

# Commercial Vehicle Battery Solutions

Comprehensive battery range for all commercial vehicle needs:

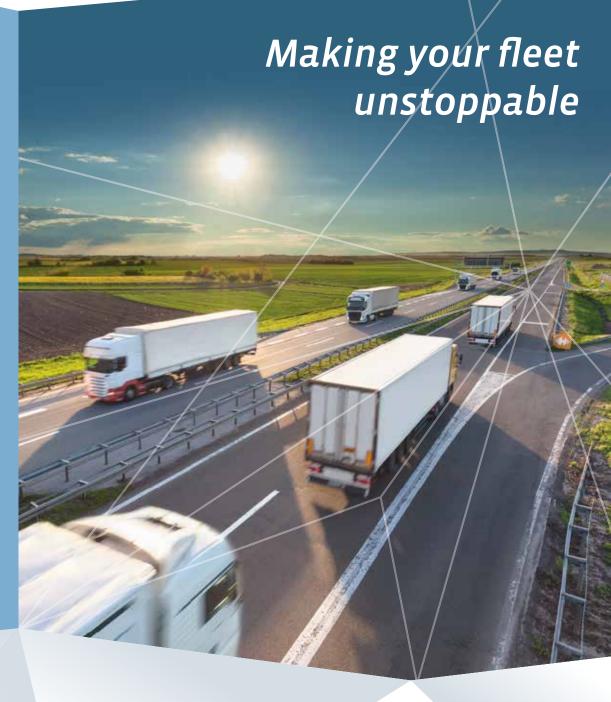
StrongPRO

EndurancePRO

PowerPRO

StartPRO

PowerPRO Agri & Construction



Made in Europe by Exide Technologies Original Equipment Manufacturer









# Batteries that mean business

#### High-performance batteries to keep your business moving

Logistics is more important than ever, with customers expecting faster and more predictable deliveries. In this competitive environment, fleet owners are focusing on total cost of ownership. After all, when a truck is off the road, it leads to customer dissatisfaction, unused labor and capital, and potential fines and penalties.

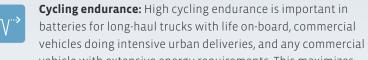
Exide designed its battery range to reduce the risk of breakdowns and give customers a competitive advantage. You get market-leading performance, lower total cost of ownership, and battery options for any use case.

As a true expert in OE batteries, Exide helps you select the right battery. For fleet owners and installers alike, it is vital to make the right choice for the conditions of use. Three important criteria to consider in battery performance are: vibration resistance, cycling endurance and cranking power.



#### Three main factors when selecting the right battery:

**Vibration resistance:** For trucks with rear-chassis battery installations (e.g. Euro 5/ Euro 6 trucks), robust and high-vibration-resistant batteries are mandatory to avoid breakdowns. Vibration resistance is also required for any vehicle operating on bad roads or rough terrain.



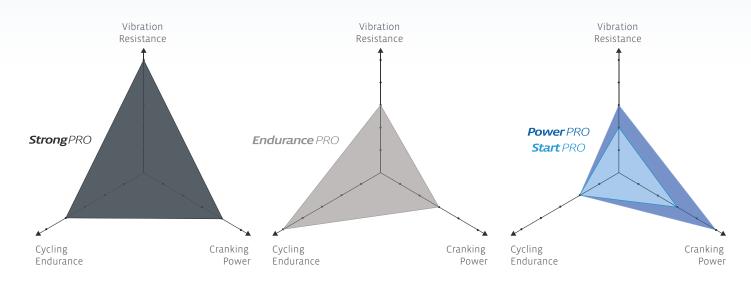
vehicle with extensive energy requirements. This maximizes battery lifespan and ensures a safe battery start.



 $( \circ )$ 

**Cranking power:** High cranking power allows for engine starts in cold climates and is required for many power-intensive vehicles in agriculture and construction.

# The perfect battery for every need



# Select the right Exide battery for your needs



## Trusted by leading commercial vehicle manufacturers

Exide has been supplying lead-acid batteries to car and truck makers for 120 years. We design the most technically advanced products in the industry, and were the first to introduce High Vibration Resistant (HVR®) batteries for trucks back in 2008. Vehicle manufacturers trust the quality of our products and our commitment to excellence in manufacturing.

Exide works with leading commercial vehicle manufacturers, including:

Isuzu, Iveco, MAN, Nissan, Renault Volvo Trucks, Scania, Bobcat, Case, Claas, Deutz Fahr, Evobus, John Deere, Komatsu, New Holland, Wacker Neuson, and many others...



