

LEOCH AUTOMOTIVE BATTERIES

MAINTENANCE-FREE SERIES



*THE POWER BEHIND
EVERY JOURNEY*

Built For Modern Vehicles

LEOCH provides high-quality, standardised energy-efficient solutions for start-stop systems, delivering dependable ignition power for passenger vehicles and commercial vehicles, as well as other transportation applications. Designed to support fuel efficiency and reduced emissions, LEOCH automotive batteries help modern vehicles operate more efficiently in everyday driving conditions.

Trusted by leading OEMs and widely available in the international aftermarket, LEOCH batteries are engineered to deliver consistent performance and reliable starting power across diverse mobility applications.

Supported by advanced grid casting and continuous casting and rolling , technologies together with ongoing technical innovation, LEOCH is an active contributor to international battery standards and a recognised pioneer in AGM and EFB start-stop battery technologies.



FULL-RANGE PERFORMANCE, TOTAL SOLUTION.



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 **Auto Aux Batteries**



Feature

AGM

EFB

MF

Start-stop support

Advanced

Basic

Not applicable

Cycle life

4x

3x

Standard

Electrical demand

High

Moderate

Standard

Best for

Premium & large vehicles

Mid-range vehicles

Conventional vehicles

AGM vs EFB vs MF

Choose The Right LEOCH Battery

From conventional vehicles to advanced start-stop systems, there is one designed for every application.

LEOCH AGM Series

Unmatched Performance for Advanced Start-Stop Vehicles

Designed for vehicles equipped with advanced start-stop systems and higher electrical demands, the LEOCH AGM battery delivers exceptional performance and durability. It is ideal for large sedans, SUVs, vans and vehicles with high energy requirements. The battery performs reliably even in cold weather and offers up to four times the cycle life of conventional batteries.



Start-stop
passenger vehicles



Commercial vehicles with
parking air-conditioning systems



Marine
dual-purpose applications



RV dual-purpose
applications

LEOCH EFB Series

Reliable Choice for Entry-Level Start-Stop Systems

The LEOCH EFB battery is designed for vehicles equipped with basic start-stop systems. It is suitable for small to mid-sized fuel vehicles and certain electric vehicles requiring enhanced battery performance. Compared with conventional batteries, it offers up to three times longer cycle life.



Start-stop
passenger vehicles



Commercial vehicles with
parking air-conditioning systems



LEOCH MF Series

The Reliable Choice for Conventional Vehicles

The LEOCH MF battery is a conventional maintenance-free lead-acid battery designed for reliable engine starting in fuel vehicles. It complies with DIN, JIS and BCI standards and is also available in a dedicated high-temperature version for hot climate regions.



Passenger vehicle
starting



Passenger vehicles in high-
temperature regions



Commercial
vehicle starting

LEOCH Automotive Auxiliary Batteries

Stable Power Support for Modern Vehicle Electronics

The auxiliary battery works alongside the main battery to provide stable power supply for electronic systems, ensuring reliable performance of vehicle comfort, safety and control functions.



Start-stop
passenger vehicles

4X LONGER
cycle life



Scan for more
information

AGM

LEOCH AGM Series

Advanced Power for Modern Start-Stop Vehicles



Zero Maintenance & Enhanced Safety:

Fully maintenance-free with a spill-proof design, the AGM battery features a sealed VRLA structure that prevents leakage and ensures safe operation.



4x Longer Cycle Life:

Innovative AGM technology delivers up to four times longer cycle life compared with conventional batteries.



Save Fuel & Eco-friendly Operation:

Compatible with start-stop technology, enabling fuel savings of 5-10% and reducing vehicle running costs.



50% Higher Charge Acceptance:

With up to 50% improved charge acceptance compared to conventional batteries, the AGM battery recharges quickly during short trips and efficiently supports regenerative braking systems.

