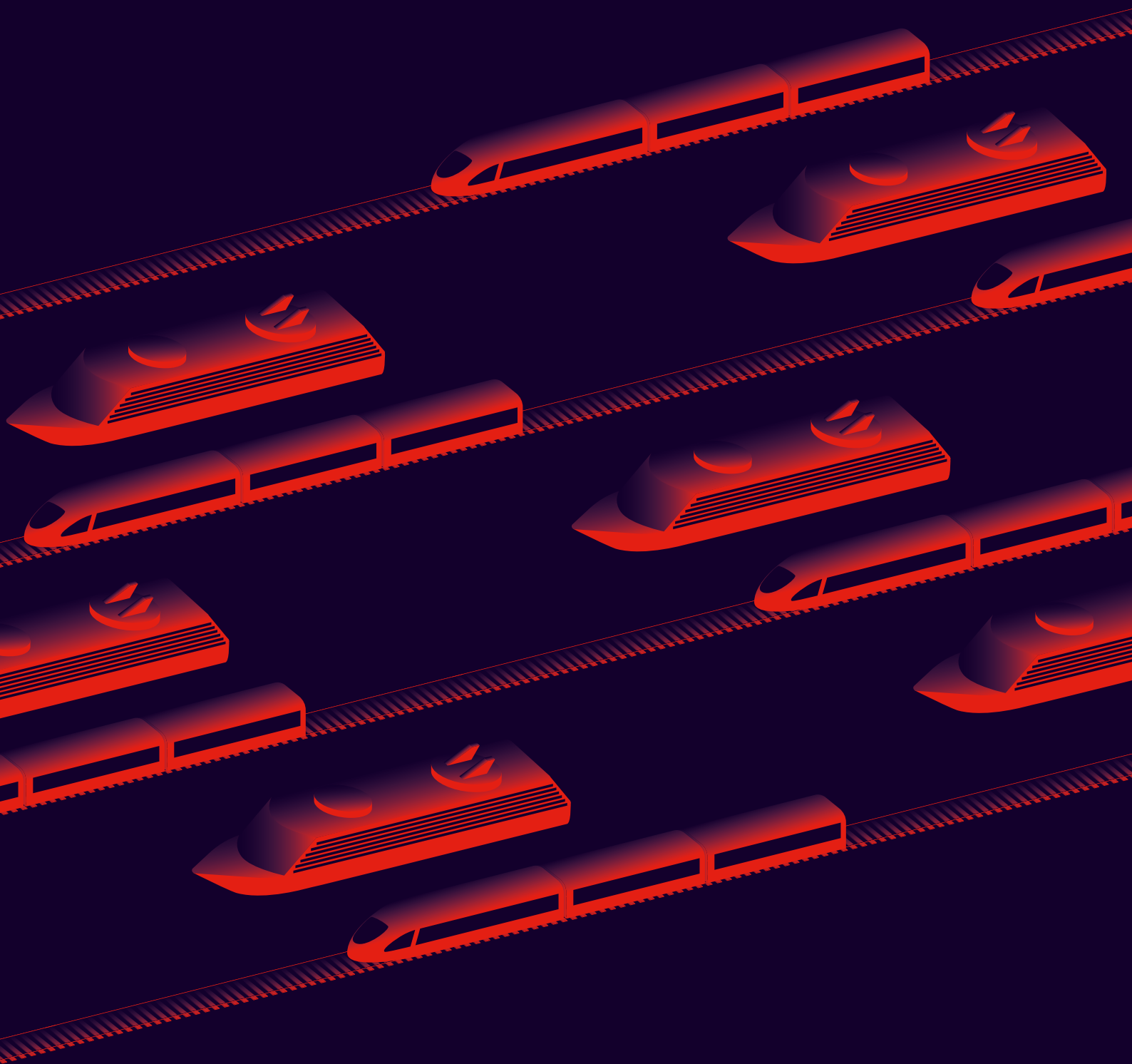


# Batteries on the move

Motion



**FIAMM**  
+ -

# FIAMM since 1942

FIAMM Energy Technology has been making batteries since 1942. We were established as a private company which set out to supply a national need for batteries to power vehicles. Since then, we have grown to be and become recognised international business engaged in the development, production and distribution of batteries and accumulators for industrial and mobile applications.

FIAMM Reserve Power Solutions offers a broad range of stationary batteries, designed to guarantee uninterrupted power supply in a myriad of fields.

As our business has expanded, so has our technical knowledge and understanding of how products can benefit customers' different needs. The result is a family of products and solutions to fit many different applications. We are now proud to supply many of the world's leading companies for telecommunications, data centers, railways, power plants, petrochemical plants and energy storage from renewable sources.

