

Innovation for the power tools sector: **Bosch ProCore18V+ featuring new cell technology** First 18V battery with tabless design for maximum efficiency

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- ▶ Runtime increased by up to 71 percent in demanding applications
- ▶ Full compatibility within the [Professional 18V System](#) and the [AmpShare battery alliance](#)
- ▶ Integration of key technologies secures technology leadership over the long term

Bosch has become the world's first manufacturer to bring the benefits of tabless technology in battery cells to 18V batteries for cordless power tools. The ProCore18V+ with 8.0 Ah increases the runtime of Bosch's high-performance ProCore18V battery series even further, giving trade and industry professionals yet another efficiency boost. The new ProCore18V+ with 8.0 Ah increases runtime for up to 71 percent compared to the previous ProCore18V battery at the same capacity. The longer runtime pays off for professional users, especially when performing demanding tasks with Biturbo tools, Bosch's most powerful cordless products. For example, when drilling large diameters with the GBH 18V-45 C Professional rotary hammer or when sawing large cutting depths with the GCM 18V-305 GDC Professional miter saw. Compared to its counterpart featuring conventional battery cells, the ProCore18V+ has the same compact form factor and weight, and, thanks to CoolPack technology, offers effective and unrivalled heat dissipation. What's more, the ProCore18V+ is compatible with all [Professional 18V System](#) tools as well as products from additional partners in the multi-brand [AmpShare battery alliance](#).

Innovative tabless technology for maximum efficiency

The enhanced efficiency of the battery is achieved thanks to the tabless design of the integrated 21700-series battery cells. In conventional lithium-ion batteries, each individual battery cell inside has a narrow connection band to the anode and cathode on both sides – the so called “tab”. These tabs create a bottleneck for the power delivered by the battery and contribute to the cell's electrical inner resistance, causing heat to be generated. To ensure that the battery doesn't overheat, particularly during high-performance applications, the tool shuts itself

off, leaving the remaining energy in the battery unused. In tabless cells, the electricity can flow through countless paths across the entire length of the anode and cathode rather than being restricted to one or a couple of tabs. This new design reduces the inner resistance of each individual cell by around 50 percent and therefore substantially for the battery pack as a whole. Significantly less heat is generated as a result, which is a limiting factor in demanding applications. All in all, this translates to up to 71 percent longer runtimes compared to conventional batteries thanks to the combination of tabless design and precision-tailored battery management.

Integration of key technologies secures technology leadership

“We firmly believe that, with this innovation, we can enjoy just as much success as we did when we first introduced lithium-ion cells into a cordless screwdriver,” says Thomas Donato, President of Bosch Power Tools. “Lithium-ion cells, which pre-2003 were only used in cell phones, are now more or less universal in hand-held cordless power tools.” With the new ProCore18V+ tabless battery, the division is continuing its more than 50-year success story in the development of cordless power tools and once again underscoring its technological leadership. “Bosch’s professional cordless power tools are synonymous with efficiency and making hard work easier,” says Donato. “By opening up our battery system and founding the AmpShare battery alliance, we offer trade and industry professionals a system that combines maximum flexibility and continuous innovation.” Besides the new tabless technology, the batteries have also offered full compatibility with Bosch Professional tools since 2008 – including the powerful Biturbo series, unique CoolPack technology for long runtimes and lifetimes, and fast charging. The new ProCore18V+ with 8.0 Ah needs just 15 minutes to achieve a 50 percent charge.

The ProCore18V+ battery with 8.0 Ah is available from spring 2024. Bosch will successively expand the system. All prices are recommended retail prices and do not include VAT.

Battery specifications	ProCore18V+ 8.0 Ah
Voltage/capacity	18 V/8.0 Ah
Energy content	144 Wh
Cell type/format	Tabless/21700
Charging time with GAL 18V-160 Professional to 50/100-percent charge	15/44 min
Weight	1.0 kg
Dimensions (length x width x height)	117 x 77 x 69 mm
Recommended retail price excluding VAT	<ul style="list-style-type: none"> Battery in cardboard box: €208 Two batteries and GAL 18V-160 Professional charger in cardboard box: €465

Subject to change.

Press photos: #cfafde2a, #d84c73dd, #8cd07856, #32bf69a3, #08a8756a

Do you have questions or comments about this press release?

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The Robert Bosch Power Tools GmbH, a division of the Bosch Group, is one of the world's leading providers for power tools, garden tools, power tool accessories and measuring tools. In 2022, its roughly 20,000 associates generated sales of 5.9 billion euros, about 90 percent of which outside of Germany. With brands such as Bosch and Dremel, the division stands for customer focus and great engineering progress. The core success factors are innovative strength and pace of innovation. In 2023, Bosch Power Tools will again launch more than 100 new products onto the market in its four business segments power tools, garden tools, accessories and measuring tools.

The Bosch Group is a leading global supplier of technology and services. It employs roughly 421,000 associates worldwide (as of December 31, 2022). The company generated sales of 88.2 billion euros in 2022. Its operations are divided into four business sectors: Mobility, Industrial Technology, Consumer Goods, and Energy and Building Technology. As a leading IoT provider, Bosch offers innovative solutions for smart homes, Industry 4.0, and connected mobility. Bosch is pursuing a vision of mobility that is sustainable, safe, and exciting. It uses its expertise in sensor technology, software, and services, as well as its own IoT cloud, to offer its customers connected, cross-domain solutions from a single source. The Bosch Group's strategic objective is to facilitate connected living with products and solutions that either contain artificial intelligence (AI) or have been developed or manufactured with its help. Bosch improves quality of life worldwide with products and services that are innovative and spark enthusiasm. In short, Bosch creates technology that is "Invented for life." The Bosch Group comprises Robert Bosch GmbH and its roughly 470 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. With its more than 400 locations worldwide, the Bosch Group has been carbon neutral since the first quarter of 2020. The basis for the company's future growth is its innovative strength. At 136 locations across the globe, Bosch employs some 85,500 associates in research and development, of which nearly 44,000 are software engineers.

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