

# Metallurgical Applications

Busbar Systems and Tankhouse Accessories

**LUVATA**  
Partnerships with a Promise





## Experience, innovation and versatility

We have been working in metallurgical applications for almost fifty years, providing tailor-made solutions for the electrolysis industry. We work closely with our customers to determine the right approach, partnering to innovate and find creative solutions that meet the exact requirements of the job. We have long-term experience in the industry from complete refurbishments to major new projects.

### **Complete, turn-key solutions**

We believe that no one knows metallurgical solutions like Luvata, and along with our expertise, we provide first class project management, after sales service and attention to detail.

We can manage the entire process, from the initial design to the manufacturing and installation of the application. Our customers have one point of contact and one, very safe, pair of hands for the whole project to ensure delivery is seamless, whatever the size.

### **High Electrical Conductivity is key**

Our proprietary oxygen-free copper OF-OK® is immune to hydrogen embrittlement and known for its high malleability and electrical conductivity. Sometimes, an all-copper solution is not the best for the job, so we also work with steel and lead elements, for additional strength or corrosion resistance when needed. Every project is different, so we adapt our materials, designs and processes to make every solution the right one.

*“At Luvata we take our responsibility to the planet very seriously. We believe in a more sustainable future, and we are determined to be a force for good in the development of e-mobility, the green transition, electrification and in healthcare and scientific research.”*

*Smelting and refining industries play an important role in the green transition, electrification of societies and the circular economy, as the demand for metals continues to grow. Our busbars and cooling elements contribute to the smooth and cost efficient management of these processes. We are proud to have been truly partnering with our customers in the electrolysis industry for decades, continuously innovating and providing custom-made solutions.”*

President & CEO  
**Pekka Kleemola**



# Bus bar systems and tankhouse accessories

Luvata has worked closely with electrolysis facilities worldwide in order to develop a comprehensive range of products which are optimised for equipping new installations and modernizing old ones.

**The resultant product range includes:**

- Main bus bars
- Intermediate bus bars
- Cell bus bars
- Droppers
- Flexible joints
- Hanger bars
- Short-circuit frames

