

# PERFECT CHARGING INTELLIGENT SOLUTIONS FOR INTRALOGISTICS

Fronius

## YOUR PARTNER FOR SMART AND SUSTAINABLE CHARGING SOLUTIONS

Fronius Perfect Charging is your preferred partner for the complete realisation of your turnkey battery charging solutions that ensure highly efficient and sustainable energy supply. With 75 years of experience we support you from analysis to planning and implementation through to operation, maintenance and servicing. Contact us for your efficient and sustainable charging solution.



#### **TECHNOLOGY INDEPENDENT**

As a specialist in battery charging technology, we plan your entire battery charging installation and advise you whether lead batteries, lithium-ion or other new technologies are the most economical solution for you. We take numerous factors, such as fleet composition, different shift patterns, operating and break times into account and determine the best solution for you.



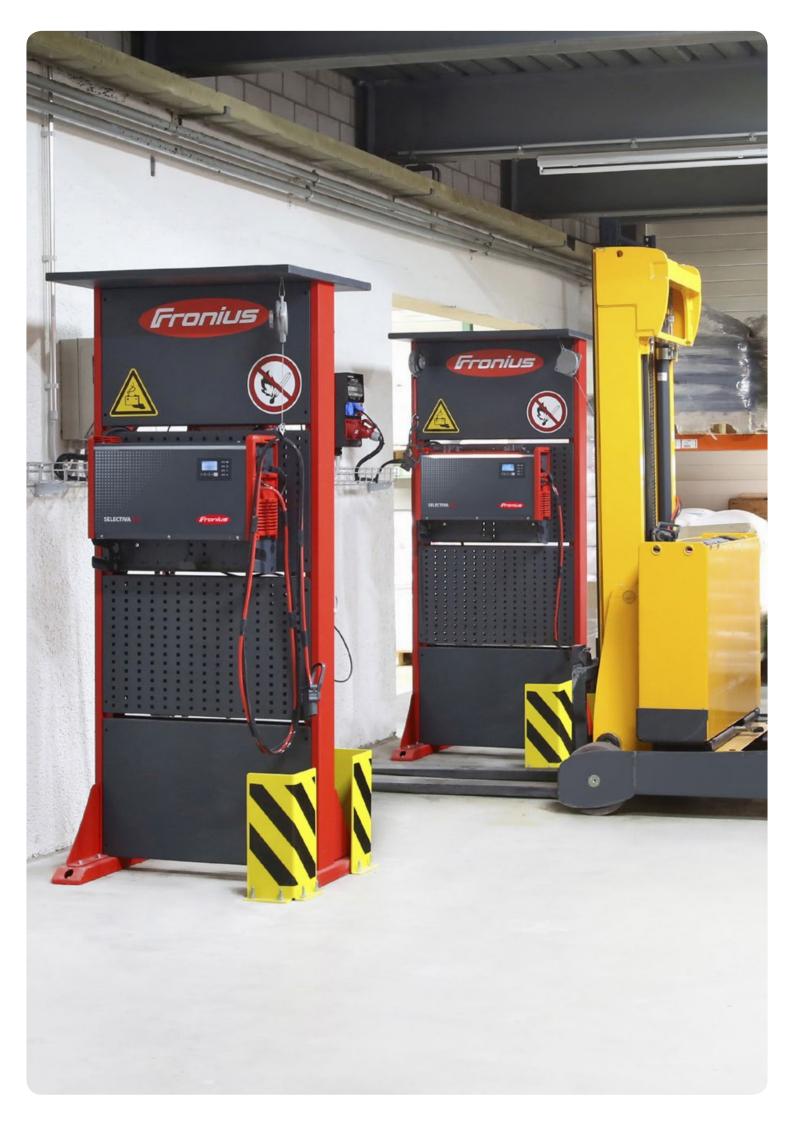
#### **COST-EFFECTIVE**

Rising energy costs are massive challenges for companies. We support you to operate your intralogistics as cost-efficient and effective as possible. By analysing your current status and determine potential savings, you can reduce your total cost of ownership effectively.



#### **EFFICIENT AND PRODUCTIVE**

Your worst-case scenario: empty batteries at the start of the shift? Together with you we develop a complete solution that minimises your total risks. We take you with us into the world of battery charging technology. Discover with us new, unmet potentials. Our energy experts consult you, technology-independently.



