requests regarding surface quality and other properties that should meet the intended purpose.

STANDARDNI (OSNOVNI) ASORTIMAN KAPILARNIH CEVI
STANDARD (BASIC) PORTFOLIO OF CAPILLARY TUBES

PROIZVODI PRODUCTS	DIMENZIJE, mm / DIMENSIONS, mm		OBLIK ISPORUKE FORM OF DELIVERY
	SPOLJAŠNJI PREČNIK OUTSIDE DIAMETER	UNUTRAŠNJI PREČNIK* WALL THICKNESS	
BAKARNE Cu-DHP CEVI Cu-DHP COPPER TUBES	1,5-3,5	0,5-2,0*	Slobodan kotur Free coi
			Prave dužine** Straight lengths**

* u zavisnosti od spoljašnjeg prečnika
** U mekom stanju slobodan kotur ili fiksne dužine 80-2000 mm,
u polutvrdom stanju slobodan kotur ili fiksne dužine 80-5000 mm.

* Depending on the outside diameter
** In soft temper, free coil or ordered lengths 80-2000 mm,
In half-hard temper, free coil or ordered lengths 80-5000 mm.





SS



2.2

Mesingane cevi

Zbog odličnih osobina, dobre sposobnosti prerade i dopadljivog izgleda mesingane cevi se koriste za razne namene, od izrade instalacija, kondenzatora i drugih primena u industriji, do izrade elemenata za nameštaj, uređenja enterijera, izrade dekorativnih predmeta, elemenata rasvete i drugih brojnih namena.

Brass tubes and pipes

Due to their excellent properties, good workability and attractive appearance, brass tubes and pipes are used for various purposes, from making installations, condensers and other applications in industry to making furniture elements, interior decoration, decorative items, lighting elements and other numerous purposes.

ASORTIMAN MESINGANIH CEVI
PRODUCT PORTFOLIO OF BRASS TUBES

2.2.1

Mesingane cevi za savijanje

Kupac može da naruči mesingane cevi namenjene za savijanje koje proizvodimo prema Tehničkim uslovima Valjaonice bakra Sevojno. Za ovaj proizvod se garantuje sposobnost prerade savijanjem i primena. Primenjuju se za izradu instalacija, sanitarnih uređaja i armatura, u industriji nameštaja, za izradu metalne galanterije, za razne vrste dekorativnih predmeta, za izradu galanterije za rasvetu i razne druge svrhe. Isporučuju se u fabričkim (2-6 m) i fiksnim (1-6 m) dužinama.

Brass tubes for bending

The customer can order brass tubes intended for bending, which we produce according to technical specifications of Copper Mill Sevojno. Bendability properties and application are guaranteed for this product. They are used for the production of installations, sanitary devices and fittings, in the furniture industry, for the production of metal hardware, various types of decorative items, for the production of lighting components and various other purposes. They are delivered in standard lengths (2-6 m) and ordered lengths (1-6 m).

STANDARDNA LEGURA ZA CEVI ZA SAVIJANJE
STANDARD ALLOY USED FOR TUBES FOR BENDING

EN OZNAKA EN DESIGNATION		OZNAKE PREMA DRUGIM STANDARDIMA DESIGNATIONS ACCORDING TO OTHER STANDARDS		
SLOVIMA SYMBOL	BROJEVIMA NUMBERS	DIN		ASTM
		SLOVIMA / SYMBOL	BROJEVIMA / NUMBERS	
CuZn37	CW508L	CuZn37	2.0321	C 272 00



2.2.2

Mesingane profilne cevi

Imaju široku primenu u arhitekturi, prvenstveno za izradu dekorativnih elemenata u enterijerima (lusteri, lampe, razne konstrukcije i slični ukrasni i funkcionalni predmeti). Standardna legura je CuZn37, a cevi se isporučuju u tvrdom, polutvrdom ili meko žarenom stanju materijala u fabričkim dužinama do 6 metara ili u fiksnim dužinama prema zahtevu kupca.

Cevi proizvodimo prema standardima EN, DIN, GOST, BS kao i prema drugim svetskim standardima, ali i prema specijalnim zahtevima kupaca.

Specijalni zahtevi se mogu odnositi na uže tolerancije, zadovoljenje specijalnih tehnoloških osobina, uže područje mehaničkih osobina, posebne zahteve za kvalitet površine i ostale osobine koje treba da zadovolje odgovarajuću namenu.

Dimenzije i oblici prema KATALOGU ili prema zahtevu kupca.

Brass profile tubes

They are widely used in architecture, primarily for the production of decorative elements in interiors (chandeliers, lamps, various constructions and similar decorative and functional items). The standard alloy is CuZn37, and the tubes are supplied in hard, semi-hard or soft annealed temper, either in factory lengths up to 6 meters or in ordered lengths according to the customer's request.

We produce tubes according to EN, DIN, GOST, BS and other international standards, but also according to special requirements of our customers.

Special requirements may refer to reduced tolerances, special technological requests in terms of properties, smaller range of mechanical properties, special requests regarding surface quality and other properties that should meet the intended purpose.

Dimensions and shapes in line with the CATALOGUE or as requested by the customer.



Mesingane tankozidne cevi

Mesingane tankozidne cevi se primenjuju za sanitarne armature, izmenjivače toplote, izradu zakovica, rasvete, ukrasnih predmeta, za uređenje enterijera, kao i za druge namene.

Mesingane tankozidne cevi proizvodimo, u zavisnosti od njihove namene, prema standardima EN 1057, EN 12735-1, EN 12735-2, EN 12449, DIN, GOST, BS kao i prema drugim svetskim standardima, ali i prema specijalnim zahtevima kupaca.

Specijalni zahtevi se mogu odnositi na uže tolerancije, zadovoljenje specijalnih tehnoloških osobina, uže područje mehaničkih osobina, posebne zahteve za kvalitet površine i ostale osobine koje treba da zadovolje odgovarajuću namenu.

Thin-wall brass tubes

Thin-wall brass tubes are used for sanitary fittings, heat exchangers, production of rivets, lighting, decorative items, for interior decoration, as well as for other purposes.

Depending on their intended use, we produce thin-wall brass tubes according to standards EN 1057, EN 12735-1, EN 12735-2, EN 12449, DIN, GOST, BS, as well as according to other international standards, but also according to special requirements of our customers.

Special requirements may refer to reduced tolerances, special technological requests in terms of properties, smaller range of mechanical properties, special requests regarding surface quality and other properties that should meet the intended purpose.