**A total solution**

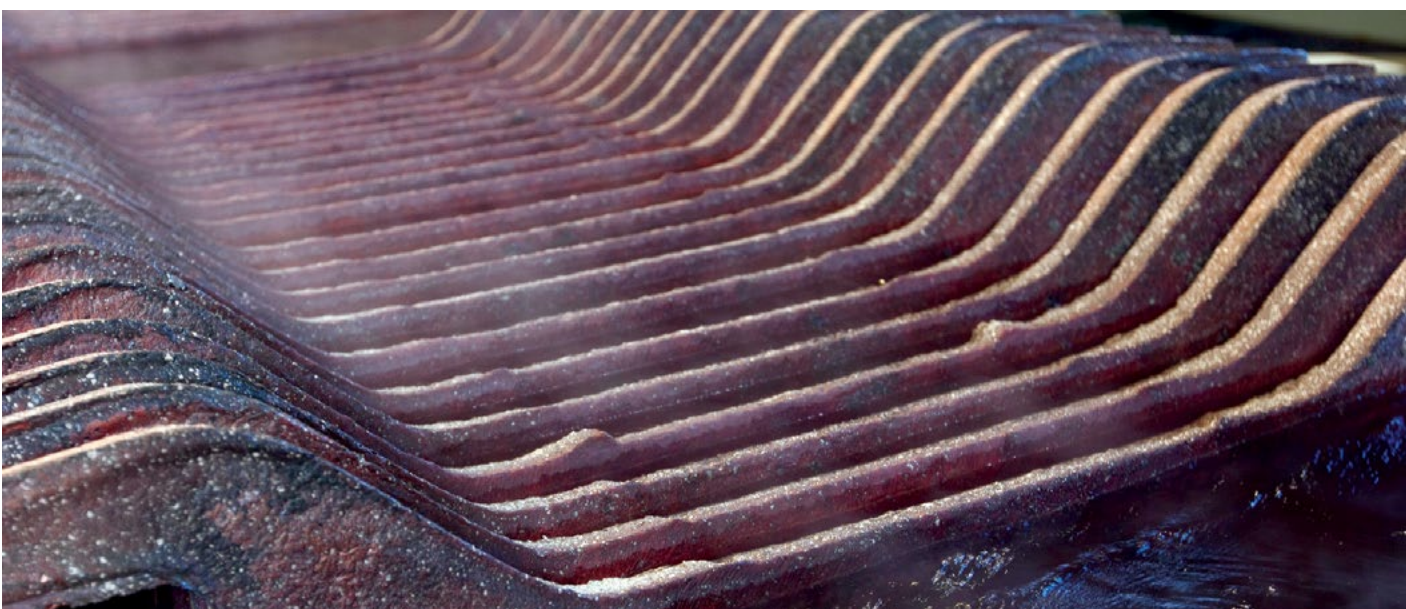
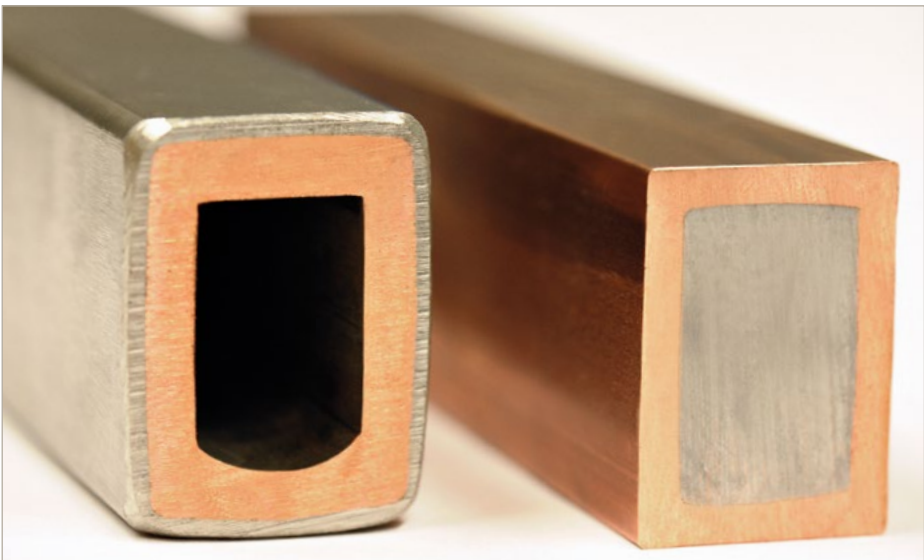
We can supply these products off-the-shelf, ready for immediate installation. Alternatively we can provide an end-to-end service where we manage the whole project, from the design, manufacture and production of the entire bus bar system, to the actual installation. This custom-made approach is increasingly popular as we have found that working together, we can find solutions to even the most difficult problems and achieve the desired outcome both economically and technically.



