



ENERGY THAT CREATES THE FUTURE!

Integrated Production Powerhouse – Expertly Assembled

Copper and aluminum components

Prefabrication of control systems & power distribution units

Advanced galvanic and powder coatings



www.electrispower.com
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ELECTRIS - FROM BESPOKE COPPER COMPONENTS TO ASSEMBLY OF POWER DISTRIBUTION SYSTEMS

Electris is a **premier manufacturer of highly specialized copper and aluminum components** and a **strategic partner in the prefabrication of control cabinets and switchgear**.

Our operational scale and cross-sector expertise allow us to support the most demanding industries: from conventional power generation and Renewables (RES), through e-mobility and Data Centers, to advanced AI infrastructure.

By leveraging our state-of-the-art machinery and engineering excellence, we optimize projects at the conceptual stage. This ensures our partners achieve measurable cost reductions and the fastest time-to-market for their products.

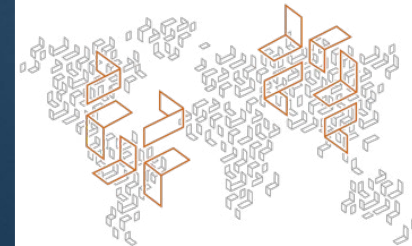
At Electris we build the reliable infrastructure of tomorrow. Our solutions operate wherever peak quality, stability, and durability are critical for safety and power continuity.

PROVEN POTENTIAL - Electris' operational scale by the numbers

With over 20 years of market presence, a deep-rooted customer-centric approach, and a continuous drive for technological innovation, Electris has established a dominant position as one of Europe's leading manufacturers of copper elements.

20+
years on the market
Established market position and industry know-how.

4 mln
components produced and sold each year



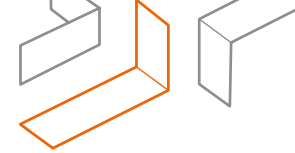
250
highly experienced employees.

200+
global clients
Strategic partnerships in key industrial sectors



ONE PARTNER - ONE PLACE - 3 BUSINESS AREAS

The entire production and assembly process in one place – less dependence on multiple suppliers. Electris operates across three business areas, offering its clients complementary services:

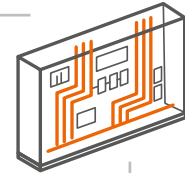


1

SWITCHGEAR ASSEMBLY



Professional prefabrication of advanced control and power distribution systems.



2

COPPER & ALUMINUM COMPONENTS MANUFACTURING



Production of dedicated components, including bespoke busbars, connectors, and terminals.

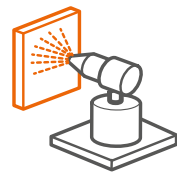


3

TECHNICAL COATINGS



High-end galvanic plating, powder coating, and functional multi-coating integration.





SOLUTIONS AND PRODUCTS FOR MANY INDUSTRIAL SECTORS

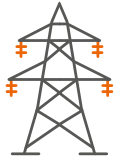
Our products reach many large, world-renowned companies that appreciate the quality, high standard of customer service, and the experience and knowledge of Electris employees.



Our services are used wherever there is a demand for reliable power distribution, in sectors such as: energy production and distribution, renewable energy sources, data centers, communications, railways, heavy industry, or infrastructures.



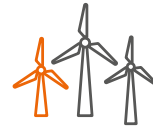
POWER GENERATION



POWER DISTRIBUTION



WIND ENERGY



SOLAR ENERGY



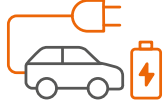
DATA CENTERS AND AI



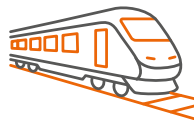
TELECOM



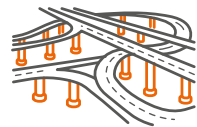
E-MOBILITY (BATTERIES, CHARGERS)



RAILWAY



INFRASTRUCTURE



CONSTRUCTION



MARINE INDUSTRY



HEAVY INDUSTRY



ELECTRIS COMPONENTS AND DEVICES WORK, AMONG OTHERS:

- in the largest server rooms,
- in devices produced by leaders of artificial intelligence solutions,
- in electric buses and rail vehicles – trains, metro, and trams,
- on wind and solar farms,
- in one of the most prestigious hybrid cars.