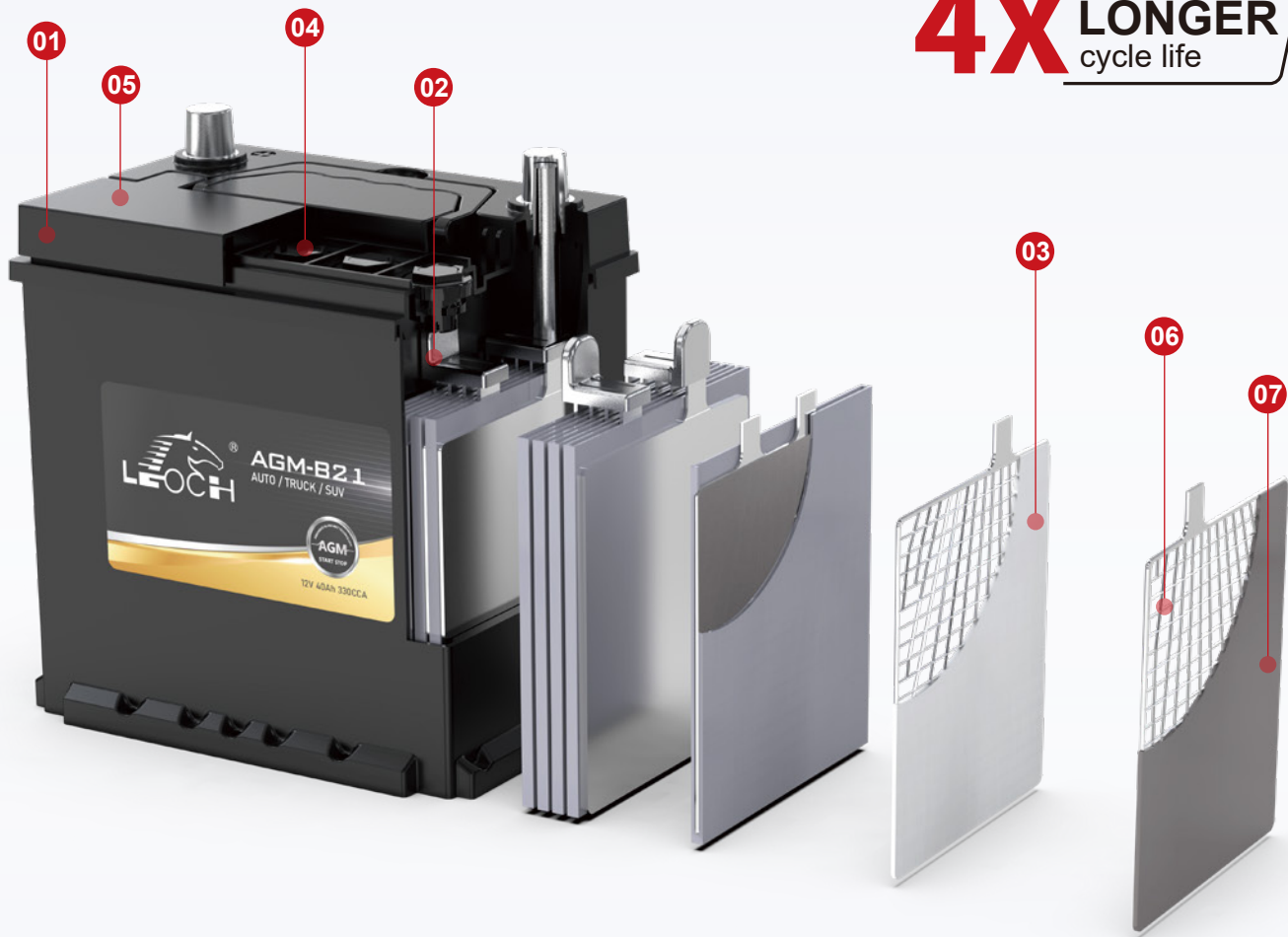


Enhanced Structural Durability:

A reinforced casing combined with valve-regulated lead-acid (VRLA) construction improves vibration resistance and overall structural strength, ensuring stable performance under demanding driving conditions.

LEOCH AUTOMOTIVE AGM START-STOP BATTERY DESIGN FEATURES

4X LONGER
cycle life



01 High-Strength Case and Cover

Heat-resistant, anti-deformation construction for improved structural stability.

02 Strap Connector Alloy

Solid, corrosion-resistant alloy ensuring reliable internal connections.

03 Composite AGM Separator

Provides excellent acid absorption and mechanical elasticity

04 Safety Valve System

Controls the internal oxygen complex reaction.

05 Central Venting System

Easy to collect and discharge gas

06 Grid

High dense and high corrosion resistant

07 Negative Plate Carbon Additives

Reduces water loss and improves charge acceptance.

