

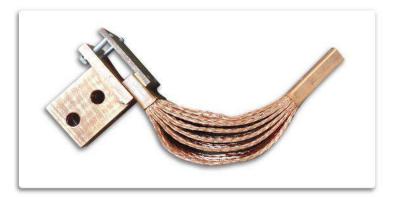
AN ISO 9001:2015 CERTIFIED COMPANY

# **BRAIDED COPPER FLEXIBLE**



## Connectors/Shunts/Jumper









Our company specializes in manufacturing Braided Copper Flexible Connectors, Shunts and Jumpers using highly flexible braided copper strips, tapes and ropes. These connectors are completely customized as per specific requirements of the customer. With the help of our highly skilled personnel we can provide job specific solutions according to bus-way sizing, current rating, fitment required, etc.

The contact areas of our connectors are made by pressing solderless copper connectors which can be bare, tin plated or silver plated.

With our manufacturing facility strategically located in Mumbai, we can provide our products in an efficient and timely manner Pan-India and globally. Our years of experience coupled with the highly committed and motivated team has helped us to cater to the needs of various industries which require such products in bulk and on a regular basis. **If required, we can also manufacture Aluminium Braided Flexible Connectors.** 

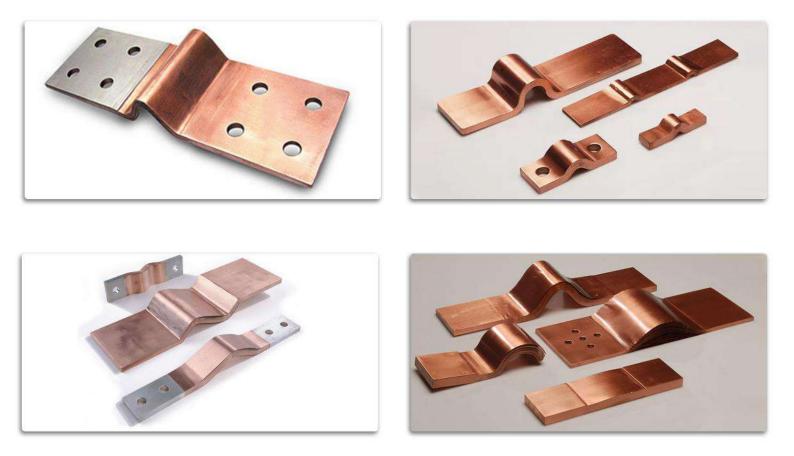
The standard specifications of Braided Copper Flexible Connectors, Shunts and Jumpers which we offer are as follows:

- O Single wire diameter: 0.07mm to 0.30mm
- O The braids can be bare, tin or silver coated.
- Raw material used is ETP grade copper with a minimum copper content of 99.90% and conductivity greater than 97% IACS.
- O Cross-sectional area of connector: 25 mm<sup>2</sup> to 6000+ mm<sup>2</sup>
- O Silicon, Fibre glass, Heat shrinkable sleeve, etc. insulation can be provided on request.
- O Contact areas can be bare, tin or silver coated.

## LAMINATED COPPER FLEXIBLE



## Connectors/Shunts/Jumper



Our company manufactures Laminated Copper Flexible Connectors, Shunts and Jumpers by using ETP grade copper foils with purity greater than 99.90% and conductivity greater than 97% IACS. These foils are stacked together and then high current is applied under high pressure thereby resulting in a special metal diffusion process where the copper melts itself and forms a homogeneous bond thus giving a very negligible almost nil millivolt drop across the connector. As a result, the cross sectional area is constant overall and no other filler material is used to join the layers of foils together.

The design of Laminated Copper Flexible Connectors can be completely customized as per customer's needs, requirements and type of application. The contact areas can be bare, tin or silver coated. If required, we can also manufacture Aluminium Laminated Flexible Connectors and Riveted Flexible connectors in both copper and aluminium.

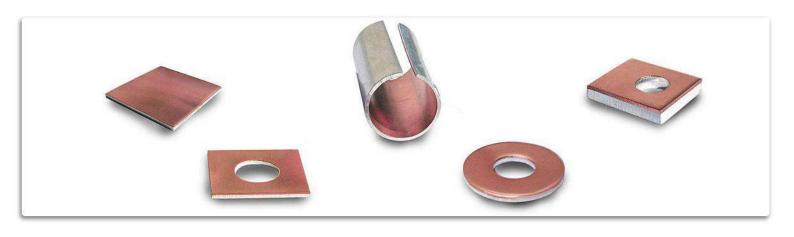
The standard specifications of Laminated Copper Flexible Connectors, Shunts and Jumpers which we offer are as follows:

- O Single foil thickness: 0.05mm to 0.50mm
- O The ends can be bare, tin or silver coated.
- O Width of the connector: 20mm to 400mm.
- Raw material used is ETP grade copper with a minimum copper content of 99.90% and conductivity greater than 97% IACS.
- O Cross-sectional area of connector: 20 mm<sup>2</sup> to 10000 + mm<sup>2</sup>
- O Insulation can be provided on request.

