Press release

Cooperation with Japanese coating specialist Techno Smart

Dürr expands market access in battery manufacturing technology

Bietigheim-Bissingen, September 28, 2020 – Lithium-ion batteries are a key technology in electromobility. In order to keep up with the growing demand for e-cars, investments are being made in battery factories worldwide. Dürr is positioning itself in this growth market as a supplier of production technology and is expanding its market access to battery manufacturers through a cooperation with Techno Smart, a leading Japanese manufacturer of coating systems. Thus, the Group covers all relevant technologies for coating electrodes for lithium-ion batteries.

In the future, producers of batteries for electric cars will in future receive complete packages from one supplier: state-of-the-art technology for coating and drying electrodes and proven systems for solvent recovery. The coating systems of the Japanese company Techno Smart are in high demand among battery manufacturers for electric cars. That is why Dürr is now bringing the coating specialists technology on board.

Dr. Jochen Weyrauch, Deputy CEO of the Dürr Systems AG: “This provides us with a convincing all-round package for major projects in the automotive sector.” In the medium term, the Group is aiming for a sales volume in the high double-digit million range in battery manufacturing technology business.

Market-leading Dürr technologies for battery manufacturing

With the acquisition of the US Company Megtec/Universal in 2018, Dürr expanded its portfolio by adding important competencies in battery manufacturing technology. With its coating, drying and solvent recovery systems, Dürr Megtec offers solutions for three essential steps in the production of lithium-ion batteries. Dürr Megtec is part of the Clean Technology Systems division.

In the coating process, anode or cathode active material is applied on both sides as a thin slurry onto a metal foil. The drying process then creates a solid composite material. Within the lithium-ion battery cell, the role of the active material is to store the energy, while the metal foil ensures the dissipation of current. Solvents used in the manufacturing process can be recovered for reusage with Dürr technologies.

Both sides of the metal foil are coated in one pass to provide an efficient process. Dürr Megtec developed a special coating process for simultaneous two-sided coating. Slot-dies are used to coat both sides of the electrode foil directly after one another and getting dried in a horizontal air flotation dryer afterwards. Benefits of this unique process are, among others, smaller overall manufacturing footprint and high cost efficiency.

With its simultaneous two-sided coating solution for battery electrodes, so far Dürr has been successful mainly in niche segments. For example, the company is benefiting from the growing demand for small-format lithium-ion batteries for hearing aids, headphones and other mobile electrical devices. In the first half of 2020, among others, a major contract was received from a battery manufacturer in Germany.

**Portfolio expanded to include solutions for the automotive sector**

However, the biggest growth driver in the market for battery manufacturing technology is electromobility. For the large amounts of electrodes required for e-car batteries, Techno Smart offers a highly efficient, proven and robust process. The slurry is applied on the first side by a slot die over a backing roller and becomes dry directly afterwards. After leaving the dryer in the first pass, the foil is turned and the second side is coated and dried following the same process.

“With our cooperation, we combine our market-leading drying and solvent recovery technologies with the proven coating solutions of Techno Smart for e-car batteries,” outlines Dr. Daniel Schmitt, CEO of Dürr’s Clean Technology Systems division. “That way, we create a unique portfolio in the market, where we can effectively support the development of battery manufacturing for e-mobility as an experienced partner of the automotive industry.”

**Broad spectrum for e-car production**

In general, the Dürr Group sees this business field as a great opportunity. In battery manufacturing technology, the portfolio includes not only solutions for coating but also gluing technology for battery modules and coolant filling systems for batteries. Moreover, Dürr is supplying painting, final assembly and testing systems for electric cars. With an order intake of just under € 400 million, production technology for electric cars already accounted for 22% of the order volume in the automotive business last year. For 2020, the growth trend is continuing, particularly due to the strong demand in China. Despite the corona crisis, Dürr was able to significantly increase incoming orders in the e-mobility business in the first half of the year.

**About Techno Smart**

Techno Smart has been building coating systems for a wide range of applications since the 1960s. The coating specialist launched solutions for coating lithium-ion battery cells from early 1990s and has already supplied its high-precision technology to major battery manufacturers in the Asian market. In 2019, the Japanese plant engineering company with around 250 employees achieved a turnover of € 130 million.

