## Benefits that fit.

Welcome to the Solition Material Handling battery system based on outstanding lithium-ion cell performance.



MATERIAL HANDLING

## How your forklift feels, when it's got our advanced battery inside.

The Solition Material Handling battery transforms your fleet through smarter electrification.

Our lithium-ion system offers the highest cell performance, which enhances **reliability**, **safety** and **total cost of ownership** (TCO). Upon purchase, our partnership has only just begun; we can provide support when required.



**High cycle life** 



**High energy density** 



Fast and frequent opportunity charging



24/7 applications & multi-shift operation



No gas emission

Remote access for asset management





#### Tailormade for these applications:





Forklifts and telehandlers

Automated gu vehicles

Ports

ΠŪ



Ground support equipment



Lifting platforms



Very narrow aisle trucks



## **One manufacturer. One stop solution.**

Reliable, profitable, sustainable – why settle for better when we strive for the best?

### It's quite simple: battery runs – business runs.

Our lithium-ion traction batteries are designed and tailored to match your demands. The modular architecture of the Solition battery system allows you to retrofit practically all existing tray and new battery designs with these fully integrated batteries.

Typical applications include material handling operations, which require battery swaps when using standard lead-acid batteries, and fast-charge applications where space is saved by eliminating the need for battery changing stations.



#### Aiming high requires a strong base.

We're all looking for that little bit of extra performance, to exploit the full potential of your fleet. Lithium-ion material handling batteries are the best choice because of their future-proof characteristics. All our work is packed into this advanced battery to shape your workload.

#### The all-in-one-solution with the one-to-one-service.

Improve your electrical infrastructure with our Solition Powerbooster for optimized operations of your Solition Material Handling batteries.

As a market leader and specialist in lithium-ion solutions it's a matter of course for us to be at your side. We'll guide you through the entire process

## Bye bye, old struggles. Hello, new benefits.

Improved energy density enhances reliability and performance. This leads to greater operational efficiency and cost reduction. Another increasingly valuable factor is time. Solition Material Handling stands out for its charging capabilities, maintaining a stable voltage

profile even under high discharge conditions. Its long cycle life delivers significantly more energy than conventional batteries - even in demanding environments.

#### TCO comparison per vehicle.

Lithium-ion Solition Material Handling battery versus a standard lead-acid PzS battery.



battery (PzS)



#### Upgrade efficiency. Downgrade costs.

Our Solition Material Handling battery has a remarkably high ampere-hour charge efficiency of more than 98 %. This means that more of the energy you pay for is used to move goods and less energy is wasted in overcharge which, consequently, will lower your costs and reduce your fleet's CO<sub>2</sub> footprint. The battery is compatible with recuperation systems. Energy recovery and charge acceptance are high, making the entire system more efficient for your business.

#### Asset management.

In addition to our latest generation of lithium-ion batteries and high frequency chargers, with Solition we offer a variety of optional online cloud based services. These services allow you to check the status of your batteries remotely, track their position via GPS or receive and support.





## Trusted technology. Awesome results.

Market-leading battery technologies, chargers, charging algorithms, battery management systems, advice and support are ready to meet current and future demands. Whether it's fast, cost-effective charging or integrating self-generated electricity from PV panels into your operation, our Solition Powerbooster is the perfect solution for upgrading your electrical infrastructure. Solition Material Handling's cloud-based Battery Management System data, complete with remote access, offers detailed reports and graphics. They provide all the relevant data for informed decision-making. You can monitor key performance indicators and proactively manage maintenance or production uptime.





### The better we do, the smaller the footprint.

Our chargers are specially designed for our batteries. We know that space and time mean money. Efficient chargers means a smaller footprint.





Only a balanced infrastructure can unlock the full potential of lithium-ion batteries. Enhanced battery management means greater battery utilization, which, in turn, lowers the TCO.





# The technology is there. Just as we are there for you.

Lithium-ion technology offers a high-performance solution with exceptional charging efficiency, a significantly longer lifespan and double the capacity of conventional batteries. This results in **optimized total cost of ownership, reduced CO**<sub>2</sub> **emissions,** and the assurance of **a reliable solution** at work.

We have the expertise to deliver smart innovations and lead the industry towards a sustainable future.

#### **Energy consultation and service, made in Europe.**

At Exide Technologies, we pride ourselves on co-operation. And that means being there when our clients need us. Following your purchase, our work has just started and are ready to offer you our service – the partner at your side to energize a new world.







Designed and assembled in Europe

Sales and service all over Europe and MEA

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R&D facility in Europe

## The skill for high efficiency.

#### **Technical features:**

- Lifetime ~4000 cycles DOD 90 %
- Lithium Iron Phosphate (LFP)
- IP54 (IP65 on request)
- Charge 0 °C to 50 °C
- Discharge -20 °C to 55 °C
- CAN 2.0B and CANopen profiles
- Recommended charge 0.5C for 24V and 48V and 0.3C for 80V to optimize battery lifetime
- Charge up to 1C possible, to be validated by Exide Technologies beforehand







Voltages from C

Capacities Excellent TCO 100-2.800 Ah

Robust design for industrial operations

#### High efficiency system:

- Battery design based on selected cell / modules to improve specific energy density
- Touch screen display
- Equipped with easy charge system for convenient opportunity charging, with no need to disconnect vehicle connector
- 4G connection (optional) for remote monitoring
- In accordance with norms and standards to fulfil EN 1175:2020 (functional safety requirements for industrial trucks)



Preventive maintenance & serviceability



Modular design supporting high specific energy

Li-lon support team



Cold environment