STANDARDNI (OSNOVNI) PROGRAM ZA MESINGANE TANKOZIDNE CEVI
STANDARD (BASIC) PROGRAM FOR THIN-WALL BRASS TUBES

PROIZVODI PRODUCTS	DIMENZIJE, mm / DIMENSIONS, mm		OBLIK ISPORUKE FORM OF DELIVERY
	SPOLJAŠNJI PREČNIK OUTSIDE DIAMETER	DEBLJINA ZIDA WALL THICKNESS	
MESINGANE CEVI BRASS TUBES	2.0 - 25.0	0.15 - 0.50	fabričke (2000-6000 mm) i fiksne (20-8000 mm) dužine Standard lengths (2000-6000 mm) and ordered lengths (20-8000 mm)
	1.5 - 6.0	0.51 - 1.50*	

* u zavisnosti od spoljašnjeg prečnika
* Depending on the outside diameter



OZNAČAVANJE MESINGA I STANDARDI PREMA KOJIMA SE PROIZVODE
MESINGANE TANKOZIDNE CEVI
BRASS DESIGNATIONS AND STANDARDS ACCORDING TO WHICH
THE THIN-WALL BRASS TUBES ARE PRODUCED

EN OZNAKA / EN DESIGNATION		EN KOJI DEFINIŠU PROIZVODE EN STANDARDS SPECIFYING THE PRODUCTS	OZNAKE PREMA DRUGIM STANDARDIMA DESIGNATIONS ACCORDING TO OTHER STANDARDS		
			DIN		ASTM
SLOVIMA SYMBOL	BROJEVIMA NUMBERS		SLOVIMA SYMBOL	BROJEVIMA NUMBERS	
CuZn30	CW505L	EN 12449	CuZn30	2.0265	C 260 00
-	-	-	CuZn33	2.0280	C 268 00
CuZn37	CW508L	EN 12449	CuZn37	2.0321	C 272 00

2.2.4

Mesingane cevi za izmenjivače toplote (kondezatorske cevi)

Cevi za izmenjivače toplote od legura bakra imaju široku primenu u brodogradnji, energetici i hemijskoj industriji. Koriste se za kondenzatore, isparivače, izmenjivače toplote, jedinice za destilaciju i za druge namene. Proizvodimo ih prema standardu EN 12451 i prema drugim svetskim standardima.

Brass tubes for heat exchangers (condenser tubes)

Tubes for heat exchangers made of copper alloys are widely used in shipbuilding, energy and chemical industry. They are also used for condensers, evaporators, heat exchangers, distillation units and for other purposes. We produce them according to standard EN 12451 and other international standards.



OZNAČAVANJE LEGURA BAKRA I STANDARDI PREMA KOJIMA SE PROIZVODE CEVI ZA IZMENJIVAČE TOPLOTE (KONDEZATORSKE CEVI)
COPPER ALLOY DESIGNATIONS AND STANDARDS ACCORDING TO WHICH THE TUBES FOR HEAT EXCHANGERS (CONDENSER TUBES) ARE PRODUCED

EN 12451	DIN 17660	ASTM B111	GOST 21646	GOST 17217
-	-	C 230 00	-	-
-	-	C 260 00	Л70	-
CuZn28Sn1 CW706R	CuZn28Sn1 2.0470	C 433 00	Л070-1	-
CuZn20Al2 CW702R	CuZn20Al2 2.0460	C 687 00	ЛАМш70-2-0.05	-
-	-	-	-	МНЖ5-1 (CuNiFe1Mn)

Kontrola kvaliteta cevi

Permanentna kontrola relevantnih parametara koja se sprovodi u svim fazama tehnološkog procesa, obezbeđuje odličan kvalitet i pouzdanost krajnjeg proizvoda. Zahvaljujući tome naše cevi imaju zavidnu reputaciju u zemlji i inostranstvu. Pored kontrole dimenzija i interne i eksterne kontrole, sve cevi se podvrgavaju EDDY CURRENT testu ili se testiraju na hidraulični pritisak. Cevi isporučujemo u fiksnim dužinama prema zahtevu kupca. Najveća dužina koju možemo isporučivati je 12 metara.

Tubes quality control

Continuous control of relevant parameters, carried out in all stages of the technological process, ensures excellent quality and reliability of the final product. For this reason, our tubes have an enviable reputation in the country and worldwide. In addition to dimensional control and internal and external control, all tubes are subjected to Eddy current tests or hydraulic pressure tests. We deliver tubes in ordered lengths as requested by the customer. The maximum length we can deliver is 12 meters.



2.2.5

Mesingane cevi za opštu industrijsku namenu

Mesingane cevi proizvodimo u velikom broju legura, sa širokim opsegom dimenzija, odličnom površinom i kvalitetom uopšte. Mesingane cevi za opštu primenu u industriji se izrađuju prema standardu EN 12449.

Cevi proizvodimo prema standardima EN, DIN, GOST, BS kao i prema drugim svetskim standardima, ali i prema specijalnim zahtevima kupaca.

Specijalni zahtevi se mogu odnositi na uže tolerancije, zadovoljenje specijalnih tehnoloških osobina, uže područje mehaničkih osobina, posebne zahteve za kvalitet površine i ostale osobine koje treba da zadovolje odgovarajuću namenu.

Brass tubes and pipes for general industrial application

We produce brass tubes and pipes in a large number of alloys, with a wide range of dimensions and with an excellent surface and overall quality. Brass tubes and pipes for general industrial application are produced according to standard EN 12449.

We produce tubes and pipes according to EN, DIN, GOST, BS and other international standards, but also according to special requirements of our customers.

Special requirements may refer to reduced tolerances, special technological requests in terms of properties, smaller range of mechanical properties, special requests regarding surface quality and other properties that should meet the intended purpose.