# **COPPER/ALUMINIUM BIMETAL**



## Sheets/Washer/Sleeve







Copper/Aluminium Bimetal is made by cladding copper sheet with aluminium. It is known that when aluminium terminals are directly connected to copper terminals to carry current at high voltage, a bimetallic galvanic corrosion occurs, resulting in high resistance at the joint. The heated joints are oxidized due to which they lose contact resulting in sparks, voltage dropout, power losses, power failure and damage to machinery. If bimetal is placed as a transition plate in between the aluminium and copper terminal at the joint, the corrosion is averted due to absence of air in the bimetal. Hence, copper/aluminium bimetal is used at dissimilar metal joints of Aluminium and Copper to make similar metals contact.

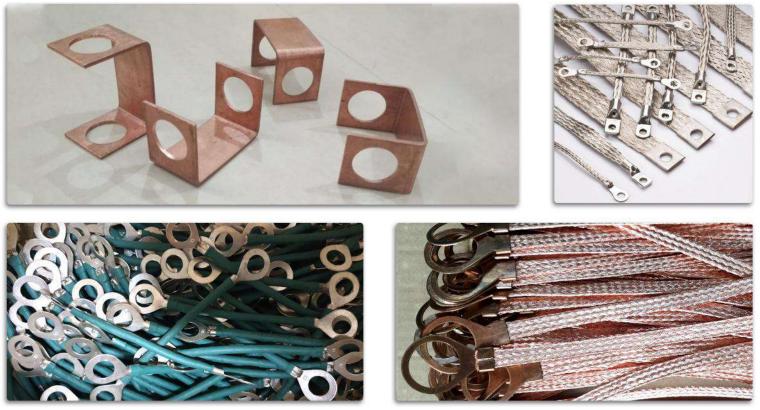
The standard ratio of aluminium to copper in bimetal is 80:20 & 85:15. Our company provides bimetallic sheets, plates, washers and sleeves. We can manufacture copper/aluminium bimetal components as per customer's specific requirements. Bimetal sheets are available in the size 300mm x 600mm and the standard thickness is 1, 1.5, 2 and 3mm.

Typical Applications of Copper/Aluminium Bimetal are:

- O Substation & Switchyard Bimetallic clamp and connectors
- O Cable lugs and cable end connectors
- O Distribution, panel boards, bus-ducts and bus-bar chambers
- O Isolators & Switchgears
- Oil & Vacuum Circuit Breakers
- Overhead connectors
- Flexible connectors



# **COPPER EARTHING JUMPER**



Our company specializes in manufacturing Copper Earthing Jumpers which are also commonly referred to as flange earthing jumpers, grounding jumpers, bonding jumpers, earthing straps, earth braids, etc. These jumpers are primarily used to prevent the hazards caused by static electricity.

Static electricity is nothing but an unbalanced electric charge within or on the surface of a material. The electric charge remains until it is able to get discharged by means of an electric current or electrical discharge. It is created whenever two surfaces contact and separate, and at least one of them has a higher resistance to electric current. If proper measures are not taken then the sparks generated through static energy can lead to explosions and industrial fire. Hence, proper bonding or grounding needs to be ensured for which earthing jumpers are used.

The most preferred type of earthing/bonding jumpers are made from braided copper flexible as it is a strong conductor and is highly flexible because of which it can bend at any degree and is easy to install. These braids are generally tin plated to prevent corrosion and are crimped with tinned/bare copper lugs or ferrules as per customer's requirement. They can also be insulated if needed. The other type of jumpers are made from copper sheets which are cut into specific size and are drilled with holes and bent as per customer's requirement.

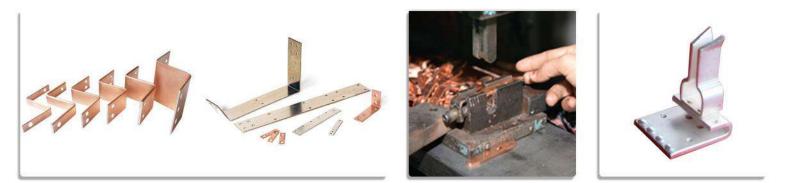
We offer completely customized solutions to our customers and manufacture earthing jumpers as per their specific needs.

