

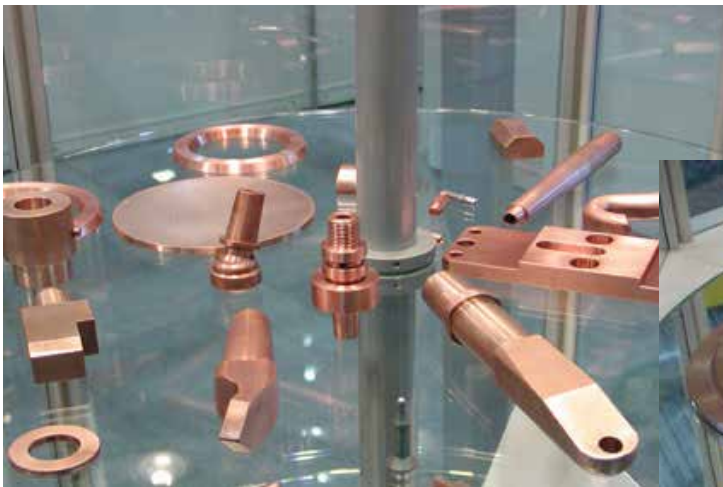
MeC

METALCON PL

**COPPER AND COPPER
ALLOY PRODUCTS**

**RESISTANCE WELDING
ELECTRODES, HOLDERS,
ARMS FOR RESISTANCE
WELDER**

**TOOLING FOR RESISTANCE
WELDING MACHINES**



Who are we?

METALCON was founded in 1990. Since the beginning, the company's activity has been focused on the products made of copper and precipitation-hardened copper alloys used in many industries.

As a producer of resistance welding electrodes, holders and arms for welding machines, we are a long-term supplier to companies in the automotive, metal and energy industries.

We offer:

- **Electrode caps.**
- **Electrodes used in the spot and projection welding process.**
- **Seam welding wheels used in seam welding process.**
- **Special electrodes made of tungsten, molybdenum or elkonite materials.**
- **Holders and arms for welding machines.**
- **Shunts and cables for resistance welding.**
- **Semi-finished products made of copper and copper alloys.**
- **Machine components and energy equipment parts.**
- **Insulating parts, positioning pins and unusual details used in welding processes.**
- **Parts made of aluminum and aluminum alloys.**
- **Fixture of resistance welding machines.**

We produce items based on the documentation or provided parts.

We produce documentation according to the delivered parts.

We offer professional advice to our Clients about different technical aspects e.g. selection of appropriate material and electrodes for a given application.

Since 2002, we have implemented a Quality Management System according to EN ISO 9001 for the following scope:

**Production of electric resistance welding electrodes
and welders equipment made of copper and age hardenable copper alloys.**

We use materials from well known producers of copper and copper alloys for our products. Properties and application are presented in the table below.

Group	Designation	Assortment	Hardness min.	Electrical conductivity min.		Softening temperature °C	Application
			HB	MS/m	%IACS		
A2	CuCr1Zr	< Ø25	160	43	75	480	Stressed current-carrying parts including the electrodes, holders and arms. For spot, seam and projection welding. Welding of mild steel and coated steel.
		Ø25 ÷ Ø50	140				
		Ø51 ÷ Ø200	120				
		Other products (flat bars, seam welding wheels, and other)	120				
A3/1	CuCo2Be CuCoNiBe	< Ø25	230	25	43	480	Stressed current-carrying parts including the electrodes, holders and arms. For spot, seam and projection welding. Welding of stainless and heat-resistant steels.
		> Ø25	220				
		Other products (flat bars, seam welding wheels, and other)	210				
A3/2	CuNi2Si	Bars, Flat bars and other	190	24	42		

In addition to the materials listed in the table, we also produce tungsten, molybdenum and sintered WCu type components (eg elkonite).

Electrodes for resistance welding

Electrodes used in the spot and projection welding process.



