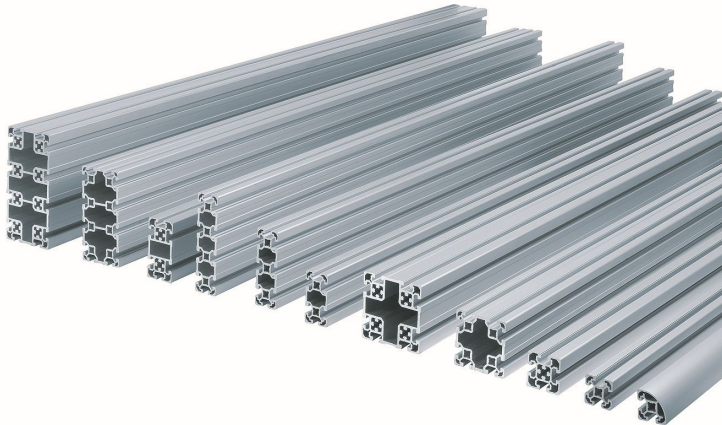


PRESS INFORMATION

Resource-efficient aluminum profile kit

Manuela Kessler | 13.01.2026 | Lohr am Main / Germany | PI 052/25

Bosch Rexroth reduces product carbon footprint of the raw material of its aluminum profiles



Since the end of 2025, Bosch Rexroth's aluminum profiles have had a reduced product carbon footprint. (Image source: Bosch Rexroth AG)

Due to rising energy prices and more stringent CO₂ pricing, companies are more than ever required to further reduce their CO₂ emissions. When manufacturing its aluminum profiles, Bosch Rexroth starts with upstream CO₂ emissions and uses raw materials with a reduced product carbon footprint (PCF) of 5 kg CO₂eq/kg aluminum. This is almost 50% less than the average value for primary aluminum used in Europe. In the long term, the company intends to reduce its CO₂ footprint by increasing the recycling rate and making efficient use of secondary aluminum. Customers can thus reduce the carbon footprint of their products and benefit from future-proof components and stable supply chains.

Bosch Rexroth offers the world's largest selection of aluminum profiles. For more than 40 years, they have been enabling custom-fit and efficient solutions for machine frames, safety fences, ergonomic workstations and lean material supply.

Since the end of 2025, the company has been using raw materials (billets) with a significantly reduced product carbon footprint (Scope 3 upstream) for profile production: The billets have a PCF of 5 kg CO₂eq/kg aluminum, which is almost 50% less than the average of 9.7 kg CO₂eq/kg aluminum for primary aluminum used in Europe (European Aluminum, Environmental Profile Report, Nov. 2024). In a typical assembly workstation with a width of 1000 mm, a depth of 600 mm and an aluminum content of 34.3 kg, 161 kg of CO₂ can be saved with the Low Carbon Aluminum Profiles. With ten workstations, this corresponds to savings of 1.6 t CO₂.

In the long term, Bosch Rexroth intends to further reduce the PCF value of the profiles by increasing the recycling rate and making efficient use of secondary aluminum.

Greater transparency in the CO₂ footprint

On request, Bosch Rexroth not only provides the cradle-to-gate PCF (from raw material extraction to the factory gate) of its aluminum profiles, but also the PCF values of over 300,000 other standard components. Customers can use this to calculate the PCF value of their own machines and plants.

Visitors to LogiMAT can obtain information about aluminium profiles at the Rexroth booth B41 in hall 8.

Basic Information Bosch Rexroth

PRESS INFORMATION

As one of the world's leading suppliers of drive and control technologies, Bosch Rexroth ensures efficient, powerful and safe movement in machines and systems of any size. The company bundles global application experience in the market segments of Mobile and Industrial Applications as well as Factory Automation. With its intelligent components, customized system solutions, engineering and services, Bosch Rexroth is creating the necessary environment for fully connected applications. Bosch Rexroth offers its customers hydraulics, electric drive and control technology, gear technology and linear motion and assembly technology, including software and interfaces to the Internet of Things. With locations in over 80 countries, around 32,600 associates generated sales revenue of 6.5 billion euros in 2024.

Basic Information Bosch

The Bosch Group is a leading global supplier of technology and services. It employs roughly 418,000 associates worldwide (as of December 31, 2024). The company generated sales of 90.3 billion euros in 2024. Its operations are divided into four business sectors: Mobility, Industrial Technology, Consumer Goods, and Energy and Building Technology. With its business activities, the company aims to use technology to help shape universal trends such as automation, electrification, digitalization, connectivity, and an orientation to sustainability. In this context, Bosch's broad diversification across regions and industries strengthens its innovativeness and robustness. Bosch uses its proven expertise in sensor technology, software, and services to offer customers cross-domain solutions from a single source. It also applies its expertise in connectivity and artificial intelligence in order to develop and manufacture user-friendly, sustainable products. With technology that is "Invented for life," Bosch wants to help improve quality of life and conserve natural resources. The Bosch Group comprises Robert Bosch GmbH and its roughly 490 subsidiary and regional companies in over 60 countries. Including sales and service partners, Bosch's global manufacturing, engineering, and sales network covers nearly every country in the world. Bosch's innovative strength is key to the company's further development. At 136 locations across the globe, Bosch employs some 87,000 associates in research and development.

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