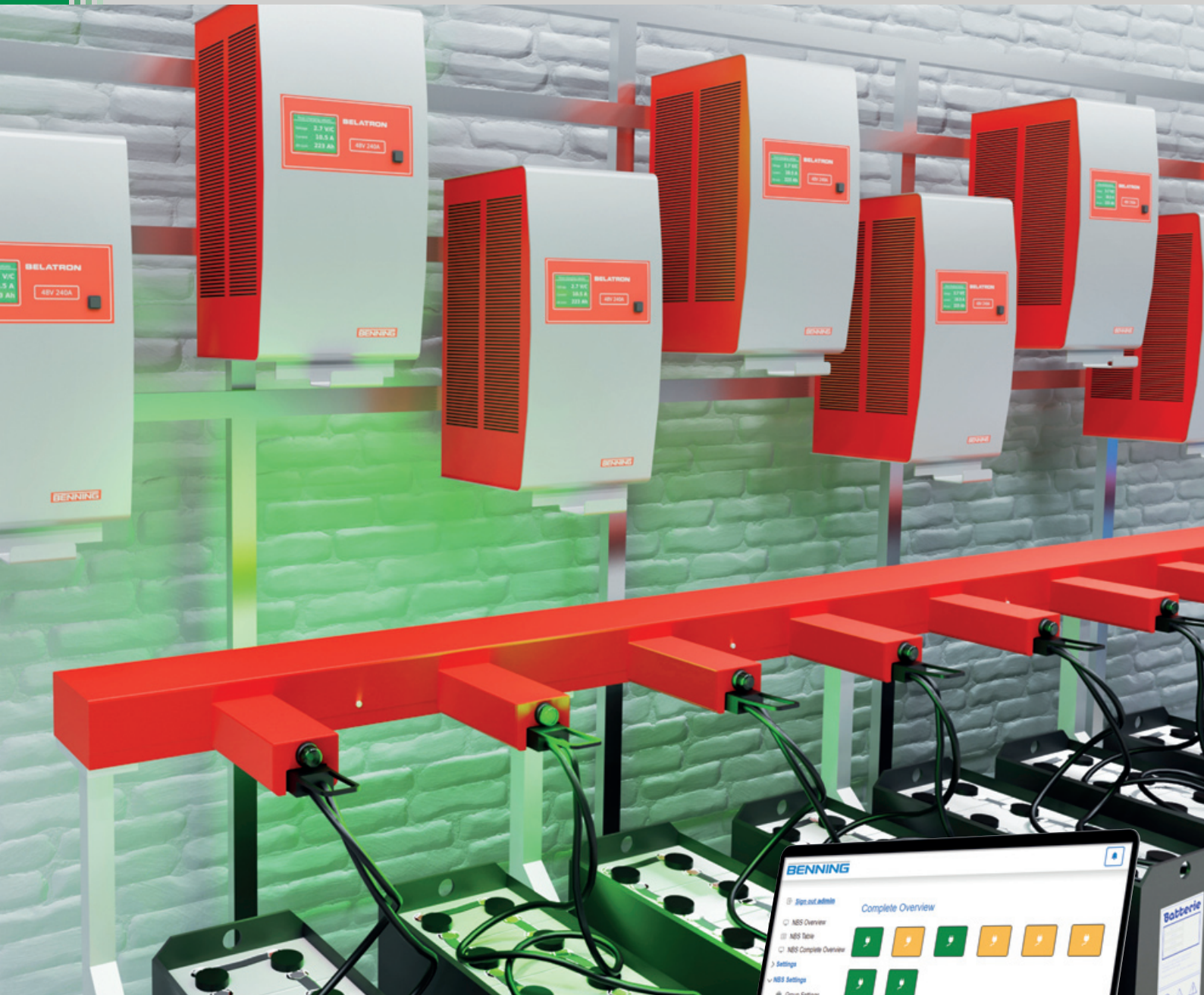


Excellent Technology, Efficiency and Quality



**NBS**  
Next Battery Selector  
**dynamic**

- Charging station management
- Optimised battery usage
- Flexibly upgradable

## Always the right battery for every situation



The signal light and charging plug are installed in a square profile. This convenient layout above the battery facilitates battery replacement.