DIMENZIONI ASORTIMAN CEVI ZA OPŠTU INDUSTRIJSKU NAMENU PREMA EN 12449
DIMENSION RANGE OF TUBES AND PIPES FOR GENERAL INDUSTRIAL APPLICATION ACCORDING TO EN 12449

DIMENZIJE, mm / DIMENSIONS, mm		OBLIK ISPORUKE FORM OF DELIVERY
SPOLJAŠNJI PREČNIK / OUTSIDE DIAMETER	DEBLJINA ZIDA / WALL THICKNESS	
6.0 - 35.0	0.5 - 2.0 (2.5)	fabričke (2 do 6 m) i fiksne (1 do 6 m) dužine Standard lengths (2-6 m) and ordered lengths (1-6 m)
35.0 - 50.0	1.0 - 5.0	
50.0 - 80.0	1.0 - 8.0 (10.0)	
50.0 - 80.0	2.0 - 10.0	

OZNAKE MESINGA I STANDARDI PREMA KOJIMA SE PROIZVODE MESINGANE CEVI ZA OPŠTU INDUSTRIJSKU PRIMENU
BRASS DESIGNATIONS AND STANDARDS ACCORDING TO WHICH THE BRASS TUBES AND PIPES FOR GENERAL INDUSTRIAL APPLICATION ARE PRODUCED

EN OZNAKA / EN DESIGNATION		EN KOJI DEFINIŠU PROIZVODE EN STANDARDS SPECIFYING THE PRODUCTS	OZNAKE PREMA DRUGIM STANDARDIMA DESIGNATIONS ACCORDING TO OTHER STANDARDS		
			DIN		ASTM
SLOVIMA SYMBOL	BROJEVIMA NUMBERS		SLOVIMA SYMBOL	BROJEVIMA NUMBERS	
CuZn5	CW500L	EN 12449	CuZn5	2.0220	C 210 00
CuZn10	CW501L	EN 12449	CuZn10	2.0230	C 220 00
CuZn15	CW502L	EN 12449	CuZn15	2.0240	C 230 00
CuZn20	CW503L	EN 12449	CuZn20	2.0250	C 240 00
CuZn30	CW505L	EN 12449	CuZn30	2.0265	C 260 00
-	-	-	CuZn33	2.0280	C 268 00
CuZn36	CW507L	EN 12449	CuZn36	2.0335	C 270 00
CuZn37	CW508L	EN 12449	CuZn37	2.0321	C 272 00
CuZn40	CW509L	EN 12449	CuZn40	2.0360	C 280 00

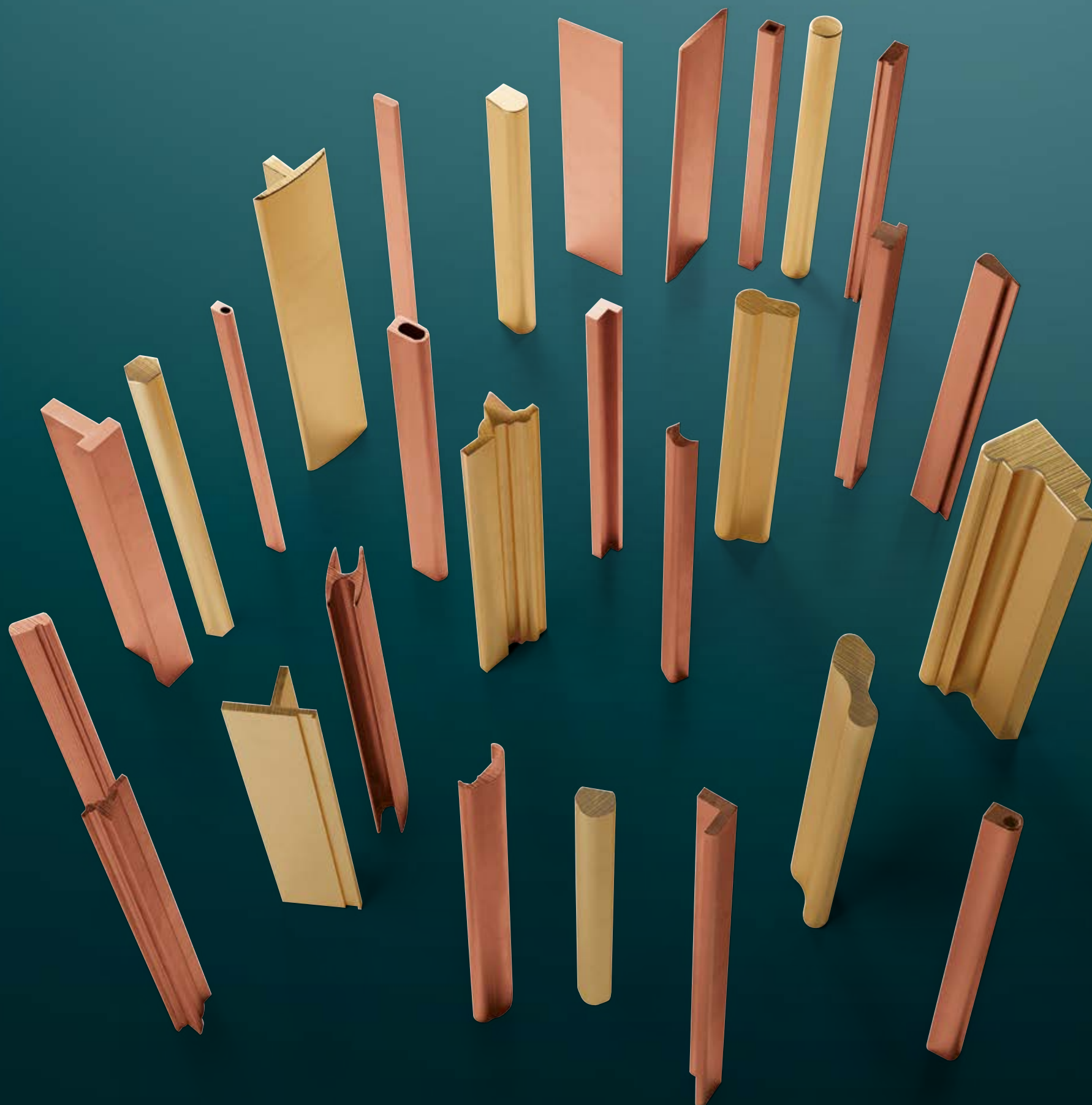
3

PRESOVANI I VUČENI PROFILI

EXTRUDED AND DRAWN
PROFILES

PRESOVANE I VUČENE PROFILE
IZRAĐUJEMO OD BAKRA I MESINGA.
KORISTE SE U RAZNE SVRHE, A
MOGU SE NARUČIVATI PREMA
STANDARDIMA VALJAONICE BAKRA
SEVOJNO ILI PREMA
ZAHTEVIMA KUPACA.