PREFABRICATION OF CONTROL AND POWER DISTRIBUTION SYSTEMS

Electris specializes in professional prefabrication of control and power distribution systems. We offer assembly of, among others, switchgear and control cabinets dedicated to industry, the energy sector, and original equipment manufacturers (OEM).



FROM PROTOTYPE TO SERIAL PRODUCTION

Electris supports clients at various stages of product development – from prototypes, through pilot series, to stable serial production. We offer assembly ranging from small devices to distribution systems consisting of many sections.

WE OFFER THE ASSEMBLY OF:

- PROTOTYPES,
- PILOT SERIES AND SHORT SERIES,
- SERIAL PRODUCTION.

SMART ASSEMBLY: A MODERN PREFABRICATION STANDARD

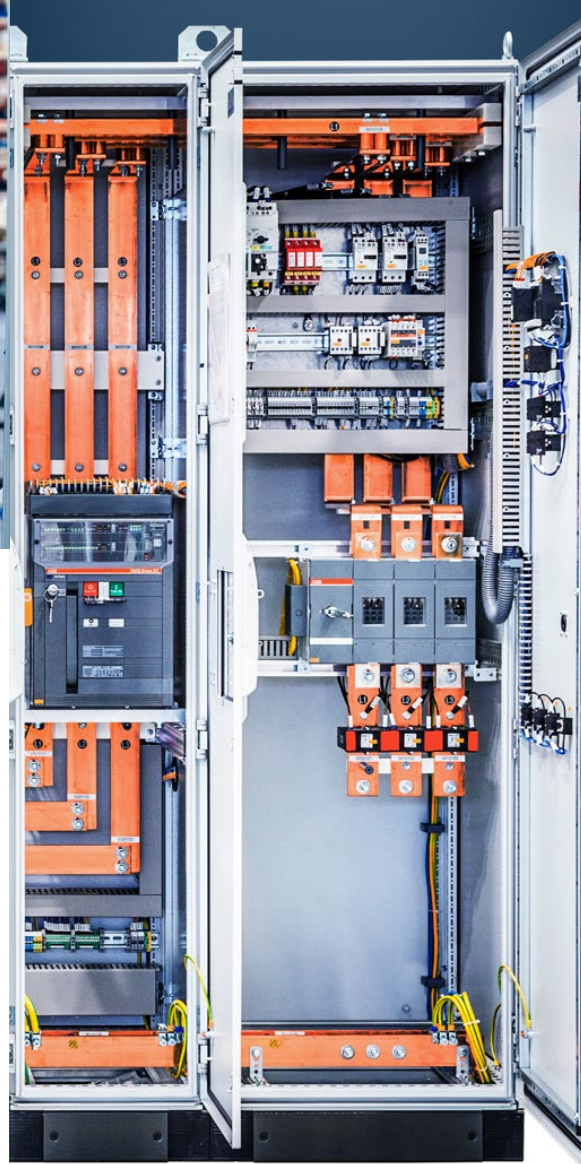
Our company has a modern, separate production hall designed for efficient prefabrication of switch cabinets.

Specialized infrastructure includes dedicated:

- ASSEMBLY STATIONS,
- TRANSPORT SYSTEMS,
- AND CLOSED TEST ZONES.

We focus on a smart approach to process improvements, using advanced tools and proprietary Poka-Yoke (error-proofing) devices. These solutions eliminate the risk of errors at every stage of work.

The assembly process includes **component production, full system integration, and appropriate tests – Factory Acceptance Test (FAT)**. Thanks to our own production infrastructure, we are able to quickly implement design modifications (redesign) and maintain high independence from external suppliers of metal elements.



FLEXIBLE COOPERATION MODELS

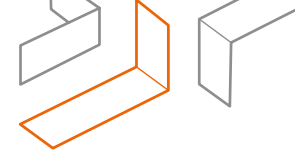
We currently implement the assembly process in two cooperation models:

- **Assembly according to the client's documentation (Build-to-Print)**, in compliance with the provided technical specification, guaranteeing full conformity with the guidelines.
- **Technical consultancy and optimization (Design for Manufacturing – DfM)**: we support the client in the redesign process. We optimize projects for production efficiency by introducing necessary adjustments to internal layouts and mechanical components.





