

EFFICIENCY MEETS INNOVATION

THE ADVANTAGES OF BÄCHLI AG'S COMPACT AND SMART E-POWER TRANSFORMERS FOR SUSTAINABLE TRAIN DEVELOPMENT

Bächli AG, a leading Swiss technology company, specialises in the development and production of electrotechnical components. With a wide range of highly specialised transformers, chokes and windings, the company offers solutions that meet the requirements of modern rail transport systems.

The company is headquartered in Kriens near Lucerne and can look back on over 70 years of successful co-operation with international industrial partners.

Customised Railway Power Boxes

Bächli AG supplies complete electrical railway power boxes that can be installed on the train roof, underfloor or as a switch cabinet inside the train. These boxes are individually calculated and designed according to customer specifications, system requirements of the track or the surrounding system.

Our engineers design the Electric Power Box to maximise the benefits for the customer or operator. One of Bächli's great strengths lies in designing these boxes to be very compact and energy-efficient, saving valuable space and weight while ensuring maximum performance.

The Electric Power Boxes are designed as a module. During the engineering phase, the components are defined down to the smallest detail with the customer. This allows us to take individual requirements into account when designing the product and ensure that the solution is tailored precisely to the customer's needs, guarantees a long life cycle and minimises maintenance costs.

Production in Switzerland means that the highest quality standards are maintained. This guarantees that the customer receives a high-quality product that is durable and reliable. Each product is carefully tested to ensure that it fulfils the quality requirements. Bächli also ensures that all Railway Power Boxes fulfil all railway industry standards and regulations. This ensures that the customer receives a product that is not only efficient and reliable, but also safe and standard-compliant.

Our products are designed so that they can be easily and quickly integrated into the customer's system. In addition, Bächli AG attaches great importance to punctual delivery so that you can rely on receiving your ordered products on time.

The Railway Power Boxes are tested for their functionality, and Bächli AG is also able to carry out various tests on the boxes as required by the standards. These tests are documented in test reports for the customer. The customer thus receives comprehensive, high-quality and complete documentation to accompany the product.

In the pictures you can see two roof boxes that we developed, designed and produced for the customer this year.

Compact design and weight saving

Compact transformers

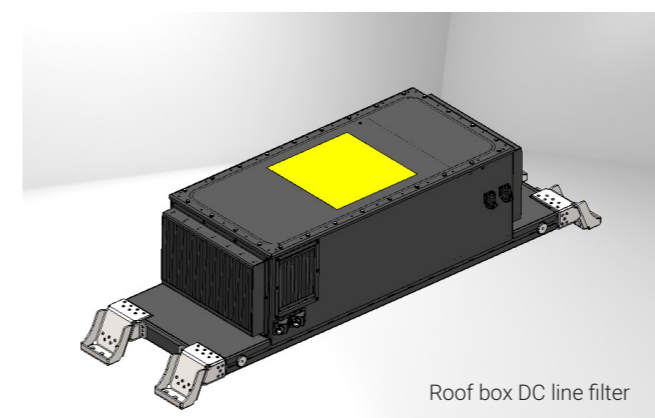
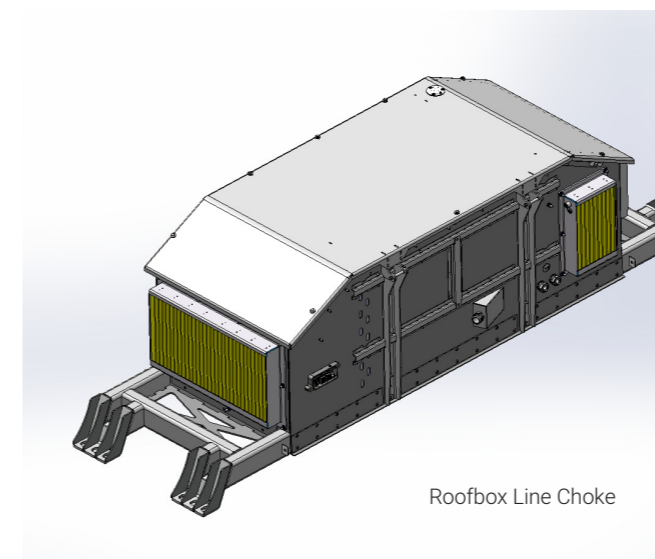
Space is often at a premium in modern trains. This is where the compact transformers and chokes from Bächli AG come into play. Bächli AG has the ability to build a compact transformer in such a way that it weighs up to 20% less and takes up to 30% less space than other solutions on the market. These products not only save valuable installation space and load, but also offer numerous other advantages.

For us, «compact» means that our transformers and chokes have a small size in relation to their power and function. This refers to physical characteristics such as size, space requirements and dimensions. This compact design means that the limited space in, on or under the trains can be optimally utilised and the efficiency of the systems is increased.

We also attach great importance to minimising weight. Our transformers are designed to maximise performance while minimising weight. This not only helps to reduce the overall weight of your trains, but can also improve energy efficiency and driving performance.

Smart-E-Power® - Energy-efficient transformers

In addition to the compact design, we also offer particularly energy-efficient transformers. Our Smart-E-Power® product line is designed to achieve maximum efficiency. These transformers minimise energy losses, which reduces operating costs and lowers CO2 emissions. High-quality materials, precise calculations and careful manufacturing help these transformers achieve efficiencies of over 99%.



WHY BUY SMART-E-POWER TRANSFORMERS FROM BÄCHLI AG?

- Cost savings in life cycle costs:** The high efficiency of our transformers leads to lower operating and life cycle costs. Companies can realise significant savings by reducing energy losses and maintenance costs.
- Reliable performance:** The longevity and reliability of Smart-E-Power® transformers means less downtime and a constant supply of high-quality energy.
- Sustainability:** With a focus on environmentally friendly technology, Bächli transformers help to achieve sustainability goals and reduce the ecological footprint.
- Technological innovation:** The advanced control and monitoring systems of the Smart-E-Power® transformers enable proactive maintenance and optimisation.
- Customised solutions:** Bächli AG offers customisation to ensure that transformers are perfectly matched to the customer's specific needs and requirements.
- Complete product documentation:** Nowadays, it is essential that products have complete accompanying documentation that complies with standards. Bächli AG offers its customers high-quality and complete documentation.

To summarise, the compact and smart e-power transformers from Bächli AG offer a combination of high efficiency, reliability, weight reduction, space saving and environmental friendliness. By integrating these transformers into a railway power box, the customer has the optimum solution. These strengths make them an excellent choice for companies looking for sustainable, cost-efficient, low-maintenance, high-performance and reliable solutions. Discover how our innovative chokes, transformers or filters can take your new train developments to the next level.

We would be happy to help you solve your individual challenges with a personal consultation. Contact us via www.baechli.com

