



**BAKARNI PRESOVANI
I VUČENI PROFILI**

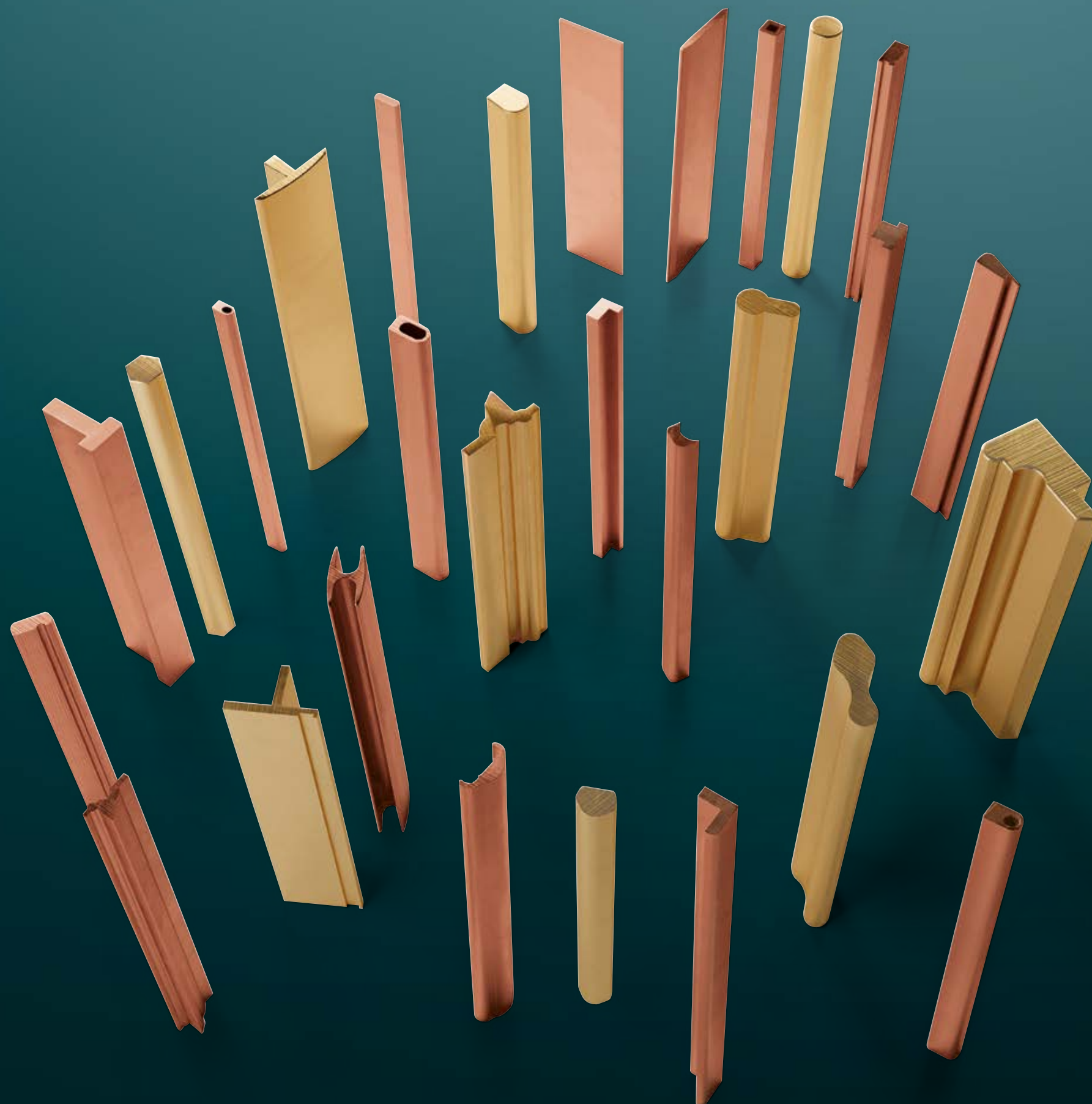
75 YEARS
SOLID AS COPPER

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).