PREFABRICATION OF CONTROL AND POWER DISTRIBUTION SYSTEMS



PROJECT TEAM

At Electris, every assembly project is supported by a dedicated project team that provides comprehensive care at every stage of implementation: from documentation verification, through design optimization and redesign, to final implementation.



MULTI-STAGE QUALITY AND SAFETY TESTS

Every control cabinet assembled at Electris **undergoes rigorous quality control**. Testing procedures, as an integral part of the process, confirm the correctness of assembly, electrical safety, and full compliance with technical documentation.

As part of the control, we perform:

- POINT-TO-POINT CONNECTION TESTS,
- EARTHING EFFECTIVENESS MEASUREMENTS,
- HIGH-VOLTAGE INSULATION TESTS (HI-POT).

OUR OFFER INCLUDES:



DOCUMENTATION ANALYSIS AND DESIGN REVIEW

- we verify the project from a technical perspective, ensuring its compliance with requirements and smooth production implementation.



OPTIMIZATION AND RAPID REDESIGN (DFM)

we offer mechanical modifications, busbar redesign, optimization of component placement, and cable routing.



SUPPORT IN THE SELECTION OF REMAINING COMPONENTS

- we cooperate with renowned suppliers to select the appropriate components. We eliminate the risk of design errors, ensuring production continuity, punctuality, and adherence to technical assumptions.

The process concludes with the preparation of a detailed **Factory Acceptance Test (FAT)** report. This document confirms the results of all conducted tests and serves as proof of the device's compliance with the project's technical requirements.

Additionally, depending on the client's requirements, we implement the **PPAP (Production Part Approval Process)**.

WHAT DO OUR CLIENTS GAIN BY OUTSOURCING ASSEMBLY TO ELECTRIS:

- **Stable supply chain.**
- **Shorter project lead times** – by manufacturing up to **60% of BOM elements in-house**, we reduce lead time by an average of **2 weeks**.
- **High production repeatability.**
- **Full quality control.**
- **Optimization** of logistics and delivery costs.



DEDICATED COPPER AND ALUMINUM COMPONENTS

BUSBARS

Electris specializes in the production of **dedicated, highly specialized busbars made of copper and aluminum**. Our components guarantee reliable energy transmission, ensuring safety and stability in many systems.



We produce **busbars in various shapes and dimensions, ranging from several millimeters to over 3000 mm**.



High-quality materials: Cu-ETP and Cu-OF, as well as upon request: Cupal Bimetal and flexible flex connections.



Comprehensive processing: we offer cutting, milling, bending, laminating, and the application of galvanic and lacquer coatings (epoxy and polyester).

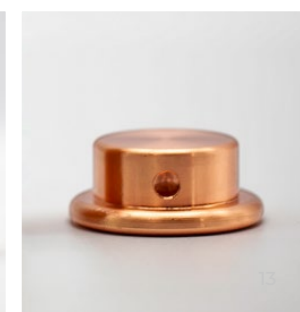
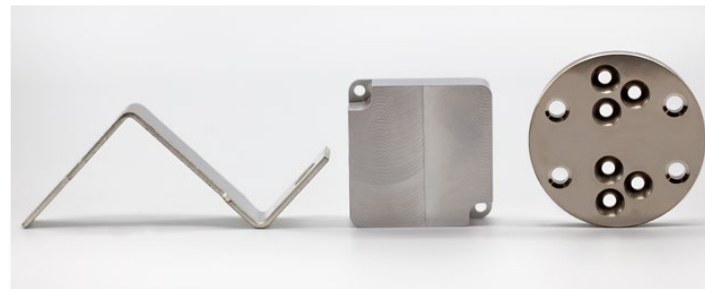
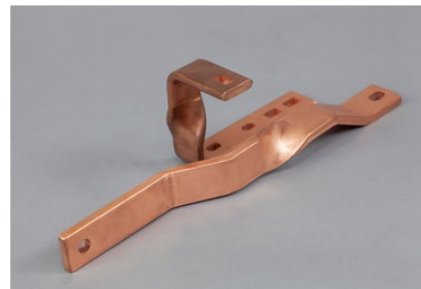
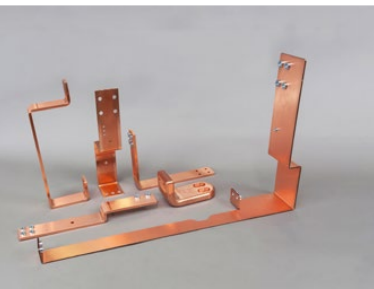


Electris busbars guarantee stability, reliability, and a long service life for power systems.