*WE MANUFACTURE THE EXTRUDED
AND DRAWN PROFILES FROM COPPER
AND BRASS. THEY ARE USED FOR
DIFFERENT PURPOSE, AND
CAN BE ORDERED ACCORDING TO
STANDARDS OF COPPER MILL SEVOJNO
OR ACCORDING TO
THE CUSTOMER REQUIREMENTS.*



3.1

**Bakarni presovani i vučeni
profili**

Presovane i vučene profile od bakra izrađujemo u obliku šipki, šina, profila i žice. Mogu se primenjivati u razne svrhe, ali primenu najčešće nalaze u elektrotehnici.

**Extruded and drawn
copper profiles**

We produce extruded and drawn copper profiles in the form of rods, bars, profiles and wire. They can be used for various purposes, but they are most often used in electrical engineering.



ASORTIMAN BAKARNIH PRESOVANIH I VUČENIH PROFILA
PRODUCT PORTFOLIO OF EXTRUDED AND DRAWN COPPER PROFILES

3.1.1

Bakarne šine i šipke

Bakarne šine i šipke zbog odlične provodljivosti i sposobnosti oblikovanja imaju široku primenu u elektrotehnici i ukoliko su namenjene za te svrhe proizvode se prema EN 13601.

Primenjuju se i u najrazličitijim oblastima industrije, u građevinarstvu za razne instalacije i konstrukcione elemente i za mnoge druge svrhe.

Šipke od bakra i od niskolegiranih legura bakra za opštu namenu se izrađuju prema EN 12163, dok se za obradu kovanjem izrađuju prema EN 12165. Šine od istih materijala, takođe za opštu namenu, izrađujemo prema EN 12167.

Bakarne šine i šipke proizvodimo prema standardima EN, DIN, GOST, BS i drugim svetskim standardima, ali i prema specijalnim zahtevima kupca.

Specijalni zahtevi se mogu odnositi na uže tolerancije, zadovoljenje specijalnih tehnoloških osobina, uže područje mehaničkih osobina, posebne zahteve za kvalitet površine i ostale osobine koje treba da zadovolje odgovarajuću namenu.

Copper bars and rods

Due to their excellent conductivity and formability, copper rods and bars are widely used in electrical engineering, and if they are intended for these purposes, they are produced according to EN 13601.

They are used in the most diverse areas of industry, in civil engineering for various installations and structural elements and for many other purposes.

Rods made of copper and low-alloyed copper for general use are produced according to EN 12163, while these products for fabrication by forging are produced according to EN 12165. We make bars from the same materials, also for general use, according to EN 12167.

We make copper bars and rods according to EN, DIN, GOST, BS and other international standards, as well as according to special requirements of our customers.

Special requirements may refer to reduced tolerances, special technological requests in terms of properties, smaller range of mechanical properties, special requests regarding surface quality and other properties that should meet the intended purpose.

ASORTIMAN
PRODUCT PORTFOLIO

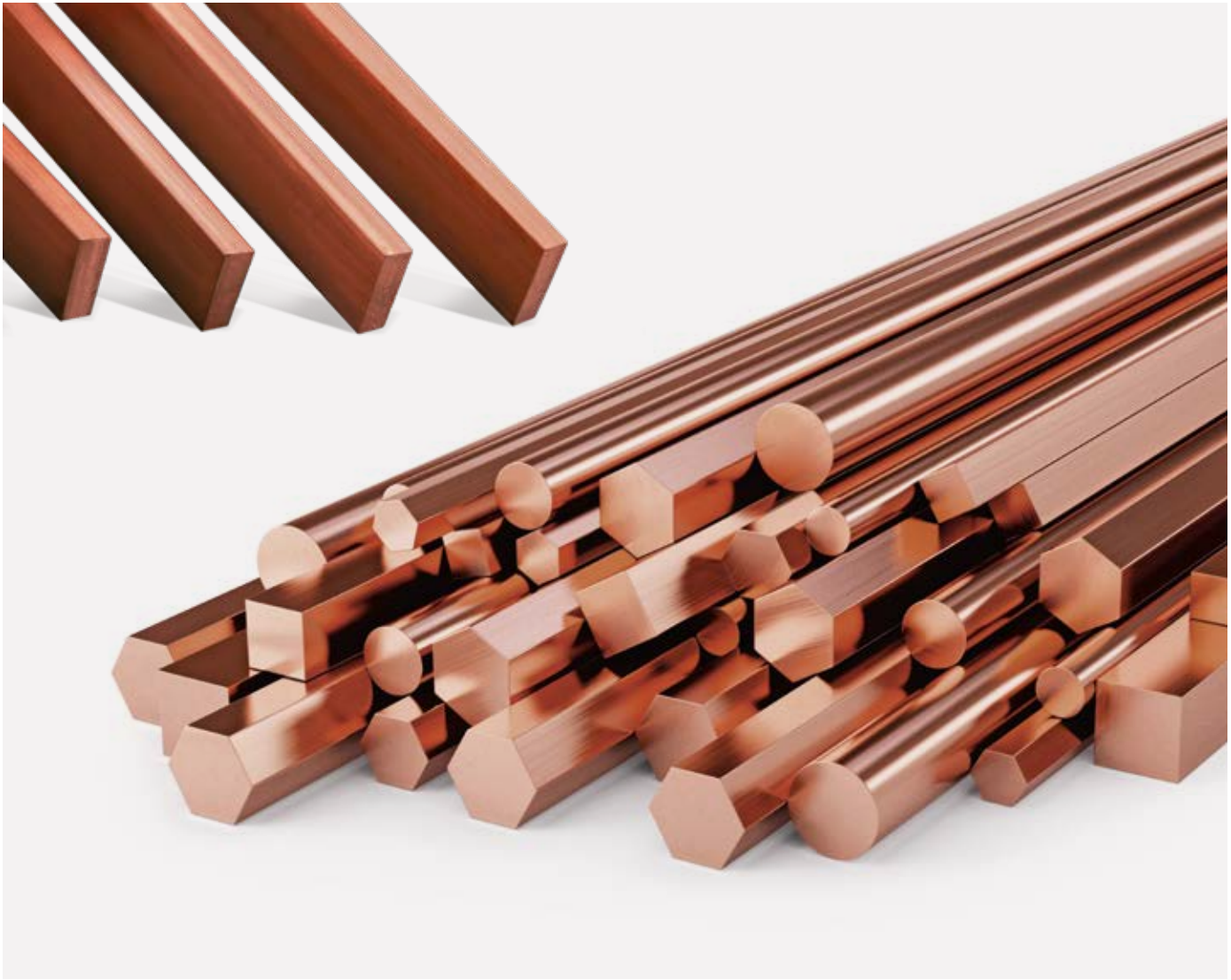
MATERIJAL MATERIAL	POLUPROIZVOD SEMI-FINISHED PRODUCT	DIMENZIJE DIMENSIONS mm	OBLIK ISPORUKE FORM OF DELIVERY
Bakar: Copper: Cu-ETP Cu-HCP Cu-DHP	šine Bars	debljina 2.0 - 25.0 širina 5.0-120.0* Thickness 2.0 - 25.0 Width 5.0-120.0*	Okrugle šipke do prečnika 18 mm i šestougaone do otvora ključa 16 mm mogu se isporučivati u koturu ili pravim dužinama (max težina kotura 100 kg). Prave dužine: fabričke (2-4 m) i fiksne (1-4 m). Round rods with diameter up to 18mm and hexagonal rods with opening of the wrench up to 16 mm can be delivered in straight lengths or in coils (max. coil weight is 100 kg). Straight lengths: Standard lengths (2-4 m) and ordered lengths (1-4 m).
	okrugle šipke Round rods	3.0 - 80.0	
	kvadratne šipke Square rods	4.0 - 50.0	
	šestougaone šipke Hexagonal rods	4.0 - 65.0	
NISKOLEGIRANI BAKAR CuNi1,5Si CuNi2Si LOW-ALLOYED COPPER CuNi1,5Si CuNi2Si	okrugle šipke Round rods	9.0 - 60.0	fabričke (2-4 m) i fiksne (1-4 m) dužine Standard lengths (2-4 m) and ordered lengths (1-4 m).
	šestougaone šipke Hexagonal rods	20.0 - 40.0	fabričke (2-4 m) i fiksne (1-4 m) dužine Standard lengths (2-4 m) and ordered lengths (1-4 m).