### **ENSURE** OUR ADVANTAGES FOR YOU

Highest product quality and efficient battery charging technology have always been in the centre of our actions since our company's foundation. Especially in intralogistics - the internal flow of goods - energy consumption plays a major role when it comes to transportation of goods. It is obvious: the more goods a company has to transport, the higher the energy required for the internal flow of goods. This is exactly where we support you with efficient and sustainable charging solutions.



### RETAIL

Smart charging solutions are granting maximum availability also in case of seasonal peaks. The reliable and efficient charging technology of Fronius Perfect Charging gives retailers the necessary flexibility to cope with changing demands. The efficient planning of charging stations and rooms also supports our customers from the retail sector to optimise the space usage within their warehouses.

### LOGISTICS

The required energy for industrial trucks plays an important role in the overall energy consumption of large distribution centres. Beside an increase in efficiency and therefore a cost-decrease for building services (lighting, heating, air-condition) there is a huge potential for further cost savings by installing modern and efficient charging technology. Large rooftops furthermore bear a high potential to produce solar energy and to use this renewable power to charge the motive batteries.



### FOOD AND BEVERAGES

The production of food & beverages underlies high hygiene standards. To meet these high standards a smart planning of the charging infrastructure is mandatory. Intralogistics operations in cold logistics areas and warehouses pose another challenge to forklift trucks and their batteries. Usually lead acid batteries suffer from low temperatures - their lifetime is reduced significantly. A specially developed charging process of Fronius Perfect Charging provides a solution for this problem: this charging process warms up the battery before the real charging process starts.

### AUTOMOBILE-INDUSTRY

The automotive industry is permanently challenged to adapt itself to an ever increasing pace of technological change. Flexible production lines also require a flexible infrastructure: our flexible charging solutions can be adapted easily to new conditions. It's also possible to charge different battery technologies and types of forklift trucks with a single Fronius charger.



### COMPLETE SOLUTIONS WE ARE THINKING AHEAD

Fronius is not just a manufacturer of high-quality battery chargers, but also your partner for advice, planning, construction and operation of customised solutions for individual charging stations, battery rooms and charging stations. We deliver you a complete solution of chargers, batteries and infrastructure that perfectly meet your requirements.





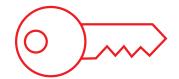
### READY FOR SOLAR ENERGY? RENEWABLE ENERGY FOR YOUR FORKLIFT TRUCK FLEET

In addition to the charging solutions, Fronius has also been active in the solar energy market for decades. Benefit from our extensive expertise and use your green potential for the charging infrastructure, too.



#### BEST IN TCO WE OPTIMISE YOUR COSTS, AVAILABILITY AND PERFORMANCE

We optimise your total costs, minimise your risks and increase your performance. Be with us BEST IN TCO!



### GENERAL CONTRACTOR WE WILL TAKE CARE FROM THE BEGINNING

From planning to implementation - our offer is comprehensive, broad and individual. You choose when we charge you - once, monthly or ongoing. According to your needs our solution can be leased or purchased. Ask us!



### CHARGE & CONNECT WE CONNECT YOUR CHARGING ROOM

Ever thought of connecting your charging infrastructure? With Charge & Connect you can increase your transparency, receive important charging data and be always up to date with efficient condition monitoring. You can profit from never seen before predictability, enabling you to fast and efficiently move your business forward.

### **FRONIUS SELECTIVA SIMPLY SMARTER**

Ri

### **BATTERY INDEPENDENT**

We are aware that your daily business can quickly change. That is why our Selectiva 4.0 chargers are not only modular and movable, but also charge all common lead-acid, lead crystal, PSQ/ PZQ and CSM batteries.

With the Selectiva 4.0 charger product range you benefit not only from one of the most efficent and economic charging process but also from new connectivity and communication functions. The unique Fronius Ri charging process ensures an optimised and particularly gentle charge, which extends the life of your batteries as well as reducing your energy consumption.

#### **COOL CHARGING EXTENDS BATTERY LIFE**

Can a charger be sustainable? We are convinced that this is possible. Our Selectiva 4.0 chargers are thought ahead - from start to finish and help you to reduce your total costs of ownership.