CONNECTORS AND OTHERS

We offer the production of metal elements such as **pins, connectors, threaded studs, or sleeves**. These are small-sized parts, often with complex and irregular shapes, which can serve as cable terminals for power power conductors.





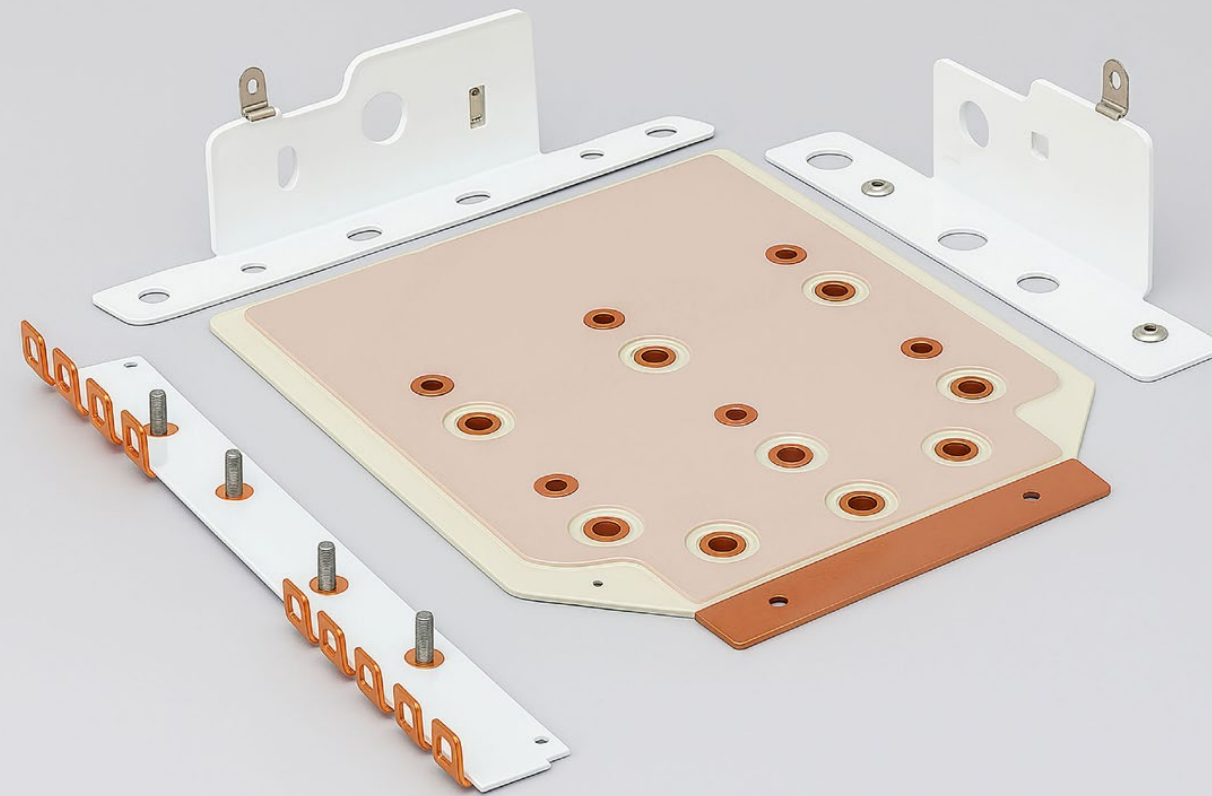
DEDICATED COPPER AND ALUMINUM COMPONENTS

LAMINATED ELEMENTS

Electris offers **BUSBAR LAMINATION** technology, which significantly improves safety and energy efficiency.