* u zavisnosti od debljine
* depending on thickness

Dimenzije koje nisu prikazane u tabeli razmatramo po posebnom upitu.
Dimensions not shown in the table shall be considered upon special requests.

OZNAKE BAKRA I STANDARDI PREMA KOJIMA SE PROIZVODE BAKARNE ŠIPKE
COPPER MARKS AND STANDARDS ACCORDING TO WHICH COPPER BARS ARE MANUFACTURED

EN OZNAKA EN DESIGNATION		EN KOJI DEFINIŠU PROIZVODE EN STANDARDS SPECIFYING THE PRODUCTS	OZNAKE PREMA DRUGIM STANDARDIMA DESIGNATIONS ACCORDING TO OTHER STANDARDS		
			DIN		ASTM
SLOVIMA SYMBOL	BROJEVIMA NUMBERS		SLOVIMA SYMBOL	BROJEVIMA NUMBERS	
Cu-HCP	CW021A	EN 13601 EN 12165	SE-Cu	2.0070	C 103 00
Cu-ETP	CW004A	EN 13601 EN 12165	E-Cu58	2.0065	C 110 00
Cu-DHP	CW024A	EN 12163 EN 12165 EN 12167	SF-Cu	2.0090	C 122 00
CuNi1Si	CW109C	EN 12163 EN 12165	CuNi1.5Si	2.0853	-
CuNi2Si	CW111C	EN 12163 EN 12165	CuNi2Si	2.0855	-



3.1.2

Bakarni profili

Bakarni profili proizvode se u oblicima i kvalitetima definisanim u tabeli ili prema specijalnim zahtevima kupca.

Program obuhvata razne presovane i vučene profile za elektrokontakte, šuplje bakarne induktorske profile za namotaje indukcionih električnih peći ("induktorske cevi" poprečnog preseka do 1500 mm²) i kolektorske profile (CuAg).

Copper profiles

Copper profiles are produced in shapes and tempers specified in the table or as per the customer's request.

This product portfolio includes various extruded and drawn profiles which are used for electrical contacts, as well as different hollow copper inductor profiles used for windings within the induction electric furnaces ("induction tubes" with a cross-section of up to 1500 mm²) and collector profiles (CuAg).



STANDARDNI PROGRAM BAKARNIH PROFILA
STANDARD PORTFOLIO OF COPPER PROFILES

VRSTA BAKRA ILI NISKOLEGIRANOG BAKRA TYPE OF COPPER OR LOW-ALLOYED COPPER	POPREČNI PRESEK mm ² CROSS-SECTION mm ²	OBLIK ISPORUKE FORM OF DELIVERY
Cu-HCP Cu-ETP	od 30.0 do 3000.0 30.0 to 3,000.0	kotur težine 40-60 kg i prave dužine do 4 m Coil weight 40-60 kg and in straight length up to 4 m
CuAg0,1 CuAg0,1P CuAg0,03	od 20.0 do 1200.0 20.0 to 1,200.0	

OZNAČAVANJE BAKRA I LEGURA ZA IZRADU PROFILA
COPPER AND ALLOY DESIGNATIONS FOR THE PRODUCTION OF PROFILES

EN OZNAKA EN DESIGNATION		OZNAKE PREMA DRUGIM STANDARDIMA DESIGNATIONS ACCORDING TO OTHER STANDARDS		
		DIN		ASTM
SLOVIMA SYMBOL	BROJEVIMA NUMBERS	SLOVIMA SYMBOL	BROJEVIMA NUMBERS	
Cu-HCP	CW021A	SE-Cu	2.0070	C 103 00
Cu-ETP	CW004A	E-Cu58	2.0065	C 110 00
CuAg0,1	-	-	-	-
CuAg0,1P	-	-	-	-
CuAg0,03	-	-	-	-

3.1.3

Bakarna žica

Valjaonici bakra Sevojno je fleksibilna prema zahtevima tržišta uz široke mogućnosti u pogledu vrste materijala, dimenzija i kvaliteta prerade. Posedujemo mogućnost visokog stepena prerade i izvlačenja žice najfinijih dimenzija do najmanjeg prečnika Ø 0,1mm. Za primenu u elektrotehnici proizvodi se prema standardu EN 13601, a za opštu namenu prema standardu EN 12166.

Bakarnu žicu proizvodimo prema standardima EN, DIN, GOST, BS kao i prema drugim svetskim standardima, ali i prema specijalnim zahtevima kupaca.

