

Siemens backs efficient digitalized large-scale production of batteries

- **Comprehensive solution portfolio of software, automation and drive technology spanning the entire value chain**
- **"Green field approach" for a competitive battery production**
- **Goal is ideally scalable factory for battery cell production**
- **Participation in upcoming important industry events for the battery industry**

Siemens facilitates the efficient large-scale production of batteries with a comprehensive solution portfolio of software-based systems as well as automation and drive technology spanning the entire value chain. The company will be presenting this portfolio at the upcoming important trade fairs Battery Japan, from February 28 - March 2, 2018 in Tokyo, Hannover Messe from April 23 - 27, 2018, CIBF from May 22 - 24 in Shenzhen, The Battery Show Europe from May 15 - 17, 2018 in Hannover, The Battery Show North America, from September 11 - 13, 2018 in Novi, Michigan, and InterBattery, from October 10 - 12, 2018 in Seoul. The Siemens portfolio ranging from production planning and engineering software to automation and drive technology, including industrial communication networks and cloud-based solutions, helps to optimize every step of battery production and thus improve the competitiveness of battery manufacturers.

"Today we already offer our customers in the battery industry solutions comprising software, automation and drives spanning the entire value chain. Thus as a technology partner Siemens plays a major role in shaping the strongly growing battery market with its holistic approach", explained Jan Mrosik, CEO of the Siemens Digital Factory Division.

At important upcoming industry events Siemens will present its "green field approach" for competitive battery production: This means digitally developing an ideally scalable factory for battery cell production that enables smart control and creates transparency of performance with regard to quality and costs. As a lever for these requirements, Siemens relies on the integration and digitization of the entire value chain. From designing the battery cell, to planning the production processes, to engineering, production and services. In this way the company wants to position itself as a preferred partner in current and future projects for battery production.

With a holistic approach, Siemens continuously develops solutions for the battery market and in addition to its global setup it has the required expertise in the main markets of China, Korea, Japan, USA and Germany. Siemens implements solutions that offer added value to both battery producers and machine and plant builders to make them more competitive, such as with energy efficiency and transparency in production or a toolbox for developing high-performance plants.

Background information:

Battery companies face the same challenges all over the world. They have to shorten their time to market, improve their flexibility, quality and efficiency, and review their business models, while at the same time taking appropriate security measures. To achieve a shorter time to market, mass production and upscaling/production expansions have to be implemented in an ever shorter time to cope with the steadily growing demand for batteries. To achieve higher flexibility, battery manufacturing companies have to take various customer wishes into account such as management of different recipes, traceability of materials used, or changing material compositions and cell formats. In addition to all this, the quality requirements of batteries increase as additional possible uses emerge, such as in electro-mobility or due to energy storage systems. Moreover the use of raw materials also needs to be reduced to gain higher efficiency. Battery manufacturers also have to review their business models for instance if automotive companies want to have newly developed cell chemistries manufactured by battery cell producers.



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For further information, refer to www.siemens.com/battery

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