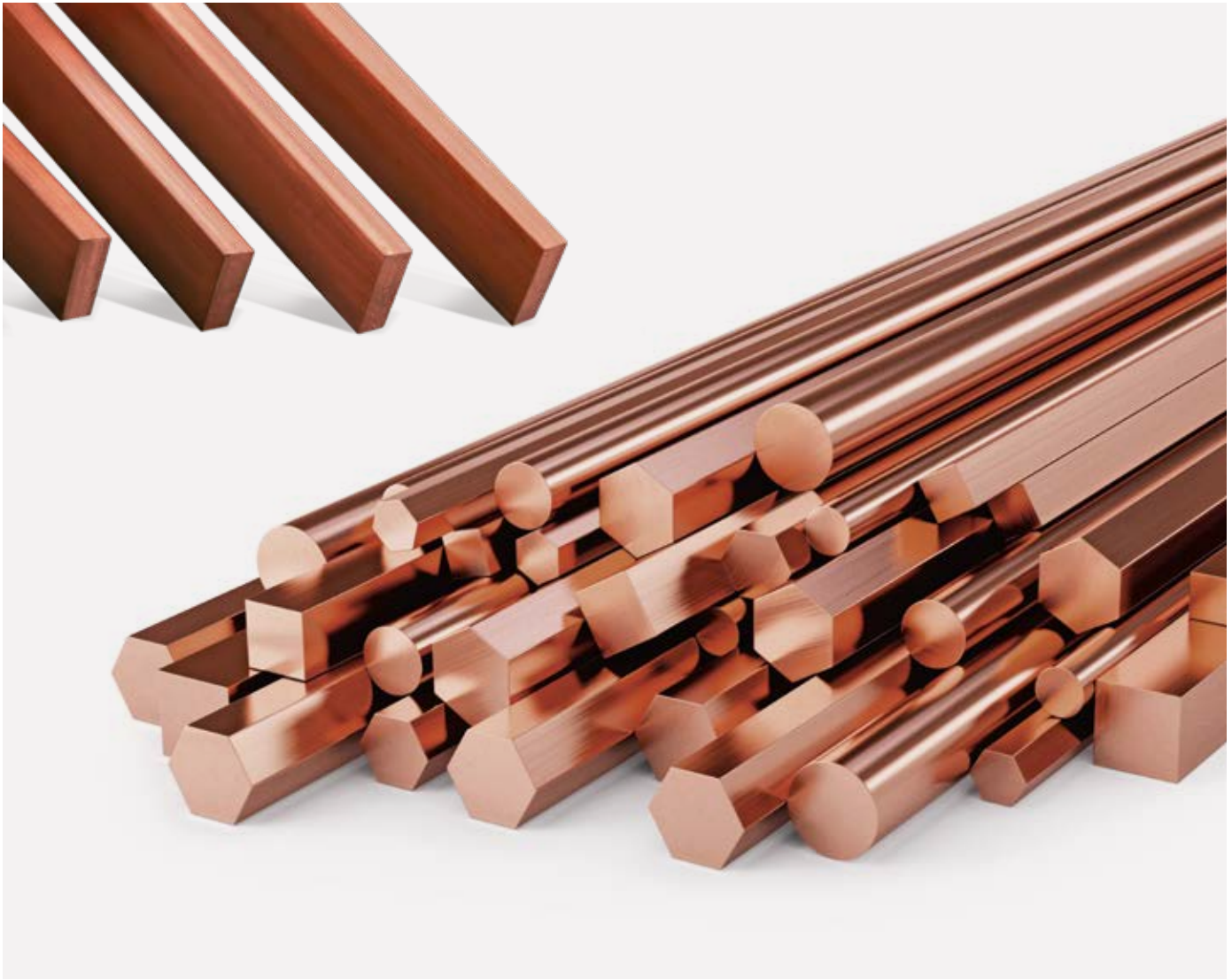
* u zavisnosti od debljine
* depending on thickness

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	-	-	-	-

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 inertnom gasu (TIG postupak) i zavarivanje metala u inertnom 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.