Specijalni zahtevi se mogu odnositi na uže tolerancije, zadovoljenje specijalnih tehnoloških osobina, uže područje mehaničkih osobina, posebne zahteve za kvalitet površine i ostale osobine koje treba da zadovolje odgovarajuću namenu.

Copper wire

The company Copper Mill Sevojno is very flexible when it comes to the market requirements and offers various possibilities in terms of types of material, dimensions and fabrication quality (tempering). Due to a high degree of fabrication and drawing operations, we are able to produce copper wire of the finest dimensions up to min. diameter of 0.1mm. It is manufactured according to standard EN 13601 for use in electrical engineering, and according to EN 12166 for general use.

We produce copper wire according to EN, DIN, GOST, BS and other international standards, but also according to special requirements of our customers.

Special requirements may refer to reduced tolerances, special technological requests in terms of properties, smaller range of mechanical properties, special requests regarding surface quality and other properties that should meet the intended purpose.

ASORTIMAN ŽICA OD BAKRA
PRODUCT PORTFOLIO OF COPPER WIRE

MATERIJAL MATERIAL	PREČNIK DIAMETER	OBLIK ISPORUKE FORM OF DELIVERY
Cu-HCP Cu-ETP Cu-DHP Cu-DLP	0.10 - 1.0	kalem, kotur reel, coil
	1.0 - 20.0	kotur coil

OZNAČAVANJE BAKRA I STANDARDI PREMA KOJIMA SE PROIZVODI ŽICA
COPPER DESIGNATIONS AND STANDARDS ACCORDING TO WHICH THE WIRE IS PRODUCED

EN OZNAKA EN DESIGNATION		EN KOJI DEFINIŠU PROIZVODE EN STANDARDS SPECIFYING THE PRODUCTS	OZNAKE PREMA DRUGIM STANDARDIMA DESIGNATIONS ACCORDING TO OTHER STANDARDS		
			DIN		ASTM
SLOVIMA SYMBOL	BROJEVIMA NUMBERS		SLOVIMA SYMBOL	BROJEVIMA NUMBERS	
Cu-HCP	CW021A	EN 13601	SE-Cu	2.0070	C 103 00
Cu-ETP	CW004A	EN 13601	E-Cu58	2.0065	C 110 00
Cu-DHP	CW024A	EN 12166	SF-Cu	2.0090	C 122 00
Cu-DLP	CW023A	-	SW-Cu	2.0076	C 120 00



3.1.4

Elektrode za zavarivanje

Proizvodni program obuhvata gole elektrode koje se primenjuju za zavarivanje bakra i legura bakra dodavanjem, postupkom gasnog zavarivanja, zavarivanja Volframovom elektrodom u inernom gasu (TIG postupak) i zavarivanje metala u inernom gasu (MIG postupak).

Welding Electrodes

The production portfolio includes bare electrodes used for welding copper and copper alloys by adding a filler metal , gas welding process, tungsten inert gas (TIG) welding process and metal inert gas (MIG) welding process.

ASORTIMAN, INTERVAL TEMPERATURE TOPLJENJA I PRIMENA
PRODUCT PORTFOLIO, MELTING TEMPERATURE RANGE AND APPLICATION

LEGURA ALLOY		INTERVAL TEMPERATURE TOPLJENJA MELTING TEMPERATURE RANGE	PRIMENA ZA OSNOVNE MATERIJALE (deformisane ili livene) APPLICATION FOR THE BASE METALS (processed or cast)
DIN 1733			
S-CuAg	2.1211	1070.0 do 1080.0 1,070.0 to 1,080.0	bakar copper
S-CuZn40Si	2.0366	890.0 do 910.0 890.0 to 910.0	bakar-cink legure copper-zinc alloys