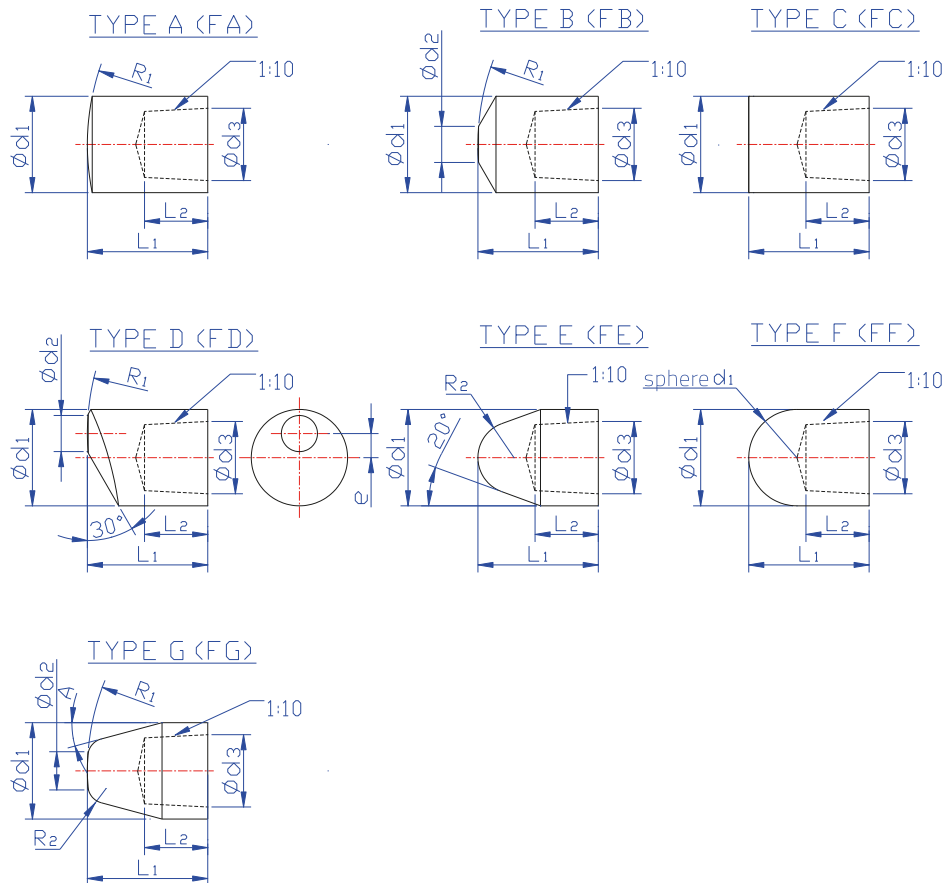
Spot welding electrode caps

In our warehouse we have a wide range of cap electrodes produced by LUVATA company. Electrodes are produced according to ISO 5821, DIN 44750 and other standards used in the automotive industry.



Marking for orders.

Female - internal taper Male - external taper	F
ISO Shape	B
Diameter: d1	16
Material A-Trode (CuCrZr): A Nitrode (CuAl2O3): N Z-Trode (CuZr): Z	A
Variation of form; Basic ISO form "00"	00
LUVATA spot welding electrode caps CODE	FB16A00
Spot welding electrode caps CODE according to ISO 5821 & DIN 44750	B16



