

Automotive Insiders: Bosch batteries – backup you can rely on



In a world of ‘influencers’ – people who use social media to appear as if they’re knowledgeable on a certain subject – Bosch are the real deal. We’re genuine automotive influencers because our in-depth automotive knowledge has been built over 100 years, our innovations have shaped the automotive landscape, and our products and services are trusted by millions of customers around the world today.

In our Automotive Insider series, we find out more about Bosch’s best-known products and services, by talking to the people behind them. From chassis and spark plugs to training solutions and ESI[tronic], our experts lift the bonnet to share how these parts and solutions work – their history, how they’ve developed over the years, and how they’re equipping vehicle mechanics and owners to face the future with confidence.

Today we’re talking to Michael Kehr – the expert behind Bosch’s top-quality 12-volt auxiliary batteries.

Tell us about the history behind Bosch’s batteries

We’ve been an expert in this field since 1922, when we started producing motorcycle batteries. Since then, we’ve established ourselves as one of the leading battery developers in the automotive sector – producing our first car batteries in 1927, maintenance-free batteries during the 1980s, and a battery grid with silver alloy for longer life and high starting power in the 1990s.

Our innovative mindset has been an integral part of these developments and we regularly register new patents for our products and component parts. This drive for high quality is recognised within the industry, with an Automechanika Innovation Award to our name. Our depth of battery knowledge, alongside our innovative mindset, means we’re trusted by drivers for a reliable driving experience.

12-volt AGM batteries are a key part of your product portfolio, can you tell us more about them?

These batteries really are the vehicle support you can rely on! We have a long history with them, having introduced the first AGM batteries for stop/start systems in the 2000s. The AGM technology used in these batteries allows for a higher energy capacity and high starting power, making them an excellent choice as a trusted auxiliary battery. While driving, they are charged by the high-voltage battery via a DC/DC converter.

Even if electric vehicles are fitted with a high-voltage battery, they also need a 12-volt one to support electrical components and important safety systems. At peak loading, the 12-volt battery works as a buffer, by powering features such as the windscreen or the automatic braking system. Should the high-voltage system fail, this battery acts as vital backup, taking over the supply

“Influencers depend on a reliable connection. Our 12V auxiliary battery provides essential backup power for EVs, keeping the drive stable and smooth.”

Invented for life



of safety-critical systems such as power steering and brakes.

The power in this battery doesn't stop when parked either. It supplies essential systems such as central locking, keyless access, and interior and exterior lighting.

What is it about Bosch batteries that makes them so good?

Our broad range of 12-volt batteries covers most electric and hybrid vehicles in the European market. They are designed to maintain a continuous high-quality output, and don't need to be refitted or maintained, thanks to the labyrinth design that condenses evaporated liquid and keeps it inside the battery.

Charge acceptance is an important feature, particularly when you're

considering city driving and the fact many drivers need to be able to recharge quickly. Thanks to the optimised grid design which gives better current flow, our batteries have particularly good charge acceptance. On the other hand, these auxiliary batteries are also deep discharge resistant, and can handle long periods without charging. Our auxiliary batteries have a longer service life and up to four times higher deep-cycle resistance than standard SLI batteries, with micro-fibreglass mats to absorb the acid and keep self-discharge rates low.

Talk us through the test process

Our automotive heritage means we have a deep and comprehensive knowledge of vehicle batteries, and the measures they need to pass to make sure they're of very high quality, for a very long time. Testing is stringent and takes place in certified external laboratories, as well as in our own. Bosch's battery quality requirements go beyond the European norms, so customers know they have a product they can feel confident in.

Our testing procedures cover many bases – from performance testing to battery safety, and we test for an

array of eventualities. Thanks to our global presence, we're able to gather knowledge from markets all over the world and use that knowledge to improve the testing and design.

Finally, our tests don't just cover the components of the battery, they test to see how the battery responds after use – essential for the maintained quality and longevity of the product.

Any developments we should know about?

We're now seeing a tendency towards smaller auxiliary batteries. While initially the trend was for batteries to get bigger and bigger, now it is going the other way! This can pose a problem, as there's a correlation between the physical size of the battery and its capacity – due to bigger batteries holding more plates.

However, our technological advances have meant we've recently introduced two smaller batteries in AGM technology especially for auxiliary use – the S5A00 and the S5A01.



Product Spotlight: the S5A battery

"The powerful S5A battery with AGM technology is high-performance and has a long service life, making it a particularly reliable solution for modern vehicles."

- **Michael Kehr**,
Product Manager for
batteries at Bosch

About our expert: Michael Kehr

Michael Kehr has been a Battery Product Manager for over six years. Until recently his role focused on the European market, and now he has taken on a more global responsibility.

What does an AV auxiliary battery power?

- Operation of power steering
- Emergency power supply of the brake system
- Supply of the driver assistance functions
- Airbags supply
- Lighting and signalling
- Engine and interior ventilation
- Seat heating
- Radio and sound system
- Navigation system
- Central locking
- Power steering actuators
- Multimedia

Choose products with influence.

For more information on Bosch's quality battery technology, please visit us at: [\[Bosch Aftermarket URL\]](#)