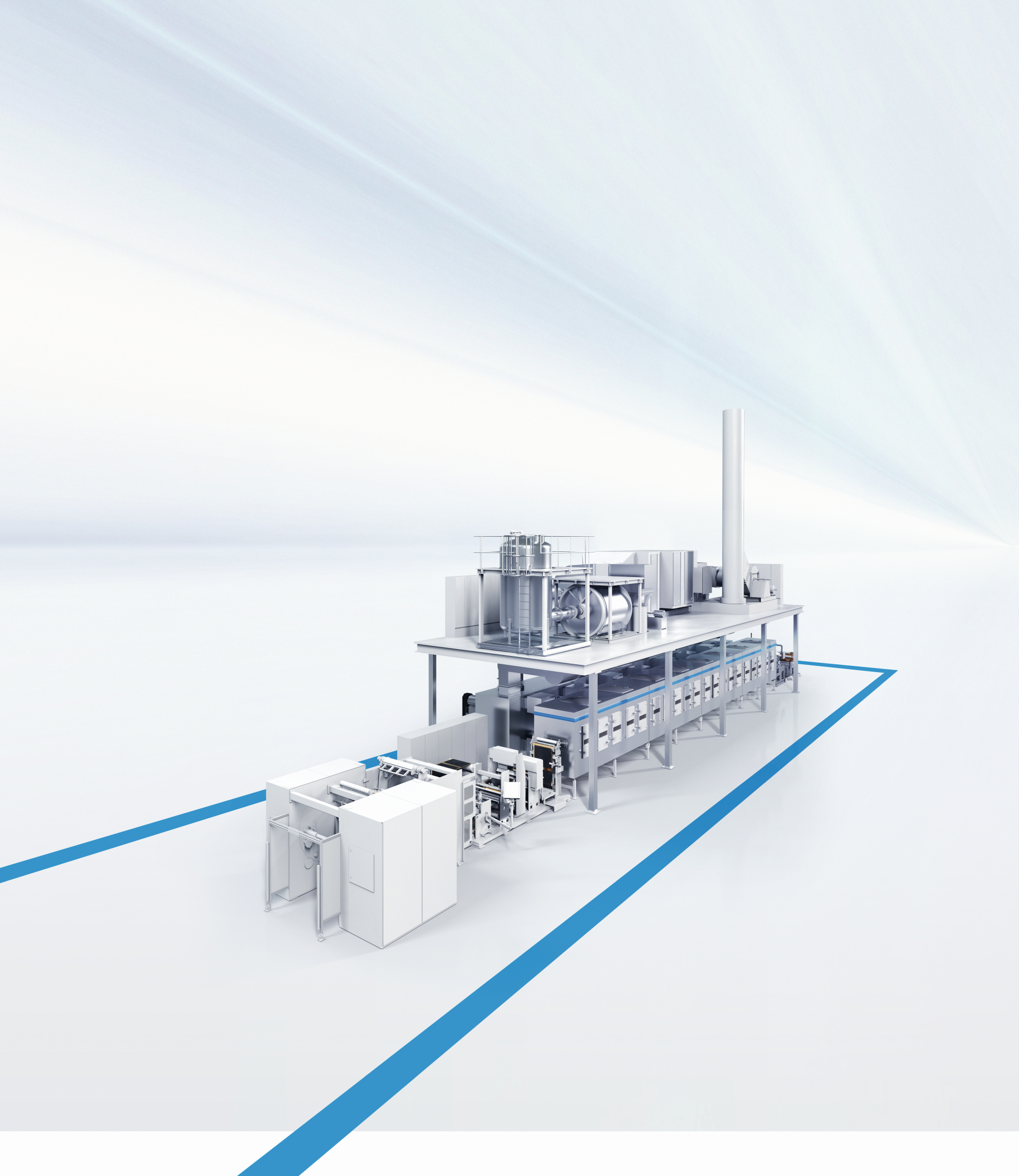


Figure 1: Producers of batteries for electric cars will in future receive complete packages from one supplier: state-of-the-art technology for coating and drying electrodes and proven systems for solvent recovery.



Figure 2: Dürr Megtec offers a system for the coating of lithium-ion electrodes in batteries. The technology is unique, in that the metal foil as base material is coated simultaneously with the anode/cathode material.

The Dürr Group is one of the world's leading mechanical and plant engineering firms with extensive expertise in automation and digitalization/Industry 4.0. Its products, systems and services enable highly efficient manufacturing processes in different industries. The Dürr Group supplies sectors like the automotive industry, mechanical engineering, chemical, pharmaceutical and woodworking industries. It generated sales of € 3.92 billion in 2019. The company has around 16,300 employees and 112 business locations in 34 countries. The Group operates in the market with the brands Dürr, Schenck and HOMAG and with five divisions:

* **Paint and Final Assembly Systems:** paint shops as well as final assembly, testing and filling technology for the automotive industry
* **Application Technology:** robot technologies for the automated application of paint, sealants and adhesives
* **Clean Technology Systems:** air pollution control, noise abatement systems and coating systems for battery electrodes
* **Measuring and Process Systems:** balancing equipment and diagnostic technology
* **Woodworking Machinery and Systems:** machinery and equipment for the woodworking industry

Contact

Dürr Systems AG

Kristin Roth

Marketing

Tel.: +49 7142 78-4854

E-Mail: [kristin.roth@durr.com](mailto:kristin.roth@durr.com)

[www.durr.com](http://www.durr.com)