### **DIGITALISATION** -**TECHNOLOGY AT THE** PULSE OF TIME

We connect your charging infrastructure. With the new Fronius Charge & Connect solution new opportunities of transparency and control are possible.



### THE UNIQUE **RI CHARGING PROCESS**

With the Ri charging process Fronius is offering the best technology available on the global market for charging lead-acid traction batteries. Unlike other processes, this process does not follow a fixed characteristic, but adapts to the requirements of each individual battery. This ensures maximum energy efficiency and a long battery life.



### SERVICE & CONSULTING ALL FROM A SINGLE SOURCE

We help you to make your forklift truck system economical and sustainable. As part of our energy consulting, we will show you the savings potential that lies in your forklift truck fleet and support you regarding optimal battery charging processes.

Benefit from our numerous services, such as a technical service hotline and trainings on safe charging for your staff.



### WE ARE YOUR OPTIMISER IN COST, AVAILABILITY AND PERFORMANCE

We optimise your total costs (of ownership), minimise your risks and increase your performance. How do we do this? For this we analyse your current situation, independent of manufacturer and technology, and show you possible savings and optimisation potentials. Always with the aim of reducing your costs and increase your availability and performance.

### SAFETY CHECK REQUIRED?

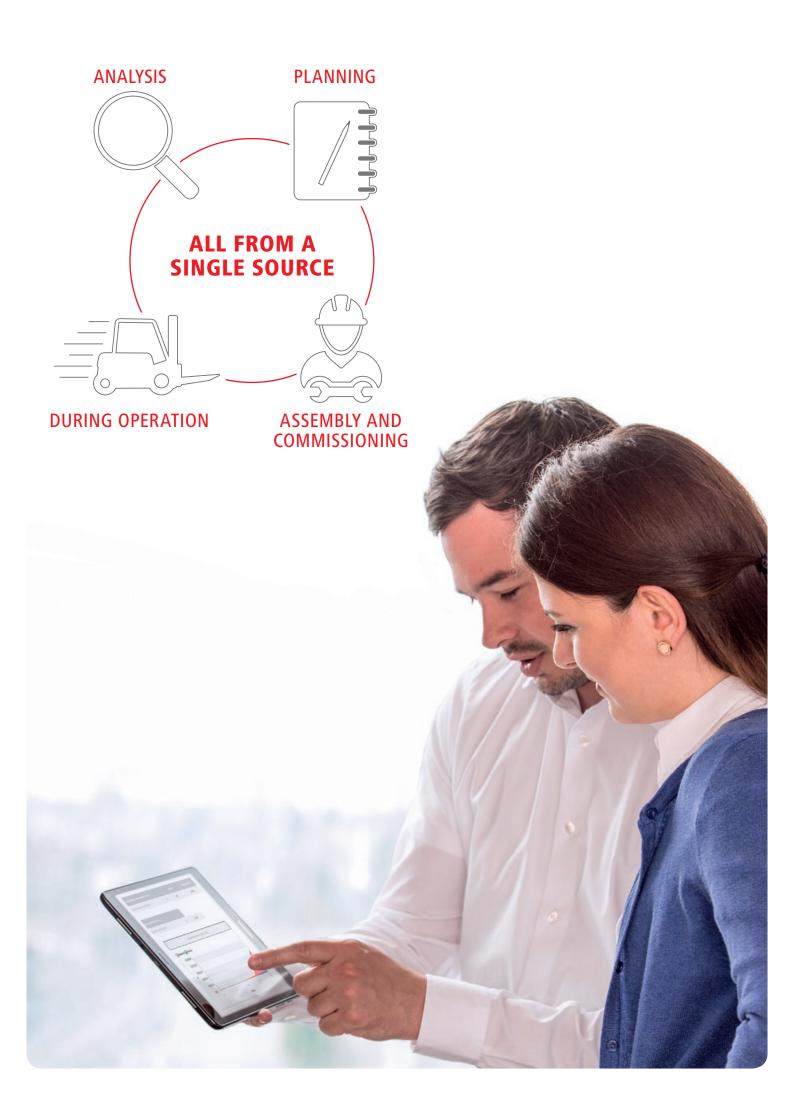
We carry out a safety-related check on site in accordance with the national and international standards and guidelines. We would be happy to advise you over the correct intervals required by law.