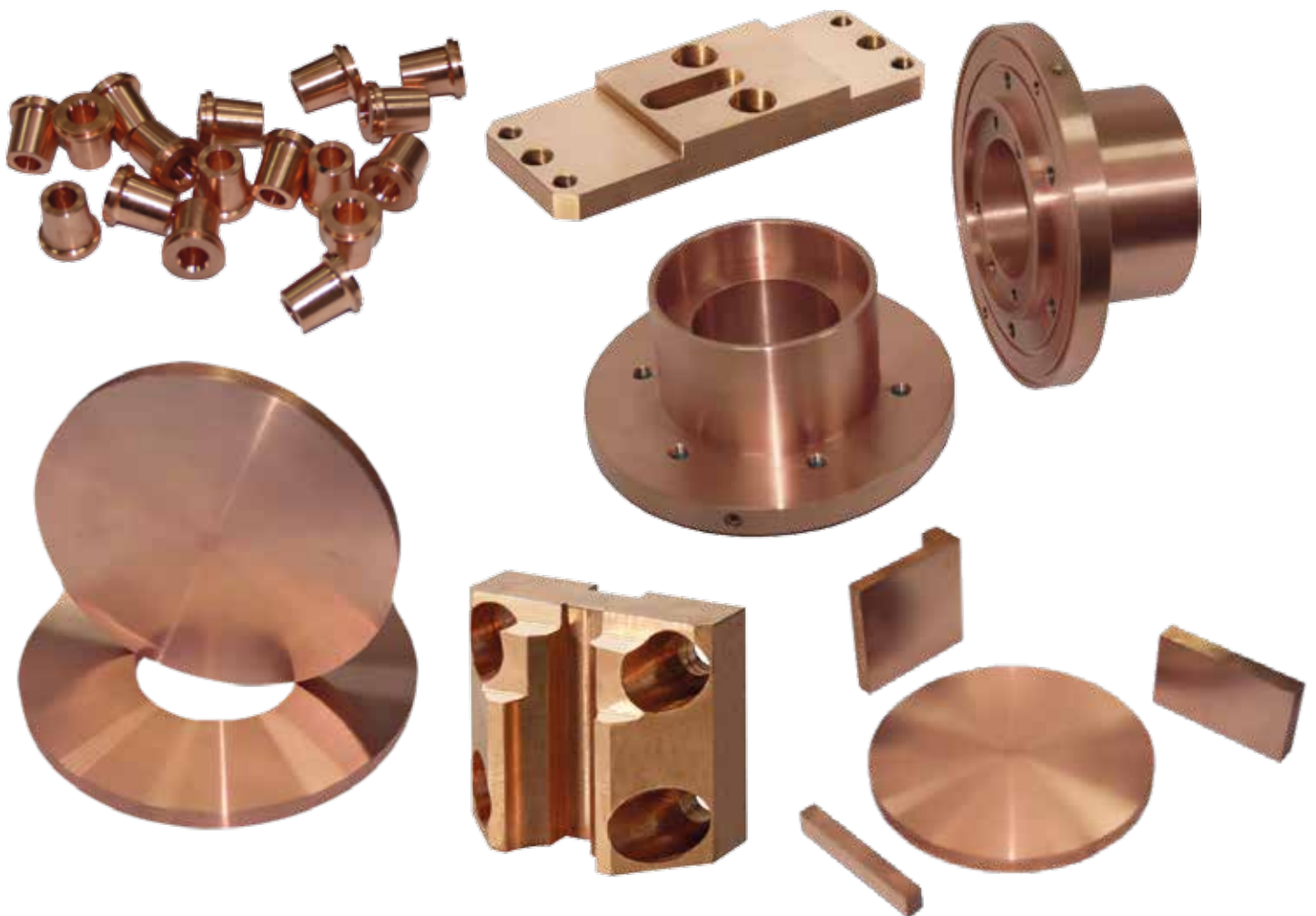
Spot Welding Electrode Caps according to ISO 5821 & DIN 44750 norm.

d_{h11}	d_2	d_3	L_1	$L_2^{+0.5}$	e	R_1	R_2	A
13	5	10	18	8	3	32	5	-
16	6	12	20	10.5	4	40	6	15°
20	8	15	22	11.5	5	50	8	22.5°

Seam Welding Wheels



Semi-finished products and other elements made of copper and copper alloys.



