

KONTAKTNI ELEMENTI AD

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Since 1980

COMPANY INFORMATION BROCHURE



Production workshops

Buildings and production halls

The enterprise is based in the town of Dragoman at a distance of 45 km from Sofia. The company has three production halls with a total area of 3600 m². They are located in an area of 23 ha. Kontaktni Elementi AD has covered warehouses, office building – massive building. Also there are an additional production unit in the city of Sofia.



The production process is divided into 3 workshops:

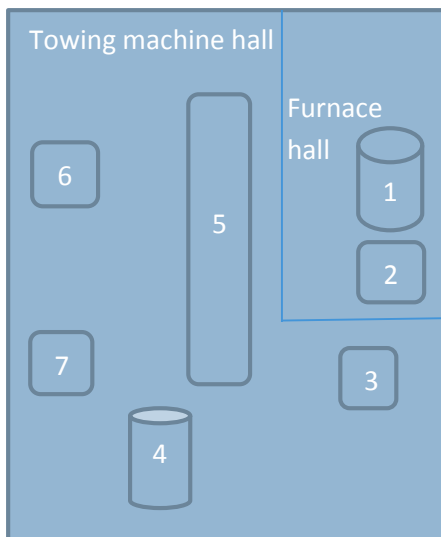
1. Workshop for casting and towing of the material. Based at the factory in the town of Dragoman with a total area of 961 m². In this workshop is produced copper or silver solder, wire type– two, three and four component in combination with silver, copper, zinc and cadmium.
2. Workshop for rolling and punching of bimetallic band. Based at the factory in the town of Dragoman with a total area of 732 m². In this workshop is produced rolled bimetallic band for punching of contact bimetals. Equipped with specialized machines made in Italy.
3. Workshop for production of bimetallic electrical contact rivets. Based in Sofia city. Production of bimetallic contact rivets takes place on specialized rivet machines from the German company “Renz-Wacker”. The production process is fully automated.



Workshop for casting and towing of the material

Machines equipment list and capabilities

Workshop for casting and towing of the material, 961 m²



1 - Melting furnace, electrical

- 120 kg material/h
- melting of Copper and Silver

2 - Electrical switchboard of melting furnace

3 - Induction heater, 1600°C

4- Hydraulic press, horizontal, 600 tons of pressure

5 - Towing machine for wire up to $\phi = 4$ mm

6- Towing machine for wire up to $\phi=4 - 2$ mm

7- Towing machine for wire up to $\phi = 2 - 0.8$ mm



1 - Melting furnace, 120 kg/h



4- Hydraulic press, horizontal, 600 tons



5 - Towing machine for wire up to $\phi = 4$ mm

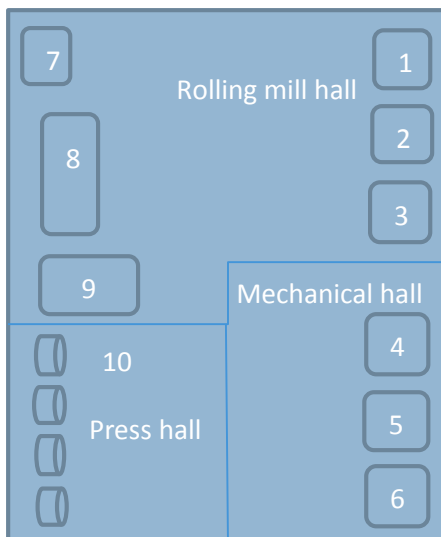


6 - Towing machine for wire up to $\phi = 2 - 8$ mm

Workshop for rolling and punching of bimetallic band

Machines equipment list and capabilities

Workshop for rolling and punching of bimetallic band, 732 m²



- 1- Rolling mill for bimetallic bands. Mario di Mario, Italy**
 - Width = 400 mm, thickness up to 0.8 mm
- 2- Rolling mill for bimetallic bands. Mario di Mario, Italy**
 - Width = 600 mm, thickness up to 0.2 mm
- 3- Rolling mill for silver wire. Mario di Mario, Italy**
- 4- Cutter machine**
- 5- Cutter machine**
- 6- Hydraulic knife**
- 7- Hot rolling machine**
 - thickness up to 0.2 mm
- 8- Furnace, 3 pcs, 1200 °C**
- 9- Hot rolling machine,**
 - thickness up to 4 mm
- 10- Eccentric presses**
 - 2x20 tons, 2x40 tons



