



Lithium-ion technology for the fleet

The need to make a change was obvious – at the Obertshausen plant, the logistics fleet consisted of a large number of vehicles with different drive concepts from various manufacturers. The plan was to standardize this in order to cut costs and reduce the maintenance requirements, while simultaneously ensuring that the fleet of the future would be sustainable. After consulting with employees, Feintool therefore decided to replace its previous fleet of diesel vehicles and forklifts powered by lead batteries – in the first phase, the company would equip 12 forklifts with lithium-ion technology. After that, it would also successively convert the hand pallet trucks. This was an important step towards implementing an internal electric mobility concept that is both environmentally friendly and easy to use, as well as cuts costs.

The main benefit of switching to li-ion batteries consists of 7 500 liters of diesel – this is how much three diesel vehicles consumed each year alone before reaching the end of their lifespan. In addition, this step also saved emissions that are generated when fuels are created and stored. By comparison,

the new forklift trucks' lithium-ion technology is completely carbon-free, generating zero emissions. Compared to lead-acid batteries, the new drive systems also stand out thanks to their higher energy density and increased effectiveness. This means that twice the amount of energy can be stored in the same space and up to 95 percent of the battery capacity can be used. Another major advantage relates to service life, as lithium-ion batteries can handle almost twice as many charging cycles as lead batteries – and the charging cycles themselves are significantly shorter. As a result, lithium-ion batteries are particularly suitable for vehicles that are often used in shift work – as is the case with forklift trucks, for example.

Around 100 of the total of 400 employees participated in training sessions to familiarize themselves with the software and charging technology. What do they think of the new equipment? Outstanding – users particularly appreciate the lower maintenance requirements and standardized operation of the now homogeneous forklift fleet. Furthermore, noise and exhaust fumes have also decreased.