Batteries and energy storage solutions are a key enabler towards the global transition from fossil fuels to a cleaner and renewable energy. Our mission is to work with our partners and customers for the continued development of next generation solutions to meet the vital energy requirements for the future of our world.



#### Headquarters

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Company subject to the management and coordination of Showa Denko Materials Co., Ltd.

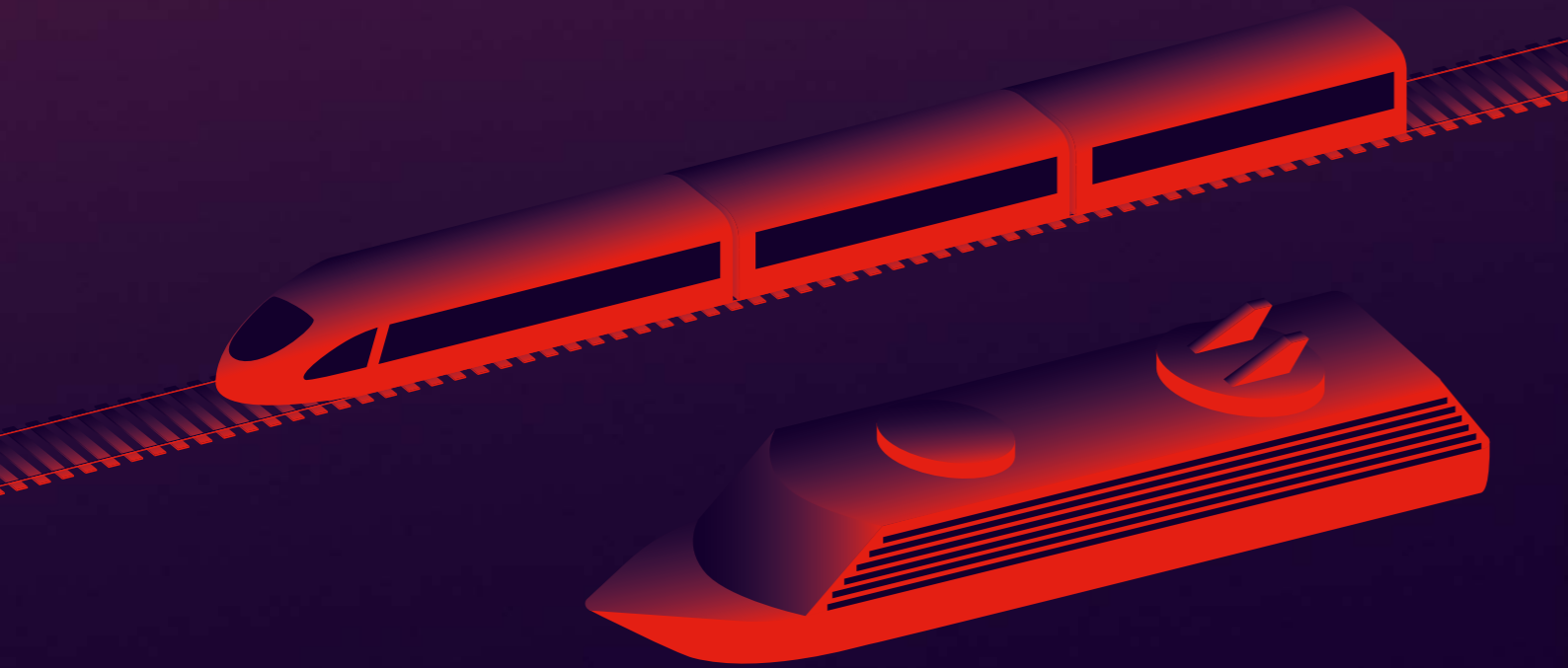


# Rail, marine and more

FIAMM supports industrial mobility systems such as rail and marine applications.

Many of our batteries are designed for rugged applications where there is motion and vibration.

On water we provide energy for small seacrafts right up to major ocean-going ships. Our products support critical systems when vessels leave the safety of land and cross small or mighty oceans. Our power solutions support command and safety systems, whatever the conditions at sea. They are ready to back-up even a momentary failure of power or in the event of people having to abandon a ship in distress. Without our batteries people could not follow emergency exits signs towards safety.



On land we support rail networks. In metro subways systems, local and high-speed train networks – they all need and use our solutions. They support engines power and driver controls as well as safety systems. In passenger carriages they power door openings, ventilation and lighting. Our batteries operate every day, all day and are in constant motion and often under severe vibration.

You can find our products on trackside applications too. We provide emergency power for signalling, transmissions, railway crossings and other critical devices.

FIAMM solutions, on the move or stationary, are always there to support our customers critical needs.









