CASE STUDY

## 1 | Challenge: Switch from gas to electrically powered forklift trucks in order to increase operational time and save operating costs

**One of the leading breweries in Romania approached HOPPECKE and its exclusive and long-term partner, ELMAS S.R.L., in order to find solutions for an optimized forklift truck fleet concept along with the aim to gain more operational time and save overall running costs.**

The customer from the beverage sector saw the need for an optimization of their forklift truck fleet concept in order to fulfil their requirement for the smooth handling of heavy loads and the managing of seasonal peaks. This needed to be achieved throughout their five locations consisting of four production sites and one distribution centre, located across the country.

Previously, the forklift truck operators had to drive to a gas refilling station situated a few hundred meters away from their working area. This resulted in problems and challenges for the daily operations, seriously hindering operational efficiency.

For the servicing of the entire forklift truck fleet with their corresponding batteries and chargers, the customer decided to outsource this task.

After intensive consultations, site visits of all locations and comparisons between the two energy types gas and electric in relation to TCO (Total Cost of Ownership), it became clear that electrification was the answer. However, to achieve the desired results it was also clear that this could only be achieved with a good battery management system and a decentralised relocation of the charging stations, locating them in closer proximity to the working area of the forklift trucks.

**Demanding environment**
in a multiple-shift operation

**Zero-emissions**
through the electrification of forklift truck range

**Five different locations**
situated across the country

**Reducing maintenance costs**
through good battery management

Dragos Lungu
Sales Director ELMAS S.R.L.

*"For this demanding case – presenting a new fleet concept to the customer – after considering overall costs along with reducing the environmental impact, in HOPPECKE we found the ideal solution".*

**Cost advantages**
through savings of investment and operating costs

**Extended battery lifetime**
through optimally charged batteries

**Increased operational safety**
due to good battery management

**Reduced environmental impact**
through optimising energy use

## 2 | Solution:

# Low energy costs with higher battery availability

**In response to these requirements, HOPPECKE and its exclusive and long-term partner, ELMAS S.R.L., recommended the implementation of the state-of the-art battery design trak | uplift air. Each of the forty-eight 80V batteries were installed with the most intelligent battery controller available on the market – HOPPECKE trak | collect.**

HOPPECKE's trak | air electrolyte circulation system prevents acid layering by means of air being blown into each cell during the charging process, thus eliminating the need for potentially time consuming weekend equalization charges.

The additional benefits are a sustainable reduction in energy and water consumption, as well as charging time, whilst at the same time reducing the number of replacement batteries required and generally extending the life of the battery.

The trak | collect measures the battery status in real time in order to improve operational safety and productivity. Through communicating with other devices such as the charger and PC, the trak | collect is able to convey detailed diagnostic data.

This data can be used to analyse the customers application and to make any necessary adjustments to the battery and charger setup, therefore ensuring the customer has the optimal energy system for his application.

Besides monitoring the battery, the trak | collect allows for temperature-controlled charging in combination with our efficient trak | charger HF premium charger, thereby charging the battery according to the battery temperature, helping to increase battery life.

By using HOPPECKE premium products and with the help of our intelligent battery controller trak | collect, the battery lifetime can be increased by up to 20%. Each time the service staff of our partner is at the customer site, the battery data can be transmitted easily to a laptop via a Bluetooth connection. Possible wrong operator handling can be detected at a glance and thus costly misuse of the batteries can be prevented. Furthermore, a quick service intervention is possible which aids in reducing downtime.

Through the combination of HOPPECKE's innovative premium products and the local and national service support given by ELMAS S.R.L., the customer has been able to not only improve his operational efficiency but has also been able to reduce his operating and maintenance costs, therefore reducing his total cost of ownership.

### Key Benefits

- Protection of investment through optimal battery operation and battery charging using HOPPECKE technology
- Extended battery life through systematic use and optimal utilization of the battery pool
- Precise adaptation to the needs of operational processes
- Increased productivity through optimised processes: no time lost due to travelling to a central charging station
- Increased vehicle availability
- Greater efficiency through increased transparency

## 3 | Products :

- **Batteries: trak** | uplift
- **Electrolyte circulation: trak** | air
- **Battery controller: trak** | collect
- **Chargers**: **trak** | charger HF premium
- **Service: trak** | optimizer

HOPPECKE
POWER FROM INNOVATION
Bontkirchener Straße 1, 59929 Brilon-Hoppecke, Germany
**Tel: +49 (0) 2963 61-475 | E-Mail: motivepower@hoppecke.com | www.hoppecke.com**

CASE STUDY