The standard specification of our earthing jumpers are as follows:

- O The standard specification of our earthing jumpers are as follows:
- O Material used: Copper with purity greater than 99.90%
- O Hole Dia: 4mm to 40mm
- O Length: As per customer's requirement
- O Cross sectional area: As per customer's requirement
- O Plating and Insulation: As per customer's requirement

## FABRICATED COPPER Busbar & Metal Components





With the help of our in-house facility for bending, twisting, punching, drilling, tapping, turning, milling and plating and the expertise of our personnel, we are able to manufacture completely customized metal components for our customers.

Our company undertakes contract manufacturing for high volume manufacturing of machined components. Our systematic approach leads to greater transparency, shorter lead time and higher customer satisfaction.

## **EXTRUDED & ROLLED PRODUCTS**



With the help of our OEMs we have been successfully supplying wide range of extruded and rolled products to our customers. All our products undergo stringent tests to ensure they are in accordance with the defined standards and as per the customer's requirement.

We provide bars, rods, sheets, plate, coil, tubes, profiles and sections in copper, aluminium, steel and brass. We keep ready stock of standard sizes and grades in order to ensure quick delivery and convenience to our customers.



# ALUMINIUM BRONZE & PHOSPHOR BRONZE



Aluminium bronze & phosphor bronze alloys have high-strength properties and excellent resistance to wear and corrosion.

Our company offers round bars, plates, flats, sheets and bushes of aluminium and phosphor bronze. Apart from this, we can also make customized components of these alloys. The chemical composition of these alloys can be kept as per customer's specific requirement.

Aluminium bronze is manufactured by casting and then forging or extrusion process depending upon the requirement. Standard grade is AB1 and AB2.

Phosphor bronze is casted and drawn. Standard grade is PB1 and PB2.

## **CHROMIUM, CHROMIUM ZIRCONIUM** & BERYLLIUM COPPER







Our company provides round bars, flat bars, plates, sheets and customized components of chromium copper, chromium zirconium copper and beryllium copper.

These copper based alloys find high usage in the welding industry along with other industrial applications due to their excellent hardness, strength and conductivity.

We provide these alloys as per following standards:

- O UNS C18200
- O UNS C18150
- O UNS C17200
- O UNS C17510

#### ABOUT US

THE INCEPTION OF SIDHARTHA METAL COMPANY DATES BACK TO THE YEAR 1987. FOUNDED BY MR. SURENDRA CHAPLOT BY THE NAME OF LION INDUSTRIES, TODAY, WE, AN ISO 9001:2015 CERTIFIED COMPANY ARE SUCCESSFULLY MANUFACTURING, EXPORTING AND SUPPLYING FERROUS AND NON-FERROUS METAL PRODUCTS WITH THE HELP OF OUR HIGHLY SKILLED PERSONNEL AND PRECISION ENGINEERING TECHNIQUES.

#### WHY CHOOSE US?

SUPERIOR SERVICE: UTMOST LEVEL OF CUSTOMER SATISFACTION IS OUR COMPANY'S PRIMARY OBJECTIVE AND WE CONSTANTLY PERSEVERE TOWARDS ACHIEVING THE SAME BY PROVIDING ON-TIME DELIVERY AND QUALITY PRODUCTS.

**STRATEGICALLY LOCATED:** WITH MANUFACTURING FACILITIES IN AND AROUND MUMBAI, WE ARE ABLE TO MANUFACTURE PRODUCTS WITH QUICK TURN-AROUND TIME AND ARE WELL CONNECTED WITH ALL MODES OF TRANSPORT.

HIGHLY SKILLED AND DEDICATED TEAM: OUR TEAM PROVIDES JOB SPECIFIC SOLUTIONS TO THE CUSTOMERS WHO NEED THEM AND ASSIST THE COMPANIES THROUGHOUT THE PROCESS FROM R&D TILL PRODUCT ACTUALIZATION.

### **OUR PRODUCTS ARE USED BY**



#### CORPORATE OFFICE

6/10, SHRI HALAI LOHANA MAHAJAN WADI, OFFICE NO. 4 & 5, DR. B.J MARG, MUMBAI - 400002. +91 22 62371521 / +91 9167909667 INFO@SIDHARTHAMETALS.COM WWW.SIDHARTHAMETALS.COM