# StrongPRO







#### Innovating the indestructible battery

The new Exide StrongPRO features a next-generation HVR® (high vibration resistance) design, and comes with Carbon Boost™, Exide's smart solution for reduced acid stratification and faster recharge. Since the AdBlue® tank was introduced (Euro 5/6), truck makers have moved the battery to the rear chassis, where increased vibrations cause early battery failures. Exide's unique HVR® technology prevents this, and enables StrongPRO to pass the extreme vibration tests under the new European V4 standard (EN 50342-1:2015).

Using StrongPRO means less risk of breakdowns, more starting reliability, and longer lifespan – providing the lowest total cost of ownership for your fleet. As a leading OEM supplier, Exide brings the latest technology straight to the aftermarket.

#### **NEW!**

#### Benefits

- Extremely robust latest HVR® technology
- Mandatory for chassis-end installation (e.g. Euro 5/ Euro 6 trucks) and ideal for rough terrain
- Carbon Boost<sup>™</sup> for faster recharge and reduced acid stratification
- Ideal for long-haul trucks with comfort equipment to support "life on board"
- Maximum starting reliability after overnight stay
- OE experience inside
- First class safety features
- Maintenance free no topping up
- Optimal total cost of ownership (TCO)







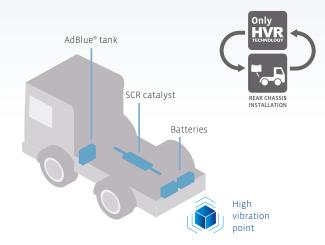


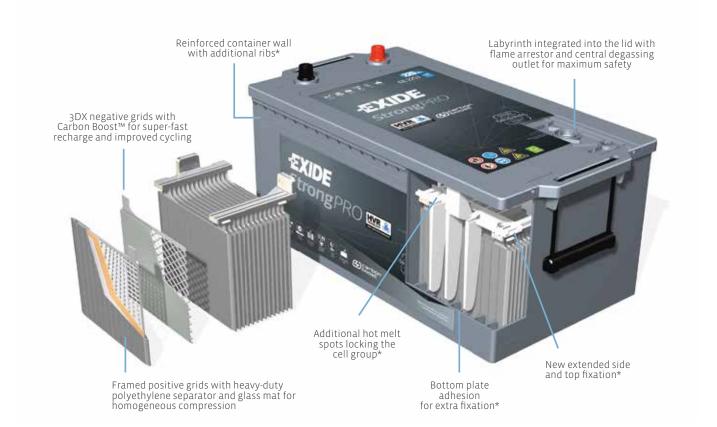












# The Carbon Boost™ Effect

Exide's smart electrochemical solution for longer battery life

Early battery failures are common in commercial vehicles, caused by exposure to deep discharge conditions. Challenges to the battery include frequent starting and stopping for urban deliveries, and overnight heating and lighting for long-haul trucks. This strain leads to sulphation and acid stratification, damaging battery lifespan.

With Exide Carbon Boost™, unique carbon additives increase the speed at which sulphate particles dissolve. This leads to faster recharging, protection from sulphation, and less stratification.

The carbon additives also promote controlled gassing during recharging, which keeps the electrolyte mixed and further reduces stratification.

#### The benefits of Carbon Boost:

- > Improved charge acceptance
- > Faster recharging
- > Reduced acid stratification
- > Enhanced cycling endurance

**Sulphation**: Sulphate particles progressively cover the negative plates. This makes recharging less efficient, because energy is used to dissolve the sulphate.





Without Carbon Boost™

With Carbon Boost™

Acid stratification: Sulphate particles turn into sulphuric acid during charging. This is heavier than the electrolyte, so it sinks to the bottom, creating a range of negative effects, including reduced capacity.



Sulphuric acid sinks to the bottom of the cell



Controlled gassing mixes the electrolyte and reduces stratification

Without Carbon Boost™

With Carbon Boost<sup>T</sup>



# EndurancePRO

Made for severe cycling



#### Benefits

- 50% more cycle life compared to standard truck battery (advanced SHD technology with glass mat separators)
- Ideal for long-haul trucks with comfort equipment to support "life on board"
- > Ideal for delivery trucks with hydraulic/electric lifts
- > Improved durability
- > Low maintenance may need water topping
- > OE experience inside













## PowerPRO

Impressive power at every start



## StartPRO

Reliable starting power for standard use



#### Benefits

- > Superior cranking power (more plates and active material to maximize grid surface)
- Ideal for cold temperatures
- Ideal for trucks/ buses with big engines
- Robust and reliable design with hot melt fixation of plate groups
- Maintenance free no topping up
- OE experience inside









Benefits

- > Ideal for trucks without special requirements in terms of vibration resistance, cycling or cranking power
- Robust and reliable design with hot melt fixation of plate groups
- Complete range covering almost 100% of vehicle parc, including special types
- Low maintenance may need water topping up



#### **NEW!**

## PowerPRO Agri & Construction

#### Choose the original part

Designed specifically to fulfill the demanding requirements of major agriculture and construction OEMs, PowerPRO Agri & Construction offers outstanding reliability, starting power and high capacity.