BELATRON UC

If the BELATRON chargers cannot be placed along a wall or a shelf, you have the option to install a BELATRON UC system. This space efficient charging cabinet offers the greatest possible energy density on a footprint of only 60 x 60 cm. BELATRON UC systems can also be equipped with the Next Battery Selector Dynamic.



The NBS Dynamic can manage more than 250 different battery groups. BELATRON chargers with the multi-voltage option automatically assign themselves to the correct NBS group.



View a charging station in AR

All BELATRON chargers are available either in a unit that can be mounted on a wall/charging rack, or in a charging cabinet that can be easily fixed to the floor of the cargo area.



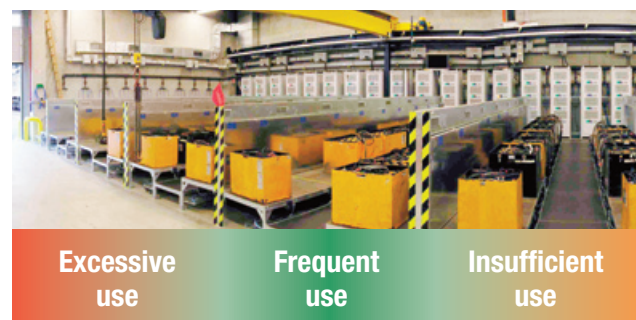
## Extended battery life thanks to consistent frequency of use

Especially in cross-shift operation, the frequency of use of the individual drive batteries can vary greatly. Batteries that are more difficult to reach are used less often (as shown on the right). As time goes by, the number of charge-discharge cycles will then deviate more and more between batteries.

Since the battery temperature rises with each time the battery is charged or discharged, there is a risk of excessive temperatures in batteries with charge-discharge cycles in quick succession without sufficient cooling phases. This should be avoided, because it significantly reduces the service life of the batteries.

Using all batteries equally would reduce the rise in temperature, since the pause times distributed over all batteries after the end of the charging process allow them to cool down.

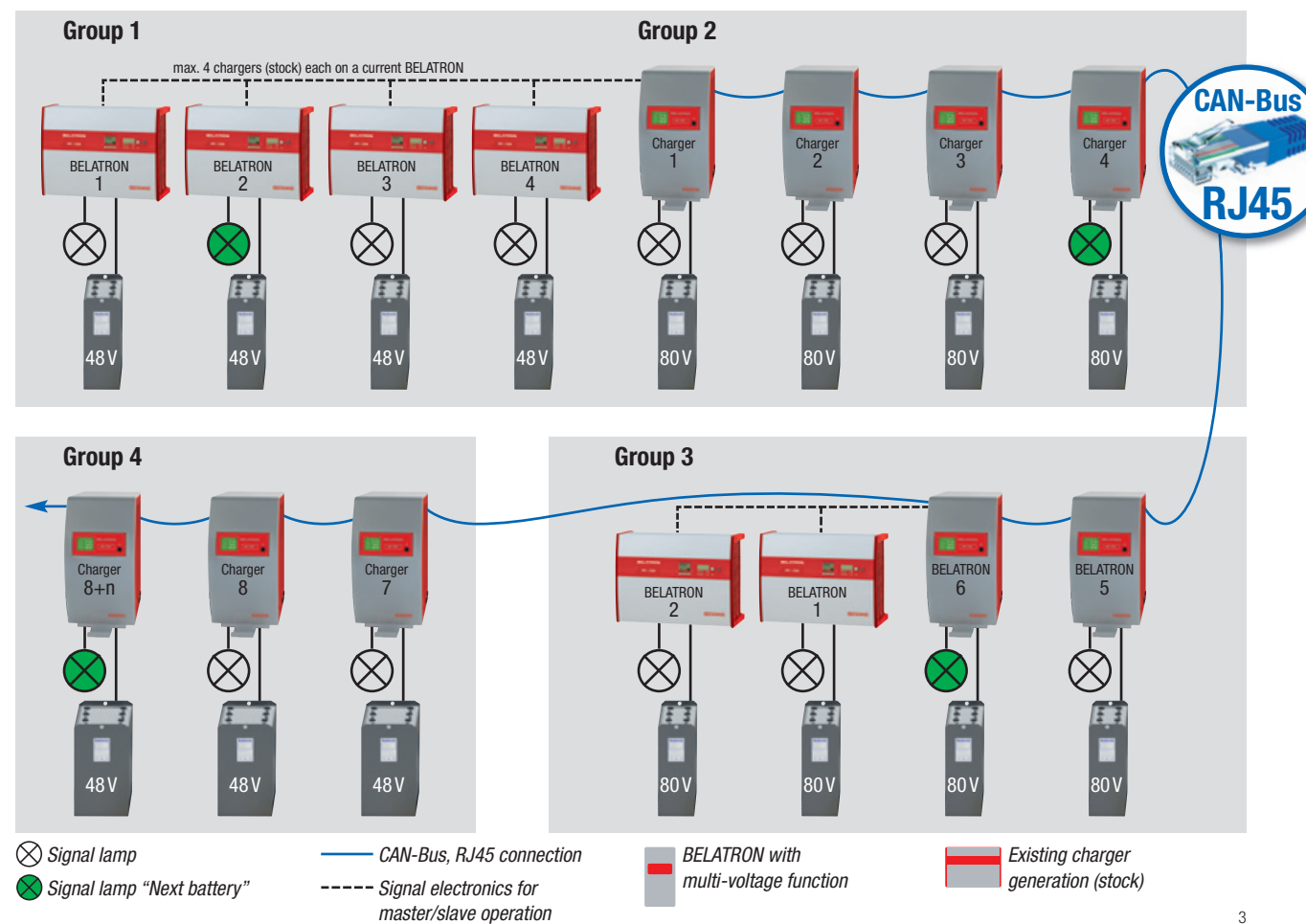
Electric vehicle operators often work in shifts. For this reason, the batteries can only be used at a consistent frequency if the order in which the fully charged batteries are used is specified across shifts and can be clearly identified by staff at any time. The Next Battery Selector Dynamic ensures that all batteries are used in the order in which they were switched off after they were fully charged.