3X LONGER
cycle life



Scan for more
information

EFB

LEOCH EFB Series

Enhanced Performance for Everyday Start-Stop Vehicles



3X

3× Longer Cycle Life:

Optimised active material design delivers up to three times the cycle life of conventional batteries, improving durability under frequent start-stop operation and partial state of charge (PSoC) conditions.



Strong and Stable Starting Power:

Provides reliable engine starts even in low-temperature environments or under increased electrical demand.



Extreme Charge and Discharge Performance:

Designed to withstand frequent start-stop cycles while supporting higher electrical system requirements.



Excellent High-Temperature Performance:

High-strength grid structure and patented alloy improve durability in elevated temperature environments.



Extended Maintenance Interval:

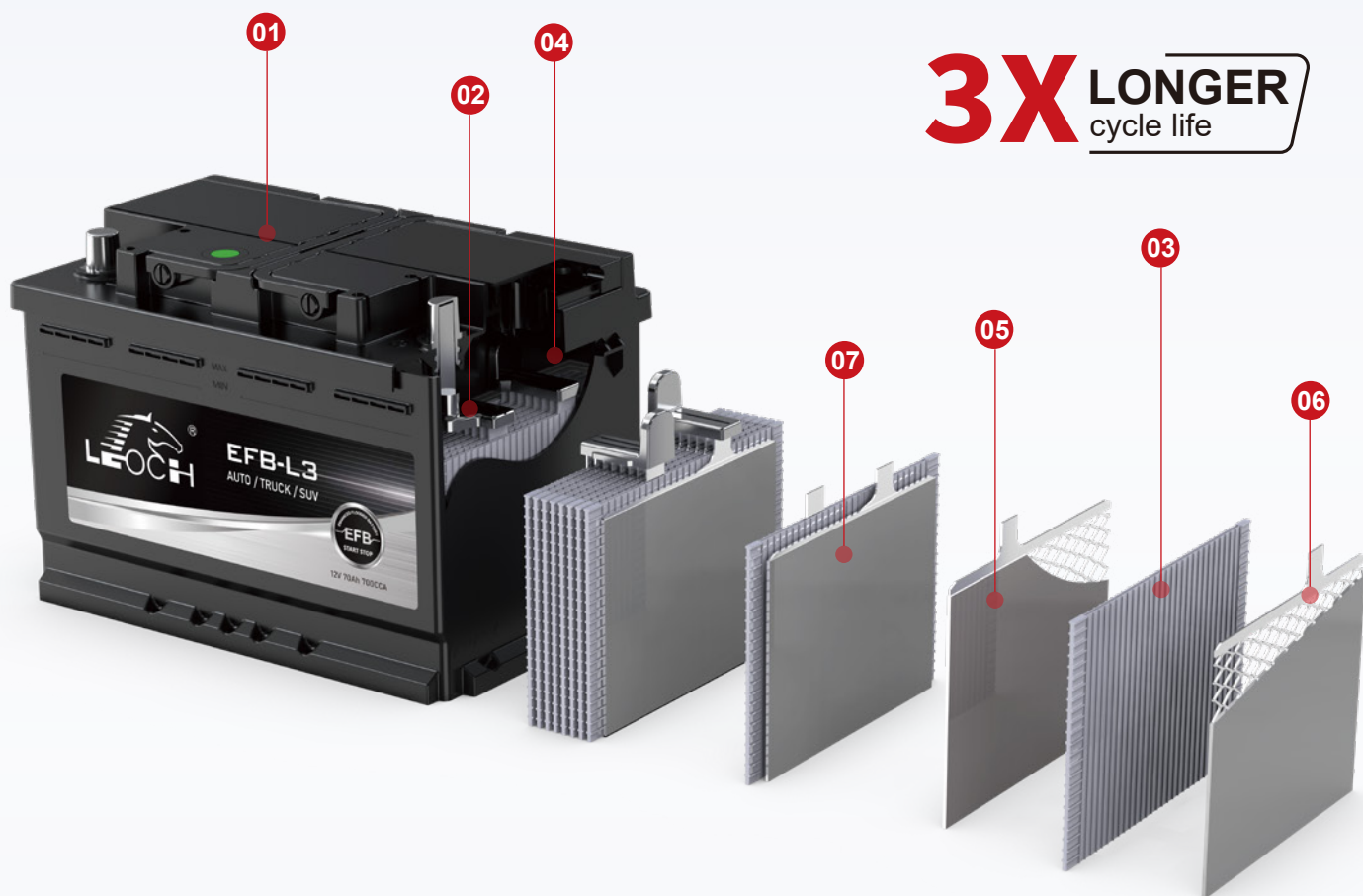
Optimised labyrinth cover design enhances water retention and reduces maintenance frequency.



