Light Vehicle Battery Solutions

Powering the road ahead!

Latest Start-Stop Technology
Senator 3 with Carbon Boost
Auxiliary Accessories & Support

Made in Europe by Exide Technologies Original Equipment Manufacturer
Innovative battery solutions for the independent aftermarket

Deta is introducing the next generation of light vehicle batteries to the aftermarket. Many ideas found in the new range were first developed in our original equipment business, where we design batteries for leading carmakers. The pioneering new range was designed to support the latest technologies, including Start-Stop and energy recuperation. This means powerful performance today and readiness for the future of the car parc.

Getting ready for the future

The European car parc is changing at unprecedented speed. Legislators passed strict targets requiring carmakers to reduce CO2 emissions to 130g/km by 2015 and 95g/km by 2021, representing a 40% reduction from the 2007 fleet average. These ambitious targets forced manufacturers to design much more fuel-efficient cars with modern engines and advanced powertrain features such as Start-Stop, battery management systems and intelligent generators, which no longer recharge batteries in continuous mode. These new technologies rely on advanced OE-compliant AGM and EFB batteries. Micro-hybrid vehicle production levels are already soaring in Europe. While cars with conventional powertrains still account for a majority of the car parc, the percentage of Start-Stop vehicles is accelerating rapidly every year.

The evolution of the European car parc

- 70% of cars produced today are equipped with Start-Stop systems and other advanced features that reduce fuel consumption and CO2 emissions by 5% to 12%
- Start-Stop vehicles make up 15% of the car parc today, and this is set to increase to 50% within the next five years
- Start-Stop vehicles need AGM and EFB batteries that meet strict OE specifications
- Both high quality conventional and Start-Stop batteries will be needed as the market evolves

Trusted by leading carmakers

We have been supplying lead-acid batteries to carmakers for over 100 years. We design the most technically advanced products in the industry, and were the first to introduce Start-Stop technology to the European market in 2004. Carmakers trust the quality of our products and our commitment to excellence in manufacturing.

Our company works with leading car manufacturers, including:

Alfa Romeo, BMW, Citroën, Dacia, Fiat, Jaguar Land Rover, Lancia, Mini, Nissan, Peugeot, Renault, Saab, Suzuki, Toyota, Volkswagen Group, Volvo
NEW!
Light Vehicle Battery Solutions

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**Start-Stop AGM**

**Choose the original**

Our company invented the first Start-Stop AGM battery back in 2004. Our technology has evolved rapidly ever since, with each new generation making large gains in efficiency and performance. We have invested millions into advanced manufacturing facilities and are one of the world’s top suppliers of AGM batteries. We are able to meet the stringent requirements of carmakers, giving the aftermarket confidence in the quality of our products.

**AGM technology**

**Benefits**
- Top charge acceptance
- Now 4 times higher cycle life
- Optimised for partial state of charge operations
- Ideal for large cars, SUVs, vans and vehicles with Start-Stop and power-hungry electrical equipment
- Top-level safety features and absolutely no free acid
- Recombinant VRLA (valve regulated)
- Latest generation approved by car manufacturers
- Great car parc coverage from a limited number of SKUs
- Long shelf life

Deta’s Start-Stop AGM battery uses high-performance components and materials, including high-surface glass mat separators, advanced lead-tin alloys and unique carbon additives in the active mass. It is ideally suited to cars with Start-Stop and/or regenerative braking systems. This new-generation AGM battery also supports sailing as well as other intelligent fuel-saving features.
Start-Stop EFB

A step ahead
We invented the first EFB* battery in 2008, helping European car manufacturers to reduce fuel consumption and emissions for small to mid-sized cars. Our technology is now considered the most advanced in the industry, driven by our investment in R&D and the experience we have gained from working with leading carmakers.

The latest-generation EFB battery offers significantly improved charge acceptance and cycle life, a result of key breakthroughs in lead alloys and unique carbon additives that came from our R&D efforts. Deta’s Start-Stop EFB batteries enable Start-Stop, regenerative braking and other powerful fuel-saving features.

EFB technology

Benefits
› High charge acceptance over life of battery
› Now 3 times higher cycle life
› Optimised for partial-state-of-charge operations
› Ideal for small to mid-sized cars with Start-Stop and other fuel-saving features
› High-level safety features
› Optimal operation in engine compartment
› Latest generation approved by car manufacturers
› Great car parc coverage from a limited number of SKUs
› Long shelf life

Key Performances

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<th>Power</th>
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* EFB is the technology name defined by CENELEC in 2012
Deta Senator 3

The new Senator 3 Carbon Boost battery recharges up to 1.5 times faster due to our proprietary application of carbon additives on the negative plates. This technique was discovered during the development of our AGM and EFB ranges, leading to improved charge acceptance and a significant reduction in charging times.

The Senator 3 Carbon Boost battery is designed to withstand extreme temperature, power-hungry electrical equipment and intensive urban driving.

Deta Carbon Boost Technology

Benefits
- 30% extra starting power
- Recharges up to 1.5 times faster
- Ideal for highly equipped cars with powerful engines and demanding electrical needs
- Ideal for extreme weather and urban driving conditions
- Original equipment experience inside
- Meets OE requirements
- Comprehensive range covering around 90% of car parc

The Carbon Boost Effect

During discharge, non-conductive sulphate particles progressively cover the negative plates, isolating them from the electrolyte. This means a lot of the energy intended to recharge the battery is needed to dissolve the sulphate, which makes charging less efficient. The high-surfaced carbon additives in Deta’s Senator 3 Carbon Boost battery provide superior conductivity, dissolving the sulphate particles much faster.