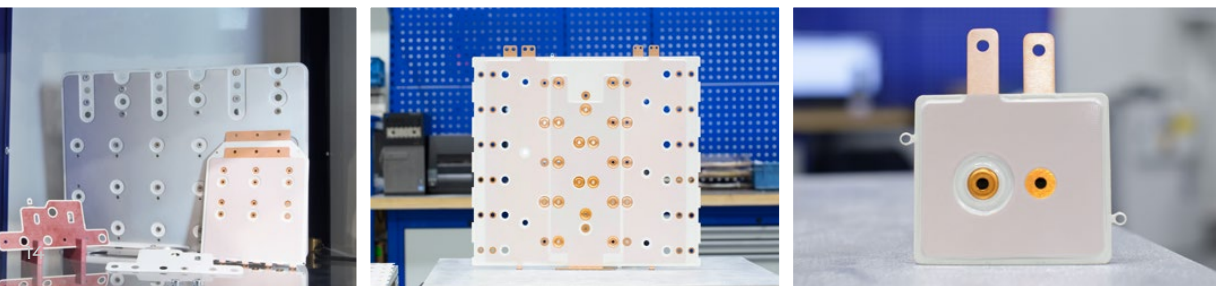
BENEFITS OF LAMINATION:

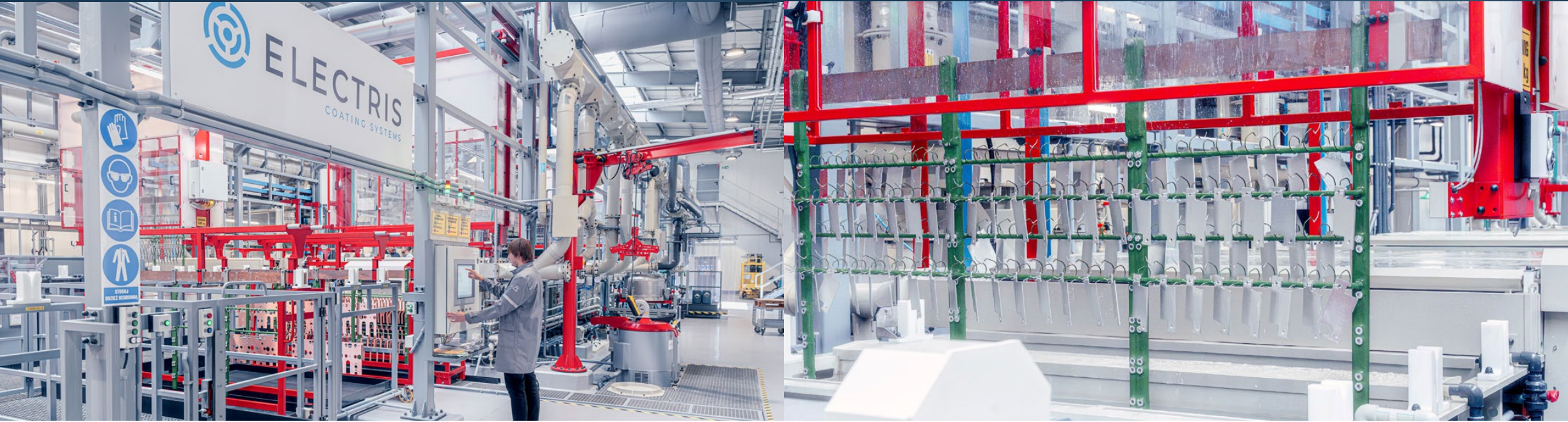
- **Space saving:** ideal for traction converters.
- **Improved electrical parameters:** reduced inductance and impedance, increased capacitance.
- **Greater thermal efficiency:** better heat dissipation.
- **Safety:** copper layers separated by a certified dielectric, non-flammable insulators (UL 94).