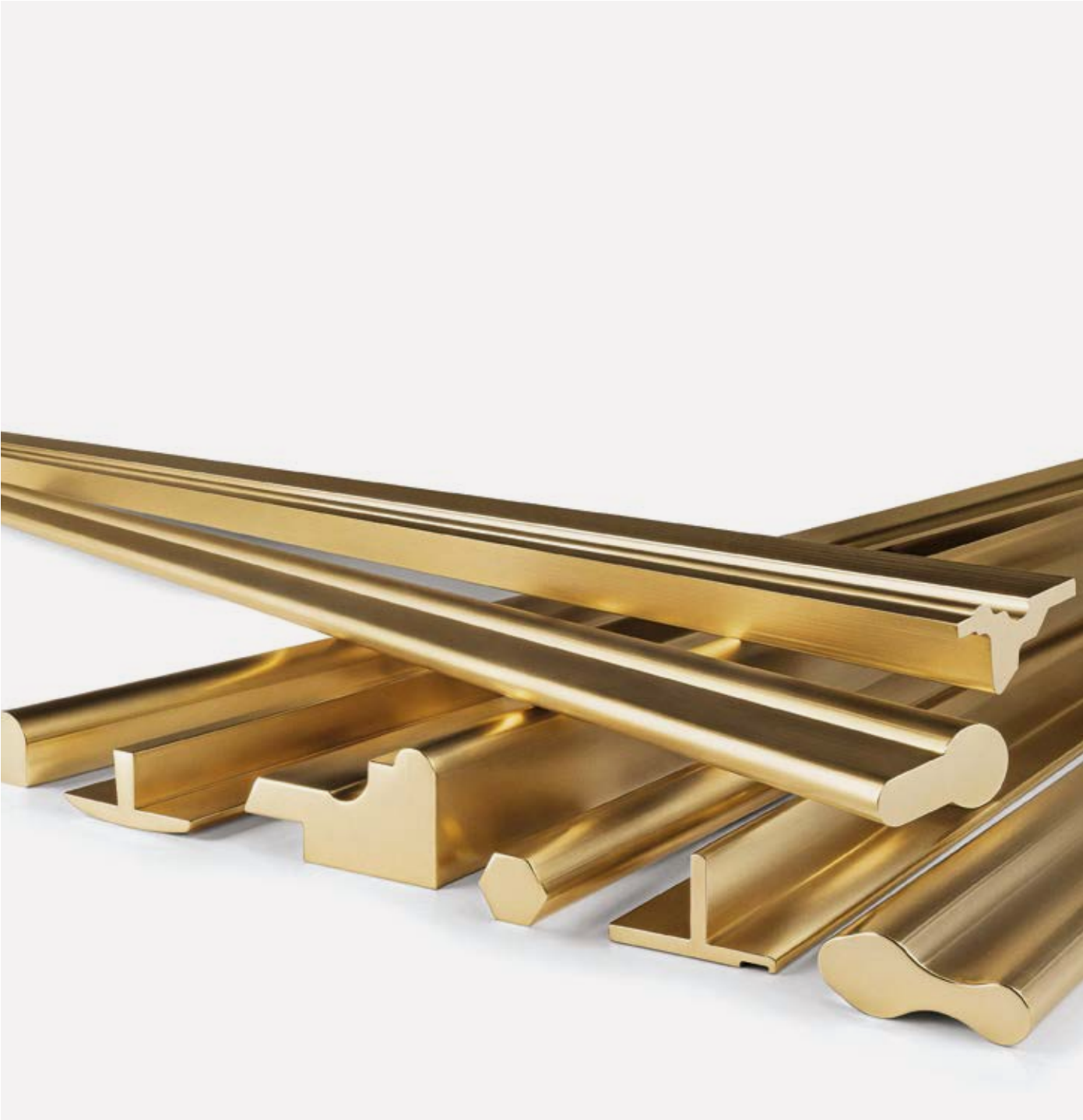
3.2

Mesingani presovani i vučeni
profili

Presovane i vučene profile od mesinga izrađujemo u obliku šipki, šina, profila i žice. Koriste se za najrazličitije namene u raznim industrijskim granama, ali i za opšte namene.

Extruded and drawn brass
profiles

We produce extruded and drawn brass profiles in the form of rods, bars, profiles and wire. They are used for a wide variety of purposes in various industrial branches, but also for general purposes.





ASORTIMAN MESINGANIH PRESOVANIH I VUČENIH PROFILA
PRODUCT PORTFOLIO OF EXTRUDED AND DRAWN PROFILES

3.2.1

Mesingane šine i šipke

Mesingane šine i šipke zbog odlične obradivosti i sposobnosti oblikovanja, imaju široku primenu u raznim granama industrije. Šipke od mesinga namenjene za mašinsku obradu na obrtnim uređajima se proizvode prema standardu EN 12164, ukoliko su namenjene za preradu kovanjem prema standardu EN 12165, a za opštu namenu se izrađuju prema standardu EN 12163.

Mesingane šine od istih materijala, za opštu namenu izrađujemo prema standardu EN 12167.

Brass bars and rods

Brass bars and rods are widely used in various branches of industry due to their excellent machinability and workability. Brass rods intended for machining on rotating devices are manufactured according to EN 12164; if they are intended for fabrication by forging, according to EN 12165; if they are intended for general use, they are made according to EN 12163.

Brass bars made from the same materials, for general use, are produced according to EN 12167.



OZNAČAVANJE MESINGA I STANDARDI PREMA KOJIMA SE PROIZVODE ŠIPKE I ŠINE
BRASS DESIGNATIONS AND STANDARDS ACCORDING TO WHICH THE BARS AND RODS ARE PRODUCED

ASORTIMAN
PRODUCT PORTFOLIO

LEGURA ALLOY		POLUPROIZVOD SEMI-FINISHED PRODUCT	DIMENZIJE mm DIMENSIONS mm	OBLIK ISPORUKE FORM OF DELIVERY
BEZOLOVNI MESINZI LEAD-FREE BRASSES	CuZn37	šine Bars	debljina 2.0 - 15.0 širina 5.0-60.0* Thickness 2.0 - 15.0 Width 5.0-60.0*	fabričke (2-4 m) i fiksne (1-4 m) dužine Standard lengths (2-4 m) and ordered lengths (1-4 m).
	CuZn40			
	CuZn10 CuZn20 CuZn28 CuZn30 CuZn33 CuZn37 CuZn40	okrugle šipke Round rods	3.0 - 80.0	
		kvadratne šipke Square rods	4.0 - 50.0	
		šestougaone šipke Hexagonal rods	4.0 - 60.0	
MESINZI SA OLOVOM BRASSES CONTAINING LEAD	CuZn36Pb1.5 CuZn36Pb3 CuZn38Pb2 CuZn39Pb2 CuZn39Pb3 CuZn40Pb2	šine Bars	debljina 2.0 - 15.0 širina 5.0-60.0* Thickness 2.0 - 15.0 Width 5.0-60.0*	Okrugle šipke do prečnika 18 mm i šestougaone do otvora ključa 16 mm mogu se isporučivati u koturu ili pravim dužinama (max težina kotura 100 kg). Prave dužine: fabričke (2-4 m) i fiksne (1-4 m). Round rods with diameter up to 18mm and hexagonal rods with opening of the wrench up to 16 mm can be delivered in straight lengths or in coil (max. coil weight is 100 kg). Straight lengths: Standard lengths (2-4 m) and ordered lengths (1-4 m).
		okrugle šipke Round rods	3.0 - 80.0	
		kvadratne šipke Square rods	4.0 - 40.0	
		šestougaone šipke Hexagonal rods	4.0 - 65.0	
		šuplja šipka (okrugla i šestougaona) Hollow rods (round and hexagonal)	prema zahtevu kupca as requested by the customer	

* u zavisnosti od debljine
* depending on thickness

EN OZNAKA EN DESIGNATION		EN KOJI DEFINIŠU PROIZVODE EN STANDARDS SPECIFYING THE PRODUCTS	OZNAKE PREMA DRUGIM STANDARDIMA DESIGNATIONS ACCORDING TO OTHER STANDARDS		
			DIN		ASTM
SLOVIMA SYMBOL	BROJEVIMA NUMBERS		SLOVIMA SYMBOL	BROJEVIMA NUMBERS	
CuZn10	CW501L	EN 12163	CuZn10	2.0230	C 220 00
CuZn20	CW503L	EN 12163	CuZn20	2.0250	C 240 00
CuZn28	CW504L	EN 12163	CuZn28	2.0261	-
CuZn30	CW505L	EN 12163	CuZn30	2.0265	C 260 00
CuZn33	CW506L	EN 12163	CuZn33	2.0280	C 268 00
CuZn36	CW507L	EN 12163 EN 12167	CuZn36	2.0335	C 270 00
CuZn37	CW508L	EN 12163 EN 12165 EN 12167	CuZn37	2.0321	C 272 00
CuZn40	CW509L	EN 12163 EN 12165 EN 12167	CuZn40	2.0360	C 280 00
-	-	-	CuZn36Pb1,5	2.0331	C353 00
CuZn36Pb3	CW603N	EN 12164 EN 12167	CuZn36Pb3	2.0375	C 360 00
CuZn38Pb2	CW608N	EN 12164 EN 12165 EN 12167	CuZn38Pb1,5	2.0371	-
CuZn39Pb2	CW612L	EN 12164 EN 12165 EN 12167	CuZn39Pb2	2.0380	C377 00
CuZn39Pb3	CW614N	EN 12164 EN 12165 EN 12167	CuZn39Pb3	2.0401	C385 00
CuZn40Pb2	CW617N	EN 12164 EN 12165 EN 12167	CuZn40Pb2	2.0402	C 378 00

3.2.2

Mesingani profili

Mesingani profili proizvode se u oblicima i kvalitetima definisanim u fabričkom katalogu ili prema specijalnim zahtevima kupaca.