Low Self-Discharge:

Provides a long shelf life and maintains charge during extended vehicle storage, ensuring dependable starting after long idle periods.

LEOCH AUTOMOTIVE EFB START-STOP BATTERY DESIGN FEATURES



3X LONGER
cycle life

01 Patented Labyrinth Cover Structure

The unique double-layer labyrinth design effectively prevent water loss.

02 Strap Connector Special Alloy

Solid, corrosion-resistant alloy ensuring reliable internal connections.

03 Low-Resistance Separator Panels

Reduces internal resistance and enhances high-current discharge capability.

04 High Purity Electrolyte

Special additives help inhibit dendrite formation after deep discharge, reducing the risk of internal short circuits.

05 Negative Plate

Special carbon additives enhance charge acceptance.

06 Grid

Strengthened grid ribs improve current conductivity and durability.

07 Positive Plate Design

High-density lead paste with high-temperature curing improves cycle life and durability.

PROVEN CHOICE
Economy with Reliability

MF



Scan for more
information

LEOCH MF Series

Reliable Performance for Conventional Vehicles



Strong & Durable:

High-strength expanded grid structure provides enhanced durability and long-term stability.



Powerful Starting Performance:

Delivers strong and reliable engine starting across a wide range of operating conditions.



Efficient Charge Acceptance:

Optimised design supports effective and stable charging performance.



Maintenance-Free Operation:

Fully maintenance-free design for convenient and worry-free use.



Enhanced Safety Design:

Patented labyrinth structure between the cover and container reduces water loss and enhances operational safety.



Extended Service Life:

Low water-loss design helps prolong battery life and maintain consistent performance.

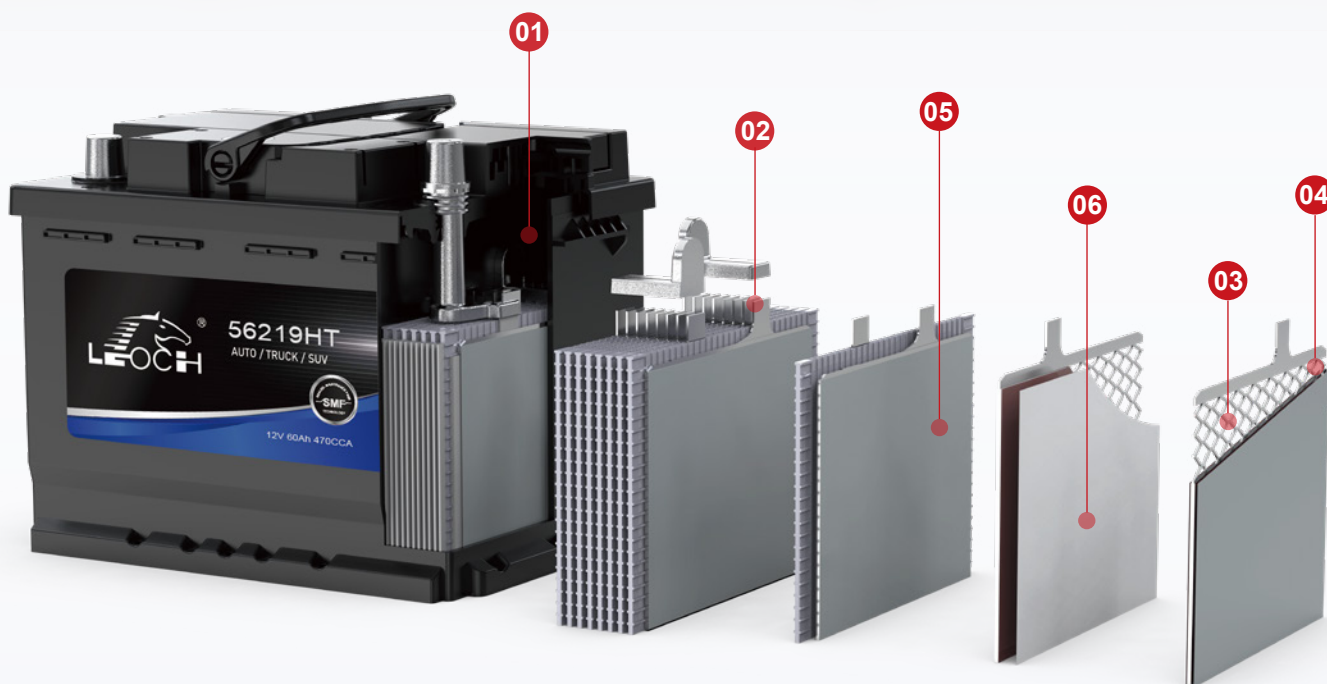
Dedicated High-Temperature Version (HT Series)
Based on the standard MF platform, LEOCH has developed a dedicated high-temperature version for hot climate regions.