**Only the best materials**

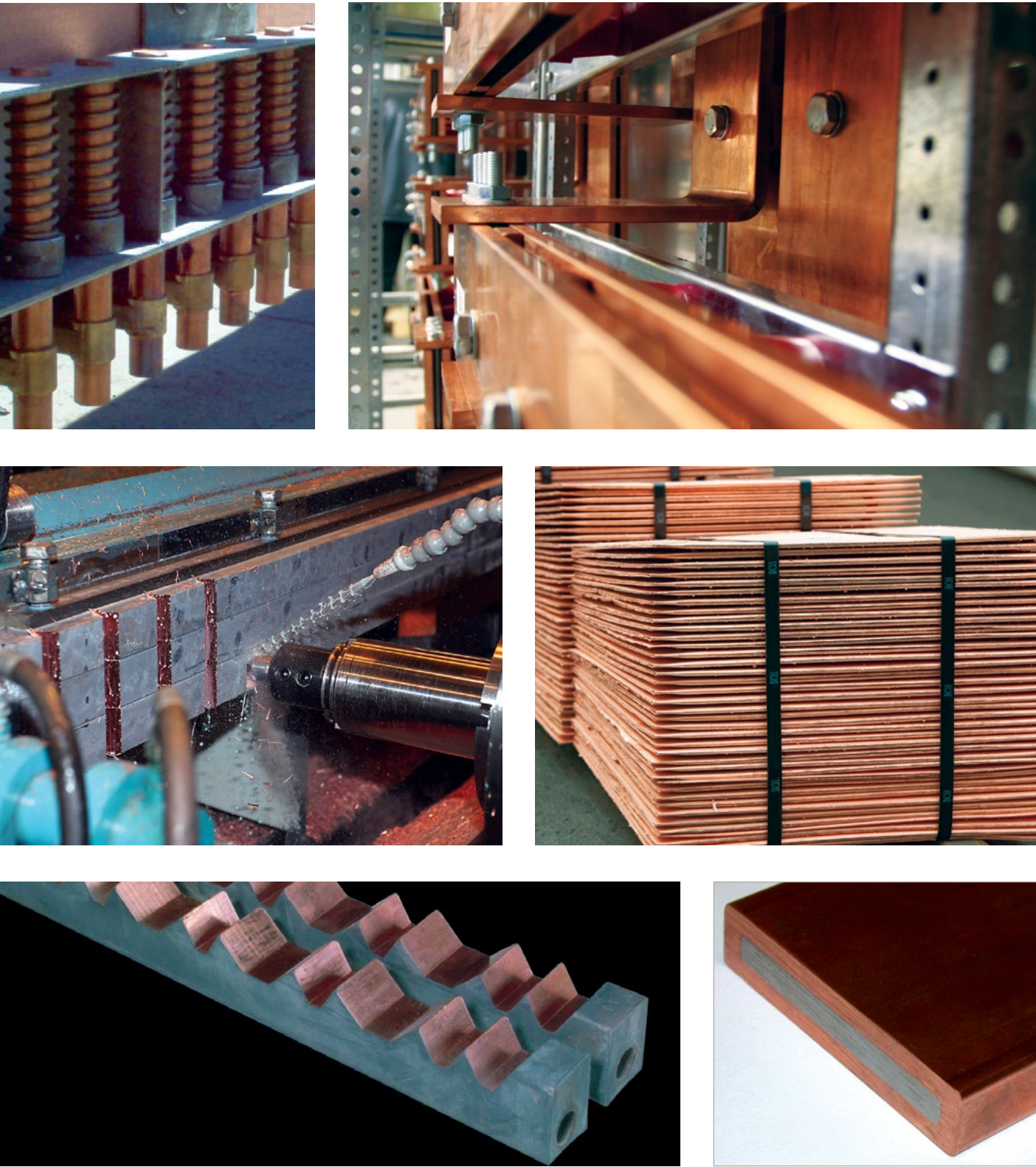
We use Luvata's proprietary oxygen-free copper OF-OK® as it is immune to hydrogen embrittlement and avoids any problems with welding. It is also known for its high malleability and electrical conductivity and it is an excellent material for installations demanding control of high voltages and currents.

Sometimes an alternative to an all-copper solution is required. We produce hanger bars in different shapes and dimensions, and our steel-cored hanger bars offer a combination of high strength and high conductivity with corrosion resistance. Other variations we offer include water-cooled intermediate bus bars which enable transfer of high currents efficiently; and lead coatings which provide corrosion resistance in demanding tank house environments.





# Metallurgical applications at work



# Luvata - Partnerships with a Promise

## Working for People, Society and the Earth

We all want to ensure a sustainable future for our planet. As a manufacturer, we know that we have both an opportunity and a responsibility to contribute positively to the changes needed to secure that future. We have stated that our vision is to be the leading provider of copper solutions that benefit people, society and the earth, and this is a serious commitment. We are active in markets such as e-mobility, healthcare, electrification and the green transition, all of which have a need for copper products. We believe that our innovations will help drive these markets forwards, making green solutions more easily accessible to all.

We also recognize the need for our operations to be sustainable. To this end, we are striving to reduce greenhouse gas emissions, aiming to be using 100% renewable electricity by 2035 and to be fully carbon neutral by 2045.

## Helping our customers grow and thrive

We have always worked in partnership with our customers, getting to know their businesses and collaborating on custom-made solutions. We take great satisfaction in seeing our customers thrive, and knowing that we played a part in their success.

Where we believe we can make a real difference is in sharing our robust manufacturing capabilities, technology and material knowledge, and by using our unique expertise to develop technically-demanding products. Together with an emphasis on lean production, innovation and value-added solutions, we work hard to ensure that we are the partner of choice for our customers, every time.

## Partnerships with a Promise

At Luvata, we deliver on our promises. We have pledged always to treat people with respect, keep an open mindset and work together with others.

Our global footprint stretches across four continents. Our diversity of locations, cultures and markets gives us access to a wealth of knowledge and expertise that continues to grow. It also means that we are local to our customers, wherever they are, so we can continue to forge the strong relationships we are known for.



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#### About Luvata

Luvata is a world leader in copper manufacturing and related engineering services. It brings together people, innovation and technology to create solutions in areas such as e-mobility, healthcare, and in electrification & the green transition. The company's success is driven by innovation, lean production and value-added sales, and its vision is to provide copper solutions which benefit people, society and the earth. Employing over 1,400 staff on four continents, Luvata works in partnership with customers such as ABB, CERN and Siemens. Luvata is a group company of Mitsubishi Materials Corporation.



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