#### Benefits

- > Superior cranking power (more plates and active material to maximize grid surface)
- > Specifically designed for agricultural, forestry and construction machinery
- Robust design with hot melt fixation of plate groups
- > Wide range including special types
- > True OE design and construction (original part)
- Maintenance Free no topping up











Type List		CODE	PERFORMANCE		DIMENSIONS				TECHNICAL	
			CAPACITY	CCA	- L (mm)	Н	W	CHARACTERISTICS		
			Ah	A (EN)		(mm)	(mm)	POLARITY	HOLD DOWN	вох
	NEW:	EE1403	140	800	513	223	189	ETN 3	Во	D04
HVR* TECHNOLOGY HIGH VIRRATEM RESISTANT	StrongPRO	EE1853	185	1100	513	223	223	ETN 3	Во	D05
		EE2353	235	1200	518	240	279	ETN 3	Во	D06
SHD TECHNOLOGY	EndurancePRO EndurancePRO	EX1803	180	1000	513	223	223	ETN 3	Во	D05
		EX2253	225	1100	518	240	279	ETN 3	Во	Do6
HDX	PowerPRO	EF1202	120	870	349	235	175	ETN o	B1	D02
		EF1420	142	850	349	290	175	ETN o	Bo	D03
		EF1421	142	850	349	290	175	ETN 1	Во	D03
		EF1453	145	900	513	223	189	ETN 3	Во	D04
		EF1853	185	1150	513	223	223	ETN 3	Во	D05
		EF2353	235	1300	518	240	279	ETN 3	Во	Do6
	NEW!  PowerPRO Agri & Construction	F11102	110	000	2/0	225	175	ETN o	B1	D02
		EJ1102 E 1100	110	900	349	235	175	ETNO	Bo	D02
		EJ1523	110	900	349 513	235	175 189	ETN 3	Во	D02
		EJ1723	172	1390	513	223	223	ETN 3	Во	D05
		EJ2353	235	1450	518	240	279	ETN 3	Во	D06
		EJ1805	180	1000	510	225	218	ETN 3	В3	D09
		EJ165A	165	850	354	285	241	ETN 6	Во	D67
		EJ1355	135	1000	514	210	175	ETN 3	В3	DB8
		EJ110B	110	950	330	240	173	ETN 9	Во	G31
		EJ050C	50	800	260	206	173	ETN 1	В7	G34
		EJ1000	100	850	353	190	175	ETN o	B13	L05
HD	StartPRO	EG1402	140	900	508	205	175	ETN o	B1	ATM
		EG1008	100	680	413	220	175	ETN o	B3	D01
		EG1109	110	800	413	220	175	ETN 1	В3	D01
		EG1100	110	750	349	235	175	ETN o	Во	D02
		EG1101	110	750	349	235	175	ETN 1	Во	D02
		EG1102	110	750	349	235	175	ETN o	Ві	D02
		EG1250	125	760	349	290	175	ETN o	Во	D03
		EG1251	125	760	349	290	175	ETN 1	Во	D03
		EG1203	120	680	513	223	189	ETN 3	Во	D04
		EG1403	140	800	513	223	189	ETN 3	Во	D04
		EG1553	155	900	513	223	223	ETN 3	Во	D05
		EG1803	180	1000	513	223	223	ETN 3	Во	D05
		EG2153	215	1200	518	240	279	ETN 3	Во	D06
		EG2154	215	1200	518	240	279	ETN 4	Bo	D06
		EG1206 EG1406	120	680	510	225	175	ETN 4	B3	Do8 Do8
		EG1406 EG1806	140	1000	510 510	225	175 218	ETN 4	B3 B3	D08
		EG1806 EG1355	135	1000	510	210	175	ETN 3	B3	DB8
		EG1705	170	950	514	210	218	ETN 3	B3	DB9
		EG1353	135	1000	514	210	218	ETN 3	Bo	DB9
		EG145A	145	1000	360	240	253	ETN 6	Во	F21







Во

G31

110

950

330 240 173

ETN 9

EG110B

**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 fulfill the highest quality standards, while minimizing impact on the environment.



#### European Headquarters

Exide Technologies SAS 5 allée des Pierres Mayettes, 92636 Gennevilliers France Tel: +33 1 41 21 23 00

Fax +33 1 41 21 23 00 Fax +33 1 41 21 27 15 www.exide.com Exide Battery Finder