Excessive use      Frequent use      Insufficient use

Using the BELATRON monitor option, it is possible to display the upcoming battery or sequence of use via a large screen.

Especially in battery changing systems with many charging stations, the Next Battery Selector Dynamic improves the clarity in the charging station considerably. Even with a large number of charging points in a confined space, selecting the wrong battery can be avoided.



## Advantages of the NBS Dynamic

The NBS ports on the chargers enable smooth networking using patch cables. This connection is significantly more stable and less susceptible to interference than wireless connections and is still quick and effortless to set up.

Thanks to the plug-in technology, the NBS Dynamic System can be easily expanded at any time.

### The advantage of flexibility – downward compatible

If there are already BELATRON chargers on site that do not have an NBS Dynamic interface (e.g. BELATRON chargers of older designs), these can be easily integrated using the clever bus connection concept. For this purpose, relay contacts are retrofitted in the existing devices and integrated into the new NBS Dynamic via a bus coupler.

This facilitates access to the perks of the NBS Dynamic with BELATRON chargers.



### Flexibility – easy expansion

The NBS Dynamic can be easily expanded. To do so, the new BELATRON charger is simply plugged into the existing structure with a patch cable. For this purpose, the BELATRON (with the NBS option) has two RJ45 ports (input/output). With this, extension even between two chargers can be effortlessly achieved.



Since batteries of different voltages are also assigned to different NBS groups, the BELATRON chargers with multi-voltage option automatically assign themselves to the correct NBS Dynamic group. This ensures that the correct charging location, for use with the next battery, is displayed at all times.

## Smooth connectivity, flexibly expandable



### Advantages and added value

- Optimises the use of exchangeable batteries
- Ensures the batteries are used in the correct order after being fully charged
- Avoids selection errors thanks to clear indicator lights
- Reduces maintenance cost
- Integration of existing BELATRON chargers possible
- Flexibly expandable at any time (pay as you grow)
- Data monitoring (optional)

- Extended battery service life
- Minimised operating costs
- Sustainable use of resources

### Smart data monitoring – all charging parameters at a glance, anytime

The BELATRON monitor option offers you all relevant information in addition to charging station management. Important charger status messages are visualised in a user-friendly way and can be used to evaluate the use of the charging space.

The data remains stored locally at all times and does not leave the company.

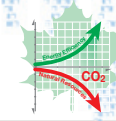
Access can be implemented both via the customer network and as a stand-alone solution.





View a  
charging  
station in AR

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