TAILORED TO NEEDS AND QUALITY GUARANTEE

- **Flexible sizes:** we produce laminates from small elements to large components with dimensions up to 650 × 800 mm.
- **Various configurations:** we fulfill orders for prototypes as well as large series, in single- and multi-layer versions.
- **Rigorous testing:** every component undergoes quality control, as well as **HIGH VOLTAGE AND PARTIAL DISCHARGE (PD) tests – UP TO 30 [KV]**.
- **Safety:** the insulators we use (GPO3, MYLAR, NOMEX, LUMIRROR) hold the **UL 94 certification** – one of the most important international marks of product quality and safety. It proves that the product has **undergone rigorous testing and meets requirements for electrical safety, fire safety, and other risk.**





GALVANIC COATINGS

Electris possesses the most modern electroplating factory in this part of Europe, allowing us to offer the highest quality galvanic coatings. **We specialize in technical coatings.**

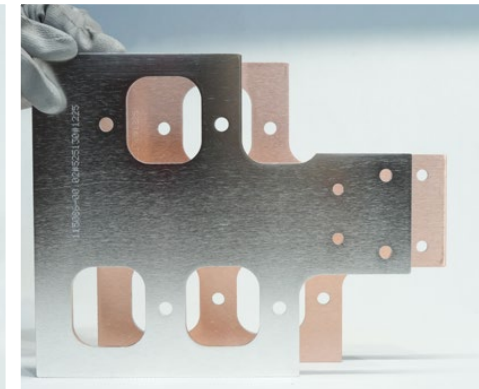
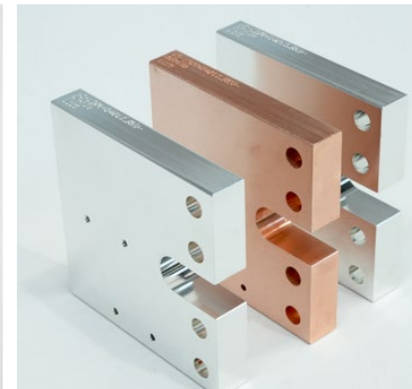


WE OFFER:

- **Tinning, silvering, and nickel plating** of copper and aluminum alloy components.
- **Precise cleaning and surface preparation process.**
- **Wide range of coating thicknesses: from 1 µm to 50 µm.**
- **Electroplating of elements with various geometries and dimensions – maximum length 2100 mm.**
- **Some of the largest silver-plating process tanks in Europe.**
- **Selective application** of galvanic coatings.
- **Coating combinations, such as nickel + tin or nickel + silver** on a single element.

BENEFITS OF THE COPPER AND ALUMINUM GALVANIZATION PROCESS:

- **Resistance to corrosion and external factors** – longer component lifespan.
- **Improved solderability and weldability** (nickel | tin).
- **Higher electrical conductivity** (silver).
- **Process repeatability** – a fully automated line ensures stable quality.



Our coatings are not just protection – they are also about functionality and reliability.





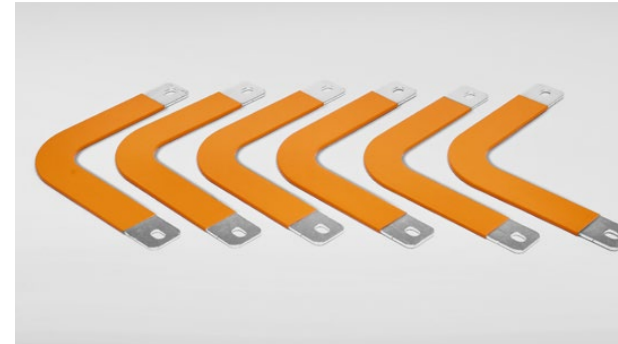
DEDICATED COPPER AND ALUMINUM COMPONENTS - TECHNICAL COATINGS



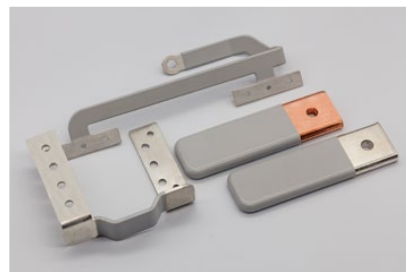
POWDER-COATED FINISHES

We offer a comprehensive **masking and powder coating service for copper and aluminum elements** in the internal Electris paint shop. We powder coat components of many sizes, shapes, and types, providing them with appropriate insulation.

Our internal powder coating shop allows for the application of **epoxy or polyester coatings** with specific thickness and color schemes.



We use epoxy and **polyester paints with high insulation parameters** – up to 45 kV.



