

## Charging and energy management for Automated Guided Vehicles

Smart charging concept for increased productivity



The implementation of intelligent charging and energy management contributes to a future-oriented automation in intralogistics.

A holistic view of all energy sources and vehicles will enable an intelligent energy management system that minimizes energy consumption and potential energy loss on the basis of transport orders.

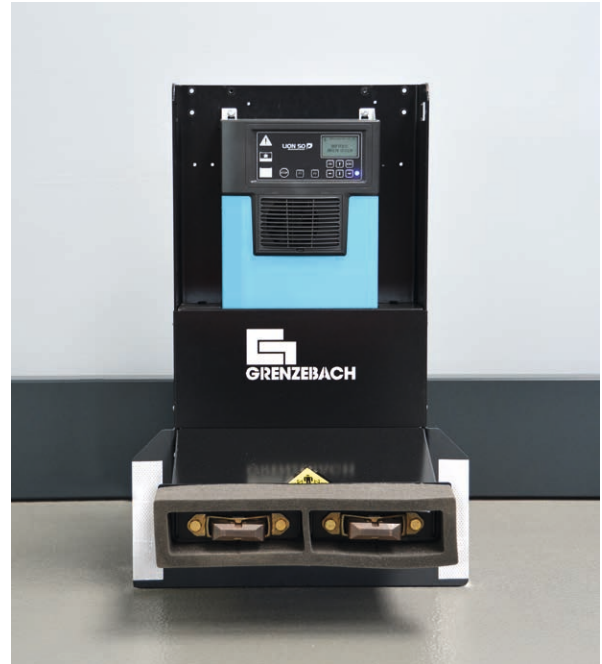
This means, for example, that battery status and charging status are monitored and all vehicle movements and charging behavior are coordinated using the universal control system.

The charging concept involves automated charging of automated guided vehicles (AGVs) at contact charging stations. The charging is done while the operation is running. For this reason, the AGV fleet is designed so that the material flow is not interrupted for the purpose of charging.

The charging station, comprising a housing with charging contacts and a configurable charging unit, can be used for all types of personal-safety vehicles. It is possible to switch automatically, e.g. for mixed fleets.

## Your benefits:

- » Effective use of resources
- » Stand-alone charging station with mains connection
- » Minimizing energy consumption
- » Long-term saving of energy costs



## Data and facts

### Characteristics of the charging station / charging device

Voltages:	400/208/480 V AC, 48V DC (CE / UL)
Charge rate:	Adjustable, max. 80 A
Dimensions:	387 x 266 x 1,152 mm
Control panel:	LCD status display
Charging system:	Spring contacts max. 200 A
Efficiency:	Effective HF charging technology $\eta=93\%$

### Charging parameters of individual AGV

#### L1200S

Charging time:	15 - 80 % SOC approx. 30 minutes
Charging system:	Fixed contact up to 50 A charge rate
Charging process:	Contact, automatic intermediate charge

#### OL1200S

Charging time:	15 - 80 % SOC approx. 30 minutes
Charging system:	Fixed contact up to 80 A charge rate
Charging process:	Contact, automatic intermediate charge

#### FF1200S

Charging time:	15 - 80 % SOC approx. 30 minutes
Charging system:	Fixed contact up to 80 A charge rate
Charging process:	Contact, automatic intermediate charge

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