Standardne legure za proizvodnju punih mesinganih profila su: CuZn39Pb2, CuZn39Pb3, CuZn37. Najmanji poprečni presek je 10mm2. Profile isporučujemo u koturovima težine 40-60 kg i u pravim dužinama do 4m, u zavisnosti od oblika profila ili zahteva kupca.

Brass profiles

Brass profiles are produced in shapes and tempers specified in the company's catalogue or in the customer's request.

Standard alloys for manufacture of brass profiles are as follows: CuZn39Pb2, CuZn39Pb3, CuZn37. The smallest cross section is 10mm2. We deliver profiles in coils of weight 40-60 kg and straight lengths of up to 4m, depending on the shape of profile or the customer's request.

OZNAČAVANJE MESINGA
BRASS DESIGNATIONS

EN OZNAKA EN DESIGNATION		OZNAKE PREMA DRUGIM STANDARDIMA DESIGNATIONS ACCORDING TO OTHER STANDARDS		
		DIN		ASTM
SLOVIMA SYMBOL	BROJEVIMA NUMBERS	SLOVIMA SYMBOL	BROJEVIMA NUMBERS	
CuZn37	CW508L	CuZn37	2.0321	C 272 00
CuZn39Pb2	CW612N	CuZn39Pb2	2.0380	C 377 00
CuZn39Pb3	CW614N	CuZn39Pb3	2.0401	-



3.2.3

Mesingana žica

Valjaonica bakra Sevojno izrađuje me-
sin- gane žice od velikog broja legura ši-
kog dimenzionog asortimana u skladu sa
EN 12166.

Mesinganu žicu proizvodimo prema stan-
dardima EN, DIN, GOST, BS i drugim svet-
skim standardima, ali i prema specijalnim
zahtevima kupca.

Specijalni zahtevi se mogu odnositi na uže
tolerancije, zadovoljenje specijalnih tečno-
loških osobina, uže područje mehaničkih
osobina, posebne zahteve za kvalitet povr-
šine i ostale osobine koje treba da zadovolje
odgovarajuću namenu.



Brass wire

Copper Mill Sevojno manufactures brass
wire from a large number of alloys with a
wide range of dimensions in accordance
with EN 12166.

We make brass wire according to EN, DIN,
GOST, BS and other international standards,
but also according to special requirements
of our customers.

Special requirements may refer to reduced
tolerances, special technological requests
in terms of properties, smaller range of
mechanical properties, special requests
regarding surface quality and other
properties that should meet the intended
purpose.

ASORTIMAN ŽICA OD MESINGA
PRODUCT PORTFOLIO OF BRASS WIRE

MATERIJAL MATERIAL		PREČNIK mm DIAMETER mm	OBLIK ISPORUKE FORM OF DELIVERY
BEZOLOVNI MESINZI LEAD-FREE BRASSES	CuZn5 CuZn10 CuZn15 CuZn20 CuZn30 CuZn33 CuZn36 CuZn37	0.05 - 0.60	kalem reel
		0.60 - 1.50	čelični kalem, kotur steel reel, coil
		1.50 - 20.0	kotur coil
MESINZI SA OLOVOM BRASSES CONTAINING LEAD	CuZn36Pb1.5 CuZn36Pb3 CuZn38Pb2 CuZn39Pb2 CuZn39Pb3 CuZn40Pb2	2.0 - 20.0	kotur coil

OZNAČAVANJE MESINGA I STANDARDI PREMA KOJIMA SE PROIZVODI ŽICA
BRASS DESIGNATIONS AND STANDARDS ACCORDING TO WHICH THE WIRE IS MANUFACTURED

EN OZNAKA EN DESIGNATION		EN KOJI DEFINIŠU PROIZVODE EN STANDARDS SPECIFYING THE PRODUCTS	OZNAKE PREMA DRUGIM STANDARDIMA DESIGNATIONS ACCORDING TO OTHER STANDARDS		
			DIN		ASTM
SLOVIMA SYMBOL	BROJEVIMA NUMBERS		SLOVIMA SYMBOL	BROJEVIMA NUMBERS	
CuZn10	CW501L	EN 12166	CuZn10	2.0230	C 220 00
CuZn20	CW503L	EN 12166	CuZn20	2.0250	C 240 00
CuZn30	CW505L	EN 12166	CuZn30	2.0265	C 260 00
CuZn33	CW506L	EN 12166	CuZn33	2.0800	C 268 00
CuZn36	CW507L	EN 12166	CuZn36	2.0335	C 270 00
CuZn37	CW508L	EN 12166	CuZn37	2.0321	C 272 00
CuZn40	CW509L	EN 12166	CuZn40	2.0360	C 280 00
-	-	-	CuZn36Pb1.5	2.0331	C 350 00
CuZn36Pb3	CW603N	EN 12166	CuZn36Pb3	2.0375	C 360 00
CuZn38Pb2	CW608N	EN 12166	CuZn38Pb1,5	2.0371	-
CuZn39Pb2	CW612L	EN 12166	CuZn39Pb2	2.0380	C 377 00
CuZn39Pb3	CW614N	EN 12166	CuZn39Pb3	2.0401	-
CuZn40Pb2	CW617N	EN 12166	CuZn40Pb2	2.0402	C 378 00



KONTAKT
CONTACT

Valjaonica bakra Sevojno
Copper Mill Sevojno

Prvomajska 43
31205 - Sevojno, Srbija
Tel +381 (0)31 531 757
www.vbs.co.rs



Prvomajska 43 • 31205 Sevojno
+381 31 531 757 • office@vbs.co.rs • www.vbs.co.rs