Senator 3 Carbon Boost has improved charge acceptance and recharges up to 1.5 times faster than standard batteries. While battery failure remains the number one cause of car breakdowns*, fast recharging considerably reduces the risk of breakdowns by helping the battery retain a healthy state of charge for longer.

* ADAC (Allgemeiner Deutscher Automobil-Club) Breakdown Statistics 2013
**Benefits**

- Superior active mass adhesion for longer service life
- Improved electrical conductivity for higher power delivery
- Special pure quality alloys for maximum lifespan and performance
- High resistance to vibration and corrosion
- Eco-friendly production
- Consistent high quality due to fully automated manufacturing process

**Deta Power**

- 15% extra starting power
- All-round battery for standard use
- Complete range covering almost 100% of car parc
- Original equipment experience inside

**Deta Standard**

- Economy solution
- Ideal for cars with basic power needs

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**3DX Grid – the secret in every Deta battery**

**Benefits**

- Superior active mass adhesion for longer service life
- Improved electrical conductivity for higher power delivery
- Special pure quality alloys for maximum lifespan and performance
- High resistance to vibration and corrosion
- Eco-friendly production
- Consistent high quality due to fully automated manufacturing process

The reinforced 3D diamond mesh ensures that the active mass stays fixed on the mesh, resulting in better electrical performance and longer lifespan.

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**Did you know? - Things that drain your battery**

**Cold weather** significantly impairs battery performance. But it is during the cold season that more energy is needed for light and heating.

**Hot weather** accelerates self-discharge, grid corrosion and active material shedding. It could lead to shorter service life if batteries are not reinforced for extreme climates.

In urban environments the engine is often turned off or idle, and the electrical system may consume more power than the alternator can supply. This puts extra pressure on the battery.

Power-hungry electrical equipment, such as media players or navigation equipment, put extra pressure on the battery.
Battery Selector

Conventional

- Power required by Engine
  - Basic
  - Medium
  - High
- Climate
  - Moderate
  - Extreme
- Equipment
  - Basic
  - Standard
  - Superior
- Driving condition
  - Everyday Driving
  - Intensive Use

Start-Stop

Always replace your battery with a new battery that uses the same technology.

- AGM
- EFB

Never use conventional batteries on a Start-Stop car. Start-Stop powertrains work very differently from those on standard cars. Only AGM and EFB batteries can withstand the frequent cycling that Start-Stop powertrains perform.

Did you know!

You can use Start-Stop batteries on cars with Conventional powertrains. Special vehicles like taxis, ambulances and police cars require batteries with high cycling endurance, making Start-Stop batteries an ideal choice. The same applies to cars with power-hungry electrical equipment and cars used primarily in urban environments.

Avoid early battery failure and save money in the long run by choosing AGM or EFB batteries. They come with 3–4 times higher cycle life than standard batteries.
More than batteries

We have a comprehensive range of accessories and support. We help you test, charge, select, replace and recycle batteries – everything workshops need to keep work in house, provide quality service and grow profitability.

Testing

Battery Tester
Deta offers a range of easy-to-use testers that work with all types of batteries.

Charging

Battery Charger
Exide chargers can be used on cars, boats and motorcycles, and are ideal for both consumers and professionals alike. Workshops use the device to ensure customers leave with a fully charged battery every time.

Selecting

Battery Finder App
Search by car model, VIN or registration number to quickly find the right battery on the go.

QR Code
Want to find out more? Scan the QR code on the label and get more information right away. No more waiting until you get home.

Web Catalogue
Find the right battery from your computer, using our web catalogue powered by TecDoc on www.exide.com.

Replacing

Battery Replacement Tool
Our award-winning* Battery Replacement Tool comes pre-loaded with battery codes, and makes it easy to replace batteries and clear faults from the dashboard.

Deta recycles!
What to do with old batteries? Subscribe to our recycling programme. We pick them up and reward you for your environmental consciousness.

* Professional Motor Mechanic magazine Top Product Award 2013.
Type List

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NEW!

Start-Stop Auxiliary

Deta is launching its Auxiliary range on the aftermarket, building on experience gained through our original equipment business. Auxiliary batteries power the electrical equipment in certain cars, as a complement to the main starter battery.

The reliable secondary battery

Benefits
› 3 times higher cycle life
› Long shelf life
› VRLA (valve regulated) for leak-proof security
› Original equipment experience inside

Did you know?
We also produce batteries for commercial vehicles, motorcycles, boats and caravans. Contact your local sales representative or visit www.exide.com to find out more.
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Exide Technologies, with operations in more than 80 countries and more than 120 years of experience, is one of the world's largest producers and recyclers of lead-acid batteries. The company develops state-of-the-art energy storage solutions for the automotive and industrial market. Leading car, truck and lift truck manufacturers trust in Exide Technologies as an original equipment supplier. Exide also serves the aftermarket through a portfolio of successful and well-known brands.

Exide Transportation manufactures batteries for light and commercial vehicles, as well as agricultural and marine leisure applications. Industrial markets – under the division GNB Industrial Power – include efficient energy storage solutions for motive power applications such as lift trucks, cleaning machines and other commercial electrical vehicles, and network power applications such as telecommunications systems, renewables, and uninterruptible power supply (UPS).

Exide's engineers have always been at the forefront of bringing important innovations to the industry. Exide's ISO/TS-certified manufacturing facilities ensure that customers receive products that are produced with maximum efficiency and fulfil the highest quality standards, while minimising impact on the environment.

Exide's extensive sales and distribution network provides quality service and delivers on time to its customers. Its world-class recycling facilities ensure that batteries will be reused, helping to make a positive contribution to the environment. Exide also provides services, accessories and energy consulting to its clients.