 Designed for High-Temperature Regions
Extended service life in high-temperature environments



Standard MF vs High-Temperature MF (HT)

 6 Key Enhancements in the HT Battery Design



01 Reduced Electrolyte Density

Lowers grid corrosion rate and improves overall cycle life.

02 Hot-Melt Reinforcement on Plate Group

Helps inhibit positive plate growth and extends battery service life.

03 Increased Positive Grid Thickness

Improves corrosion resistance and delays high-temperature grid growth related failure.

04 Optimised Alloy Composition

Uses high tin alloy in the positive grid to enhance corrosion resistance under high-temperature conditions.

05 Optimised Plate Dimensions

Adjusts plate height to maintain sufficient electrolyte and reduce water loss related failure.

06 High-Temperature Paste Formulation

Utilises high-temperature resistant negative paste to improve cycle life in elevated temperature environments.



Scan for more information

12V Dual Power System

LEOCH Auto Aux Batteries

Reliable Support for Modern Vehicle Electronics



Modern Vehicles Need More Than One Power Source

Today's vehicles are equipped with increasing electronic systems. The auxiliary battery works alongside the main battery to:

- ★ Maintain stable power supply for vehicle electronics
- ★ Act as a backup when the main battery is unable to operate normally
- ★ Power low-consumption devices such as wipers, power windows and control systems



Hassle-Free:

100% maintenance-free with VRLA design.



Enhanced Circuit Protection:

Absorbs transient overvoltage to protect sensitive vehicle electronics.



Ultra-Long Lifespan:

Reduces replacement frequency and lowers overall ownership costs.



Easy Installation:

Embedded terminal design allows quick and secure installation.

LEOCH Low-Voltage Power Supply For New Energy Vehicles



The low-voltage power supply for new energy vehicles not only performs some functions of traditional fuel vehicle starting batteries, but also supports additional intelligent and safety-related functions. These include activation of high-voltage and low-voltage electrical systems, over-the-air (OTA) updates, sentry mode, gateway control, dynamic voltage regulation and assisted driving systems.

New energy vehicles include Battery Electric Vehicles (BEV), Hybrid Electric Vehicles (HEV) and Plug-in Hybrid Electric Vehicles (PHEV).



High-Temperature
Charge Acceptance



Extended Cycle Life



High Reliability with
Stable Output Voltage



Proven OEM Supply
Experience



Customised NEV Battery
Application Development



Trusted by Manufacturers Worldwide



Application Examples(AGM)

HAVAL	VOLVO
DS	JAGUAR
VOLVO	LINCOLN



Application Examples(EFB)

DS	PEUGEOT
LYNK&CO	Citroen
INFINITI	FORD



Application Examples(MF)

FROD	BYD
LINCOLN	TRUMPCHI
LYNK&CO	JAC



Application Examples(AUX)