### STANDARDS-COMPLIANT DESIGN, MAXIMUM SAFETY FOR YOU AND YOUR EMPLOYEES

We take over the implementation of your charging infrastructure in accordance with the standards. As your specialist in battery charging technology, we support you from the planning phase and make sure that the systems comply with all regulations and safety distances, as well as fire and explosion protection laws. Do you use lithium-ion batteries? We also have safety solutions here in our portfolio. Contact us!





### SAVINGS

Additional savings on energy costs increase your energy efficiency and reduce your peak currents



### CO<sub>2</sub> NEUTRAL

Unleash your green potential – we support you on your way to become CO<sub>2</sub> neutral

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### FINANCING

Financing options - no additional investment needed

### **THE CHALLENGE** Rising energy costs? High peak currents?

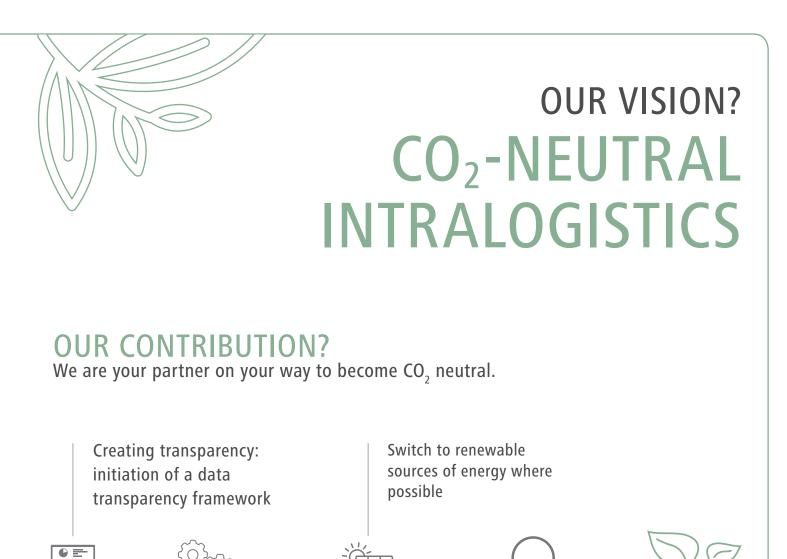
Many operators nowadays are challenged in their business by rising energy costs. Peak currents generated by battery charging processes pose a huge challenge to the infrastructure and grid stability and drive the electricity costs of the companies. In addition to efficiency and cost reduction, sustainability is of key importance nowadays too.

### OUR OFFER Sustainable and energy efficient solutions from the very beginning.

With Fronius you can be sure that you have the right partner when it comes to sustainable and efficient charging solutions. Optimised energy consumption protects the environment and simultaneously reduces the facility's operating and maintenance costs. By combining your charging infrastructure with innovative photovoltaics, you contribute to a greener environment and benefit from energy savings at the same time. Good for you and good for the planet.

With our broad range of services, we think of systems and complete solutions that efficiently and sustainably safeguard your success.

- / Combine your charging solution with an innovative photovoltaic system.
- / Increase your energy efficiency, optimise your energy consumption and reduce your total costs.
- / Benefit from our all-in-one customised solutions.



### ALL-IN-ONE SOLUTION FROM FRONIUS

Initiation of optimisation

measures to increase

energy efficiency

For many operators, purchasing a photovoltaic system is more than just an investment: it symbolises the leap towards a regenerative energy supply and thus independence from limited resources. Our innovative inverters tick all the boxes for profitable solar projects.

### CUSTOM SOLUTIONS FOR SYSTEMS OF EVERY SIZE

Fronius is your partner for photovoltaic projects as well as charging solutions for the intralogistics in all manner.



