

PRODUCT R&D

CTEK: 20 YEARS OF R&D INNOVATION TO MAXIMISE BATTERY PERFORMANCE

CTEK is a leading global brand in the care and maintenance of vehicle batteries, renowned for quality, innovation and excellence

Established in 1997, today CTEK offers world-class battery charging solutions and sells over one million battery chargers every year, in 70 countries around the world.

The business has an enviable global presence and a reputation built on partnership, teamwork, trust and technical excellence. An on-going commitment to innovation means it is perpetually pushing the boundaries of research and development to bring new battery charging technologies to the market.

Every product is the result of co-operation between the CTEK team and workshops, researchers and industry bodies, to understand and anticipate customer needs, how they will use the product, and how those needs are likely to evolve.

"CTEK is synonymous with innovation, and the company invests heavily in research and development," CTEK Australian Sales Manager, Robert Briggs, said.

"With a track record of providing cutting-edge technology, CTEK develops and tests all new products using a structured innovation process, supported by a dedicated innovation team, based at CTEK headquarters in Sweden.

"CTEK is also the trusted supplier of own-brand products to over 40 of the biggest and most prestigious vehicle manufacturers in the world. Every own-brand charger has been developed in partnership with the vehicle manufacturer, to meet their specific requirements, in turn, helping their customers to maximise battery and vehicle performance."

CTEK: History and Heritage

The CTEK story starts in the tiny village of Vikmanshyttan in Sweden, home to inventor and CTEK founder Bengt Wahlqvist.

Thanks to his technical expertise and perseverance Wahlqvist developed the first ever battery charger to use electronic pulse technology.

This early innovation gave birth to the first 'smart' battery charger and laid the groundwork for a commitment to research and development that is at the heart of every CTEK product.

"Today CTEK is committed to maximising battery performance; that's more than just a slogan it's

the philosophy that drives everything they do," Robert said.

"CTEK's unique approach combines a commitment to customer service, and an entrepreneurial approach to the creation of new products."

This approach is underpinned by heavy investment in research and development, including the CTEK PoWeR Centre, a state of the art testing and development facility at its Swedish headquarters.

CTEK investment also extends to building global partnerships and it is firmly committed to training both distribution partners and professional users, so they get the very best from CTEK products.

CTEK: Practical Innovators

CTEK says that for two decades it has led the way in battery performance management. Innovating with lithium charging technology and patented functions such as its approach to battery desulphation. Today CTEK is at the forefront of adaptive charging technology, the latest innovation designed to support the performance demands of modern batteries.



"We are always looking to develop products that can offer better efficiency, ease of use and meet the continuously changing needs of the modern workshop", Robert said.

Modern vehicles are some of the most expensive computers we own. The power needed to support their technology, even when the vehicle is stationary or switched off, mean the demands on battery performance and the risk of battery failure are greater than ever.

Vehicle servicing also places a heavy demand on the battery. Repairs, testing electrical circuits, carrying out diagnostic procedures, flash programming electronic control units (ECUs), or programming vehicle keys, all draw huge power from the vehicle.



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technology delivers high levels of current with total efficiency and stability, even at high ambient temperatures.

Variable power supply selection offers total flexibility

Many vehicles depend on a precise voltage for



"And don't forget that ECU reprogramming and fault code diagnostics need to be carried out with the engine switched off, and the ignition switch on," Robert explained.

"This means the vehicle's systems are operating solely from the power of the battery, which makes those systems vulnerable.

"Maintaining a clean, constant voltage is critical to avoiding battery failure, unnecessary downtime, lost vehicle data and potential damage to sensitive electronics - battery support is therefore vital."

Battery support also guards against battery failure after work has been completed, protecting against vehicle breakdown after the vehicle has been

returned to the customer, protecting workshop reputation.

"Using equipment dedicated to battery support is now a necessity in the modern workshop," Robert said.

"Slave batteries and boost packs are unreliable because they depend on a battery themselves and can become discharged, or struggle to cope with sudden increases in current demand.

"It's a challenge that we have tackled with our latest innovation."

The CTEK PRO60: A case study in innovation

The PRO60 from CTEK is an innovative, versatile and highly efficient 60A battery charger and power supply tool for modern 12V workshops that redefines battery management.

It's a fast, efficient and safe battery charging and support system for all battery sizes and chemistries seen in modern workshops.

If you ask CTEK, this is the only battery management tool a workshop will need.

The CTEK PRO60 restores charges and reconditions a battery using a patented multi-step charging process.

It is compatible with all types of 12V batteries, including AGM and EFB batteries for stop-start vehicles and Lithium LiFePO4.

It works with all battery sizes, and its unique 'Adaptive Charging' mode automatically adjusts the charge for the size of the battery.

Innovative design, innovative technology

The PRO60 convection cooling system eliminates the need for cooling fans and improves operating efficiency and reliability.

Its unique 'Resonant Converter' transformer

many repairs depend on a precise voltage for diagnostic fault-finding, ECU flashing or reprogramming. The PRO60 has a variable power supply spanning 12.6v to 14.8v in 0.1v increments, and two Power Supply modes depending on whether or not the battery is present in the vehicle.

A 'Memory Saver' Power Supply mode preserves vehicle settings if the battery is removed.

Quick, easy to use, portable and durable

The PRO60 features a simple user interface with just four buttons and a clear LCD. The Adaptive Charging mode automatically recognises the size of the battery and selects the optimum settings for the fastest charge.

It automatically compensates for parallel loads and constantly adjusts for ambient temperature changes. Its rugged impact-resistant polycarbonate casing incorporates a folding carrying handle, making it highly portable.

Like all CTEK innovations the PRO60 is the result of close collaboration with CTEK customers and industry partners.

"Every product that we produce is the result of looking at what our customers need, and how they're going to use it. We are in constant dialogue with researchers, workshops and leading industry bodies to understand the changing needs of the Australian market," Robert said.

For more information, visit www.ctek.com



Australian Automotive Aftermarket Magazine Publisher, Cameron McLachlan, takes a look at the products driving the automotive aftermarket, and the research and development being done to make sure that these products remain at the leading edge of technology.

cameron@aaaa.com.au