HOLDERS for welding machines



ARMS for welding machines



Shunts



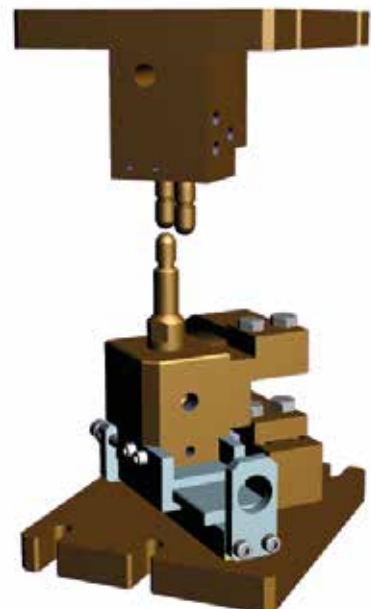
Aluminum alloys parts

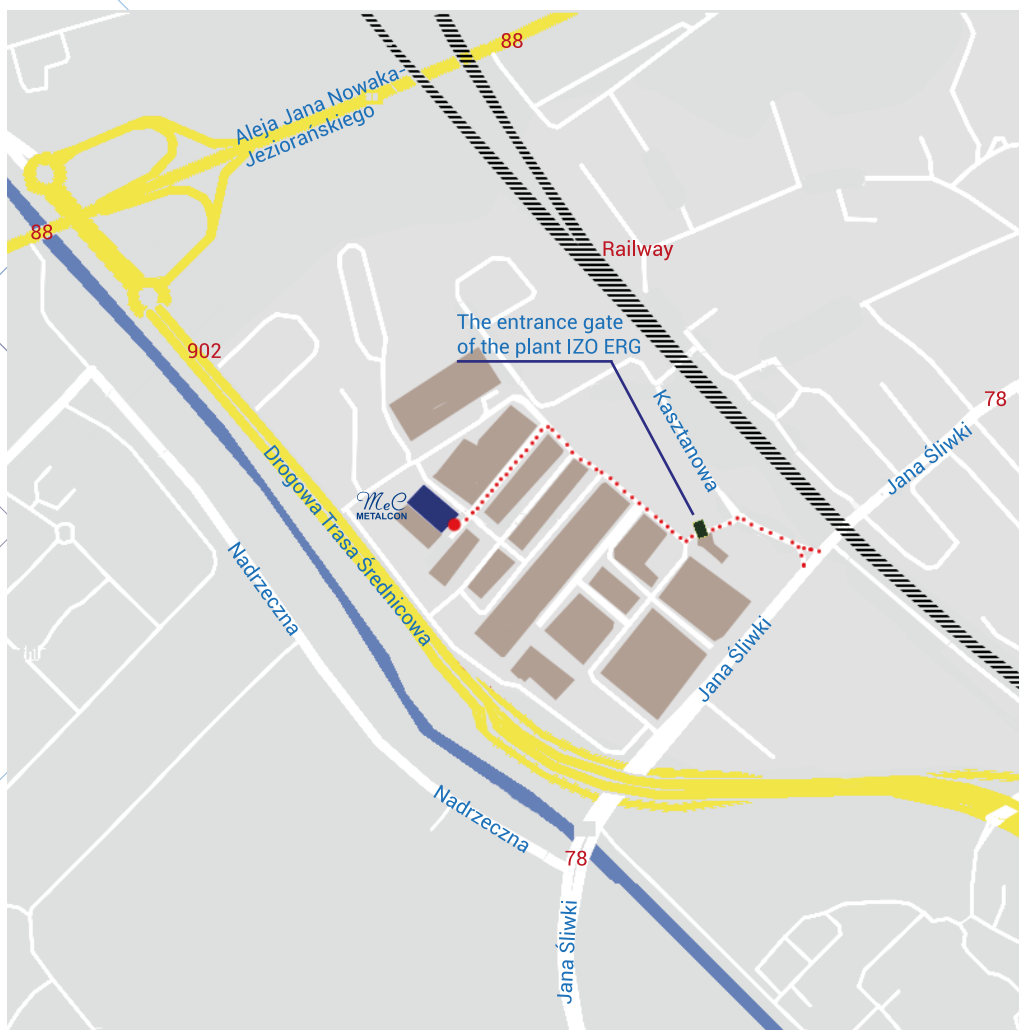


Steel parts



Fixture





More information you can see
<http://www.metalcon.pl>

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