Derivation of optimisation

initialisation of compensatory

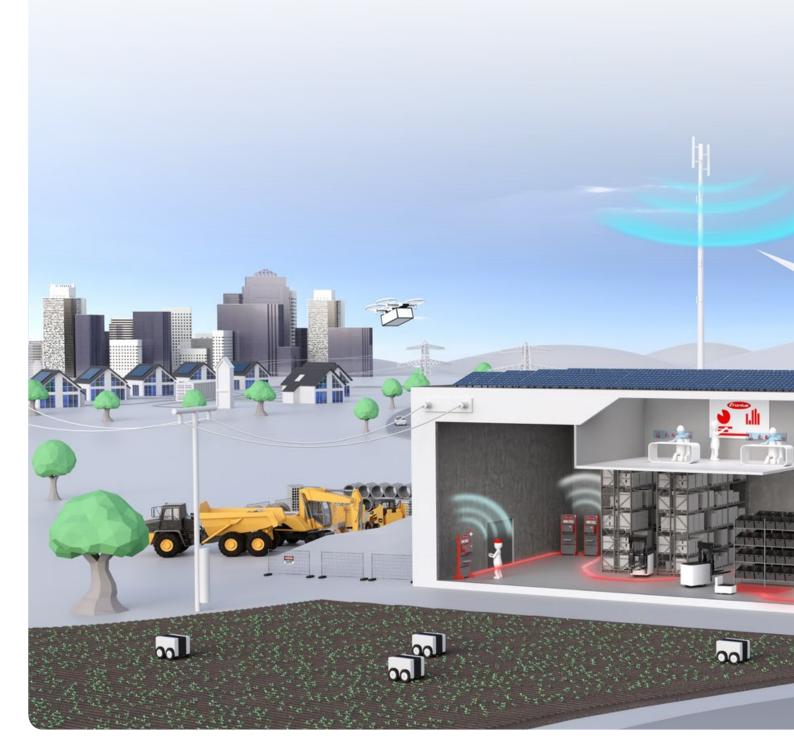
measures, if necessary,

measures

### **TOGETHER INTO THE FUTURE** YOUR PARTNER FOR INNOVATIVE CHARGING TECHNOLOGY

Together with Fronius into the future - never mind which battery technology you choose today. No matter what the future brings, we design our products in a way that they are prepared for any future challenges. Therefore, our solutions are adaptable to yours needs - no matter how your company is designed today or in the future.

Our solutions - just as flexible as you are!



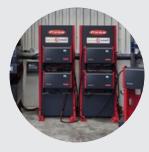


Our vision is a  $CO_2$  neutral intralogistics world. Together we work with our customers on efficient and sustainable charging solutions. For a green future.

Together into the future with us: we are your partner for innovative charging solutions, whether it's new technologies, business challenges or how to act sustainable and resource-saving.

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## FRONIUS PERFECT CHARGING



### **COMPLETE SOLUTIONS**

Fronius offers an extensive range of products for your charging infrastructure – from practical charging and safety modules to the intelligent information and management system Cool Battery Guide Easy. We also develop bespoke solutions for special requirements.



### THE CONNECTED CHARGING SOLUTION - CHARGE & CONNECT

Fronius Charge & Connect offers a number of new possibilities to increase the efficiency and performance of your charging infrastructure through the networking of charging technology. All charging data such as states of charge and charging processes are transferred and visualised in real time. The resulting transparency gives rise to control and optimisation possibilities that enable you to operate a cost-effective complete system.



### SUSTAINABLE CHARGING SOLUTIONS

Due to ever stricter environmental protection requirements and legislation, sustainable technologies are increasingly in demand, particularly for supplying energy. We will help you to make your company fit for the future, be that by switching to electrically powered forklift trucks for your intralogistics operations, using efficient battery chargers, or combining battery charging technology and photovoltaics.

/ More information on Fronius and the Ri-charging process can be found at: www.fronius.com/ri-charge www.fronius.com/intralogistik www.youtube.com/FroniusCharging

/ Perfect Welding / Solar Energy / Perfect Charging

#### THREE BUSINESS UNITS, ONE GOAL: TO SET THE STANDARD THROUGH TECHNOLOGICAL ADVANCEMENT.

What began in 1945 as a one-man operation now sets technological standards in the fields of welding technology, photovoltaics and battery charging. Today, the company has around 5,440 employees worldwide and 1,264 patents for product development show the innovative spirit within the company. Sustainable development means for us to implement environmentally relevant and social aspects equally with economic factors. Our goal has remained constant throughout: to be the innovation leader.

Further information about all Fronius products and our global sales partners and representatives can be found at www.fronius.com

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