



# FIRST CHOICE FOR ELECTRICAL ENERGY

**ORIENTAL COPPER IS A WORLD-CLASS ENGINEERING DESIGN AND MANUFACTURER OF HIGH CONDUCTIVITY COPPER BUSBAR AND COPPER FABRICATED PRODUCTS.**



**ORIENTAL COPPER – Better By Design**

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Our philosophy is simple, we only produce the very best copper material for industry, we bring innovation to the market, and we most definitely agree that using energy resources more efficiently and tackling the issue of climate change are priorities for everyone.

We actively promote ways in which we can help the Electrical Energy Business increase energy efficiency, be cost effective, and be more environmentally friendly. Our ‘OC-ETP®’ High Conductivity Copper, has a superior electrical performance, conducts electrical energy more efficiently generates lower heat loss, and even help lower everyone’s Carbon Footprint.

We also produce numerous Copper Alloys and Oxygen-Free-Copper manufactured for specific customer applications, offer a complete one-stop engineered fabricated solution, and have the very best-in-house Tin-plating service.

### Use the very best material for your electrical application

Many of our Customers in the Middle-East are electrical Switchboard Manufacturers, so a very important factor in “switchboard design” is the electrical property of the Copper Busbar.

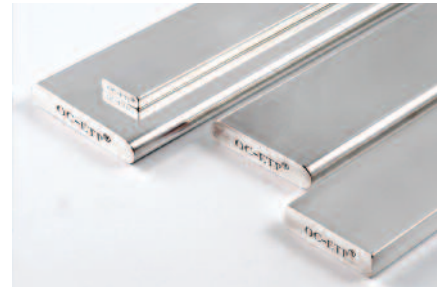
The purity of the raw material we use

and our state of the art production process result in “our finished OC-ETP® copper material”, which has a very high electrical conductivity (Over 100% IACs). Moreover, as the ‘Current Rating’ of Busbars is limited by temperature rise, OC-ETP® Busbars have undergone temperature rise testing, and have passed a Type Test of 3000A at 80 centigrade in accordance with IEC regulation 60439-1.

It’s proven that OC-ETP® Busbars can carry more current than other market Busbars. (OC-ETP® carries up to 3,175 Amperes at 80 degrees centigrade).

Furthermore, the mechanical strength of a Busbar needs to withstand additional electro-magnetic-forces when an electrical fault condition occurs. In accordance with IEC 60439-1, and OC-ETP® Busbar passes this test withstanding a short-circuit rise than other market Busbars – Design engineers should note:

- At operating conditions OC-ETP® Busbar generate less heat, so switchboards compartments are cooler
- Switchboards have a longer life due to lower temperature rise under normal operating conditions or when undergoing a short circuit occurrence



- OC-ETP® Busbars have controlled excellent flatness, when jointed together, this significantly reduces electrical resistance which also enhances switchboard performance
- Switchboard makers can design a more compact switchboard by using OC-ETP® Busbars.

Atmospheric conditions, humidity and high salt content in many parts of the Middle-East, demands Tin-plated copper as a specific regulation.

Oriental Copper has developed a unique in-house Tin-plating process under very strict quality controlled ISO procedures, which result in premium grade Tin-plated Copper Busbars which also contributes to better switchboard design, Our OC-ETP® High Conductivity Copper Busbars, together with our certified Tin-plating solution, optimise energy efficiency, and offer great value to switchboard makers.