2 - Rolling mill



3 - Rolling mill



4 - Cutter machine

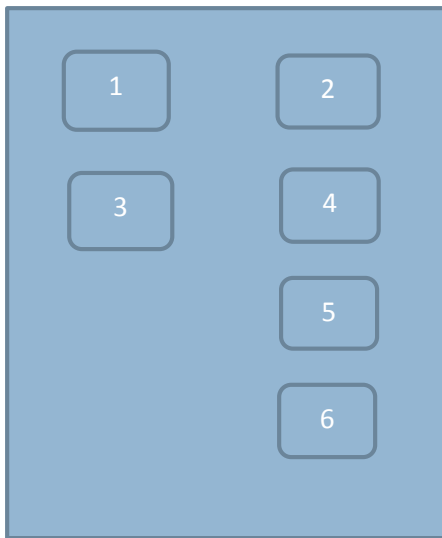


10 - Eccentric presses

Workshop for production of bimetallic electrical contact rivets

Machines equipment list and capabilities

Workshop for production of bimetallic electrical contact rivets, 30 m². Based in Sofia city



- 1- Automatic Rivet Machine. Renz & Wacker, Germany**
 - Capacity of 3500 pcs/h, double-layer bimetal rivets
 - $\phi = 3$ mm
- 2- Automatic Rivet Machine. Renz & Wacker, Germany**
 - Capacity of 3500 pcs/h, double-layer bimetal rivets
 - $\phi = 4 - 5$ mm
- 3- Automatic Rivet Machine. Renz & Wacker, Germany**
 - Capacity of 3500 pcs/h, double-layer bimetal rivets
 - $\phi = 5$ mm
- 4- Automatic Rivet Machine. Renz & Wacker, Germany**
 - Capacity of 3500 pcs/h, double-layer bimetal rivets
 - $\phi = 3$ mm
- 5- Automatic Rivet Machine. Renz & Wacker, Germany**
 - Capacity of 3000 pcs/h, double-layer bimetal rivets
 - $\phi = 5 - 7$ mm
- 6- Automatic Rivet Machine. Renz & Wacker, Germany**
 - Capacity of 3000 pcs/h, three-layer bimetal rivets
 - $\phi = 4$ mm



Automatic Rivet Machines, double-layer



6 - Automatic Rivet Machines, three-layer



Production

Type of products

Activities of the Kontaktni Elementi AD is associated with the production of bimetallic contacts (plates), bimetallic and three-metallic contact rivets, solders silver bases, PAC-40, 50, 60, zinc and tin anodes. The company carries out activities related to the foundry and metal pressing services.

Bimetallic electrical contact rivets

Kontaktni Elementi AD produces two types of bimetallic contact rivets: double-layer and three-layer contact rivets. The process of butt welding of wires appropriate size of the contact and bearing metal and the subsequent formation of the bimetallic rivet through the fray to a certain form. For contact material most commonly is used silver with a purity of 99.95% and a carrier material – electrolytic copper.



Rolled contact bimetals

Contact bimetal is a composite material consisting of basic metal and contact material built-in at its level or above it. Most often, copper or its alloys are used as a main material and noble metal – silver or its alloys – as a contact material. Due to precise task-specific technological equipment, the company can produce contact bimetals in the form of bands and other products according to customer drawings.



Silver solders

The company is specializes in the production of silver solders – three and four components. There are solders with low, medium and high content of silver, depending on the percentage of silver in them. They are produced in the form of wire or tape, depending on the customer wishes. The combination of the raw of silver, copper, zinc and cadmium is used for manufacture the silver solder.



Volume of production

Annual production

Product / Year	2013	2014	2015	2016	2017
Contact bimetals, pcs	85 987	123 074	68 925	100 405	45 560
Silver Solders, kg	581	809	840	811	625
Bimetallic Rivets, pcs	807 963	730 028	676 030	709 800	614 770

The clients of Kontaktni Elementi AD are one of the largest companies of electrical industry, instrument-making, electronics and mechanical engineering from Bulgaria and other countries

Human resource

Human capabilities-Manufacturing

One of the most significant advantages of the company - the team of engineers and technologists with many years of experience.

1. Executive Director - 1 person
2. Accountant - 1 person
3. Technologist - 1 person
4. Ecology specialist - 1 person
5. Furnace operator - 1 person
6. Towing machine operator - 1 person
7. Hydraulic press operator - 1 person
8. Rolling machine operator - 1 person
9. Electrician - 1 person
10. Mechanic - 1 person

For contacts with «Kontaktni Elementi » AD:

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