VOLVO	Ford
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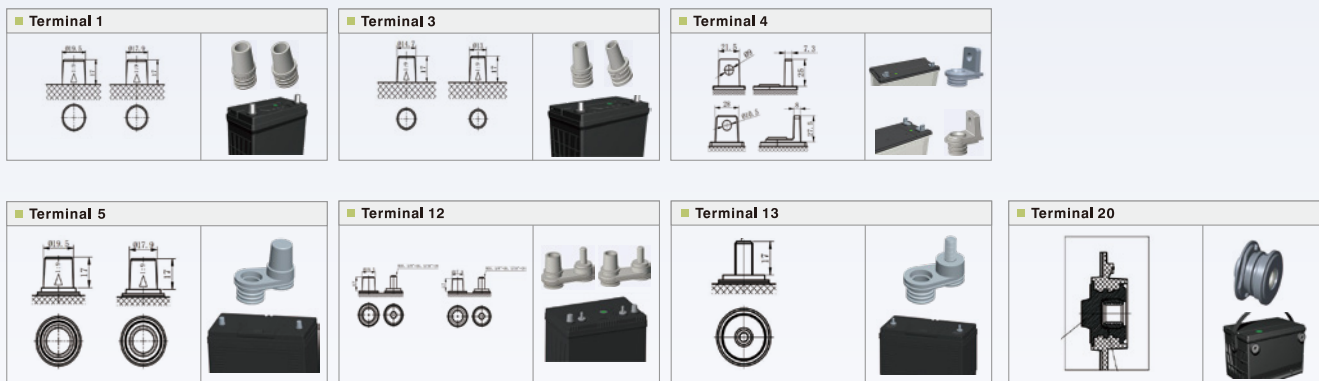
Application Examples(EV)

VOLVO	BYD
Geely New Energy	Xpeng
Lynk & Co	

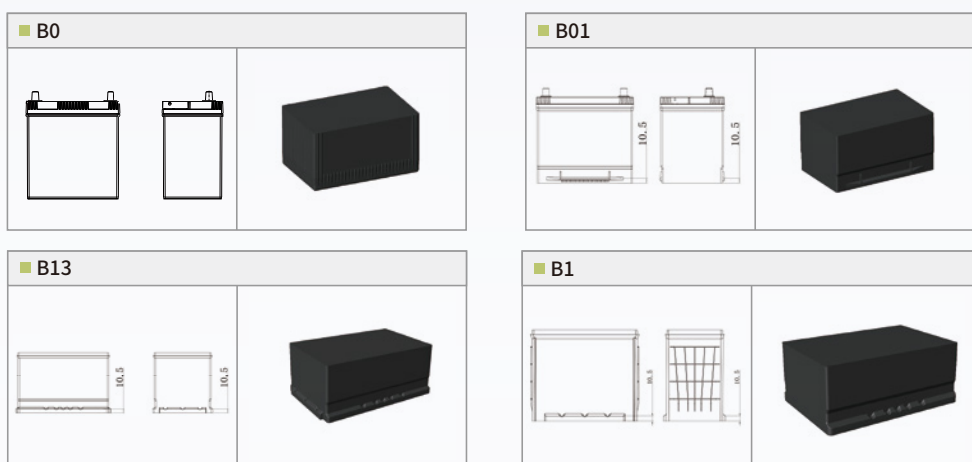
Original Equipment (OE) Supply

Leoch batteries are supplied as original equipment (OE) for selected automotive brands and are widely distributed across global aftermarket channels.

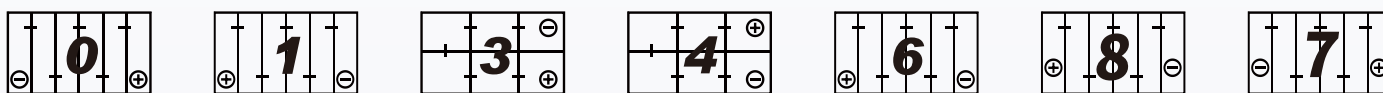
TERMINAL



HOLD DOWN



LAY-OUT



HANDLES



Founded in 1999 and listed on the Hong Kong Stock Exchange (00842.HK), LEOCH Battery is committed to innovation, reliability and sustainability. We deliver dependable power and smart energy solutions to customers and partners worldwide.

With advanced manufacturing capabilities and strict quality control systems, LEOCH automotive batteries are produced in accordance with international standards to ensure consistent performance and durability.

As a trusted OEM partner, LEOCH supplies automotive batteries to selected vehicle manufacturers and serves global aftermarket channels across more than 150 countries.

● Subsidiaries (80+) ● Production Bases (28) ● Warehouses (Overseas 30, China 100+) ● R&D Centers (8)



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