# FIAMM motion battery solutions

## Enhanced product performance

Our advanced AGM batteries are optimised for demanding applications that include cyclic, temperature or high rate

## Best choice of technology

Our wide range of proven lead-acid battery technologies provide customers with the best choice for each application. AGM & Gel are maintenance free over life, while flooded technology cells have life of up to 25 years.

## We fit every need

Our batteries can be used in many different applications and in countless configurations to meet a wide variety of needs.

## Robust and Reliable

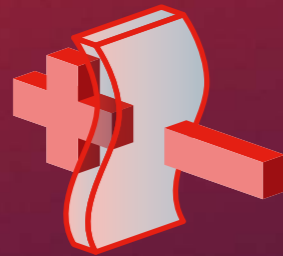
Our products are purpose designed and have stood the test of time in many operating conditions and applications around the world





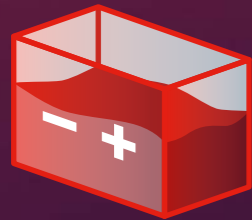
## AGM technology

AGM (Absorbed Glass Mat) batteries offer improved performance with faster charging, longer life and safer operation. These batteries are constructed with an absorbent glass-mat separator between the negative and positive plates. Special safety valves are fitted to minimise electrolyte dry-out over the life of the battery.



## GEL technology

GEL batteries use a jellified electrolyte between positive and negative plates to minimise dry out of the cell. Batteries with a GEL internal structure are very versatile. They offer excellent long life and perform well in a wide range of temperature conditions.



## Flooded technology

Batteries with a flooded electrolyte are extremely robust and have the longest life of lead acid accumulators. These cells are manufactured with clear containers showing electrolyte levels to allow periodic topping up.

## LONG DESIGN LIFE

FIAMM batteries, with a very long life classification, are designed for more than 12 years operation in accordance with the Eurobat Guide.



## Flame retardant casing

Most FIAMM batteries are made with flame retardant plastic to provide an extra level of safety and customer assurance. This material offers maximum strength over life. See our product data sheet for more details concerning each range.

99%  
**RECY**  
**CLABLE**

FIAMM lead acid batteries are 99% recyclable. Our products are perfect for the circular economy. Lead recovered from our used batteries can be reprocessed repeatedly without any loss on performance.

## HIGH CYCLIC BATTERIES

Some applications demand that the battery must be capable of charging and discharging frequently. This type of application places stressful demands on the battery chemistry that cannot be met by a standard standby battery. Our high cyclic battery ranges are designed meet these challenges and to perform in these demanding situations.



# FIT

**Very long-life, front terminal AGM battery**  
12 plus year very long design life, in flame retardant ABS cases



# SMG

**OPzV Maintenance-Free, Gel cell**  
18 years design life GEL battery; perfect for demanding applications



# SLA

**Very long-life, top terminal AGM battery**  
12 plus year very long design life, in flame retardant ABS cases available in 2V, 6V and 12V models



# FGC

**High cyclic applications battery**  
A small-sealed lead acid range designed for multi-cyclic applications



# FHC

**Cyclic maintenance-free, AGM battery**  
A front terminal block designed for high cyclic and PSOC applications



# LM

**OPzS Flooded Cell**  
20 years design life battery; perfect for demanding applications

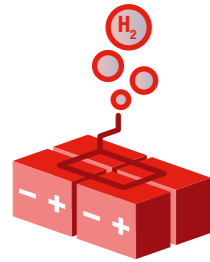


# Solutions & accessories



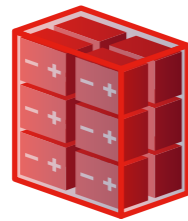
## GPS

FIAMM offers a clever solution to protect your assets. The self-powered monitoring device, which is embedded and concealed in the battery, can alert you with a signal and the location, when it is moved without permission. A perfect protection against theft.



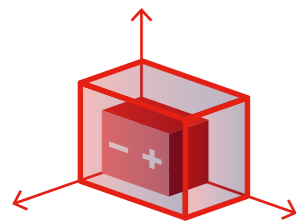
## RVS

The Remote Venting System (RVS) is a specially designed pipe system that exhausts hydrogen gases given off during the charging phase. The RVS system allows gases to be passed safely outside of the battery room. This solution can reduce the need for internal venting and lower energy consumption.



## Racks

We make a range of special rack solutions which are corrosion-proof and can be easily assembled and dismantled. A certified seismic version is available upon request.



## Battery sizing software

The FIAMM sizing software tool allows customers to select the most appropriate battery solution for their application. Using our purpose-designed software a customer can insert key parameters including electrical performance, temperature, operating life, layout and then choose from a number of variable solutions.





# FIAMM