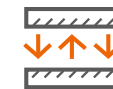
COATING INTEGRATION – BUSBARS 2.0

Electris also offers an **innovative service of combining galvanic and powder-applied coatings (epoxy or polyester coatings) on a single component.**

ADVANTAGES OF COATING INTEGRATION ON A SINGLE COMPONENT:



Precise management of the component's electrical properties (conductivity and insulation), which is crucial in many advanced applications.



Excellent coating adhesion – crucial for component durability.



Production flexibility and cost optimization – for large series and prototypes.



Dual corrosion protection – the coating combination increases resistance to moisture, temperature, and chemicals.



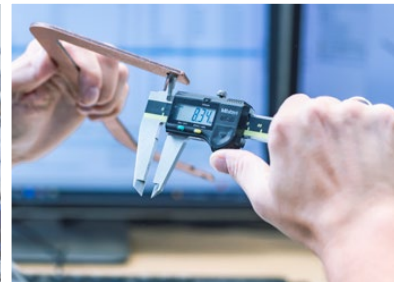
Versatility – applications in the **energy sector, e-mobility, railway, RES (Renewable Energy Sources)**, and others.

QUALITY CONTROL AND TESTING

HIGHEST PRODUCT QUALITY

The highest quality and precise execution are priorities for our company. The quality control system is fully integrated with the production process. We monitor the entire processing cycle, from raw material receipt to finished product shipment.

STAGES OF QUALITY CONTROL:



OUR CERTIFICATES AND PPAP PROCESSES

Our processes are certified and comply with international standards, providing our partners with confidence and supply stability. We operate based on the **ISO 9001:2015** certificate.



CERTIFICATE
ISO 9001:2015



REACH
COMPLIANT



ROHS
COMPLIANT



CONFLICT
MINERAL
DECLARATION



PPAP
PROCESSES

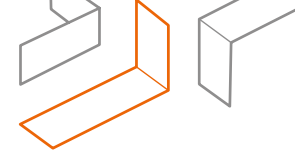
COMPREHENSIVE TESTING:

Our laboratories are equipped with modern equipment that ensures full control over quality and execution precision. We offer:

- Measurements using CMM machines (1500 x 1000 x 800 mm).
- Testing of geometry, shape, and surface roughness.
- Control of coating thickness and adhesion.
- High Voltage and Partial Discharge (PD) tests – up to 30 [kV].



Our components meet the **standards** of many demanding industries



PPAP PROCESSES AND PRE-CERTIFICATION

We know that product implementation time is crucial for our clients. Therefore, we support them in certification and documentation processes.



WE OFFER:

- **Comprehensive PPAP process and documentation** – full production part approval.
- **Components pre-certification** – accelerates the implementation process at the client's site
- **Formal and technical support** – preparation of necessary data and quality.

BENEFITS FOR OUR CLIENTS:

- Fewer formalities and a simplified certification process.
- Confidence that the product meets all regulatory requirements.

SUSTAINABLE DEVELOPMENT AND ENVIRONMENTAL PROTECTION AT ELECTRIS

Sustainable development and the highest pro-ecological standards in our plant have been the direction Electris has been pursuing since the very beginning.

Therefore, for many years, **we have been implementing various environmentally friendly solutions and actions aimed at reducing CO2 emissions and limiting our impact on the environment.**

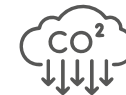


We regularly **reduce our carbon footprint by purchasing green energy and investing in renewable energy sources.** We also have our own modern treatment plant. The applied system for purification and circulation of process water, based on nanofiltration and reverse osmosis technologies, enables its reuse in the production cycle.

Every year, we undergo **EcoVadis certification, which confirms our activities in this area.**



We protect the climate through **CO₂ EMISSION REDUCTION**, thanks to the use of energy that comes from renewable sources.



We have implemented **ISO 26000** requirements and received the **ECOVDIS** certificate. We also hold **ISO 14001**.



WE PLANT TREES – together with the initiators of the posadzimy.pl project, we plant trees and thereby offset CO₂ emissions.

SUSTAINABLE PRODUCTION – all production machines are energy-efficient and low-emission.



ECOLOGICAL INVESTMENTS - All investments we carry out are conducted with consideration for ecology and environmental protection. **WE HAVE OUR OWN WASTEWATER TREATMENT PLANT.**



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quantum-bus-7765-6/core/s
XR-mode-0x8861/pulse-link.c

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