3.2

Mesingani presovani i vučeni profili

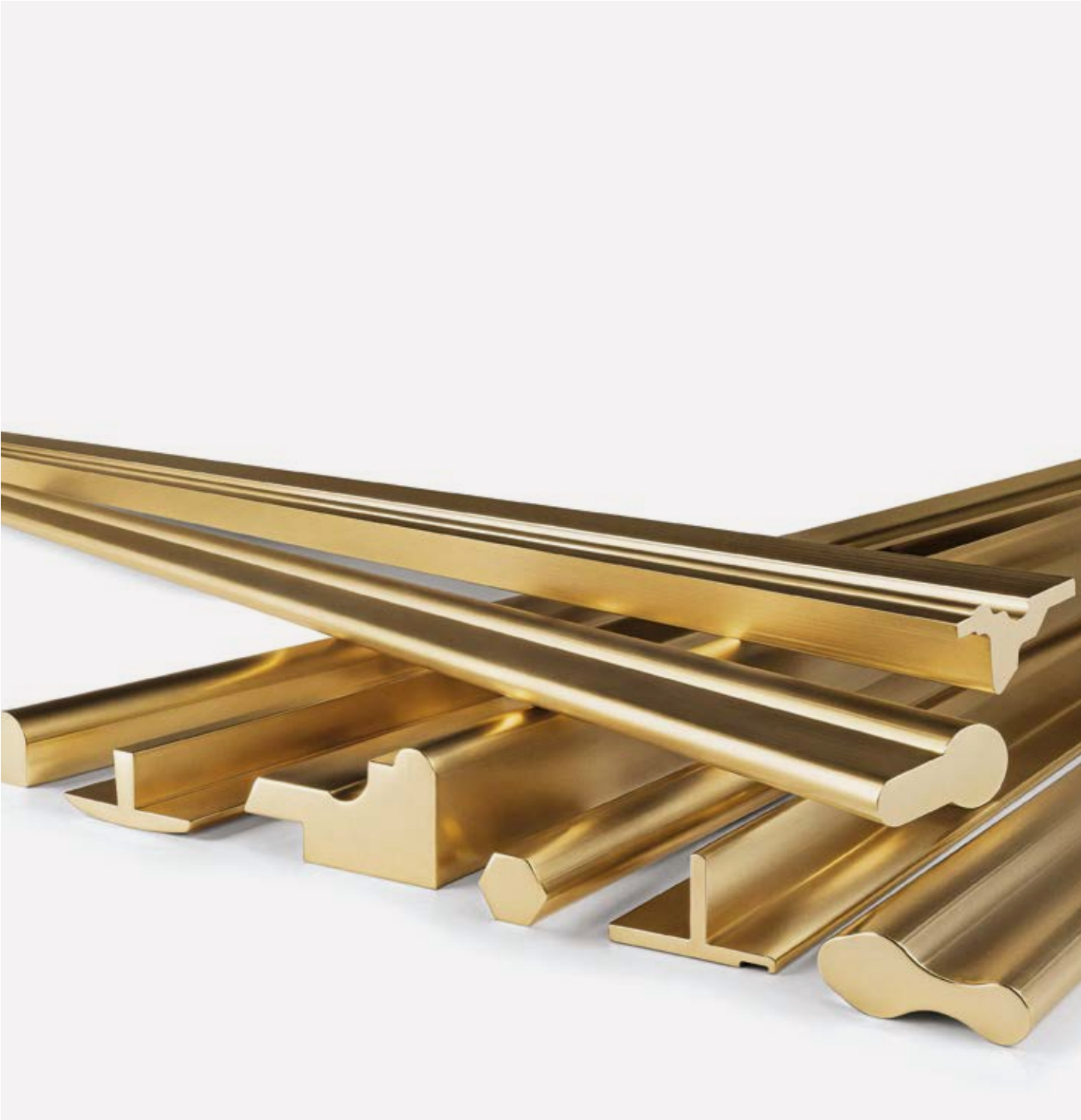
Presovane i vučene profile od mesinga izrađujemo u obliku šipki, šina, profila i žice. Koriste se za najrazličitije namene u raznim industrijskim granama, ali i za opšte namene.

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, 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





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