Integrated **Service Solutions**

Individual Consulting

Our highly-qualified experts partner with customers throughout the entire production process, providing professional technical advice and bespoke solutions - goal oriented and competent.

Research & Development

Our Competence Centers form the link between lab and largescale production. In-depth preliminary tests can be carried out on versatile laboratory equipment - the driving force behind our technical progress.

Engineering & Design

For designing and developing specialty equipment for battery production we rely on an experienced team of around 200 engineers – with profound competence in mechanical, electrical, and controls design.

Fabrication & Assembly

We are your reliable advanced specialty equipment supplier with in-house fabrication, machining, and assembly.

Installation & Commissioning

Our team of experts is experienced in installing and commissioning production equipment for the clean energy sector, and capable of handling the most complex mass production line installations - worldwide.

After Sales Services

Comprehensive maintenance and field services, as well as spare parts and refurbishments – we have the highest technological and quality standards for ourselves and our services.



EN

Matthews International GmbH Gutenbergstraße 1-3 48691 Vreden | Germany T: +49 2564 12 0

> info@saueressig.com saueressig.com



OLBRICH GmbH Teutonenstraße 2-10 46395 Bocholt | Germany T: +49 2871 283 0

> info@olbrich.com olbrich.com

polytype//converting[®]

OLBRICH GmbH | Polytype Converting® Große Elbstraße 279 22767 Hamburg | Germany T: +49 40 2000 869 0

> info@polytype-converting.com polytype-converting.com

Follow us on: in **F** × O **D**



INTERNATIONAL[®] Matthews Engineering is part of Matthews Industrial Technologies, a (MATW) Matthews International company

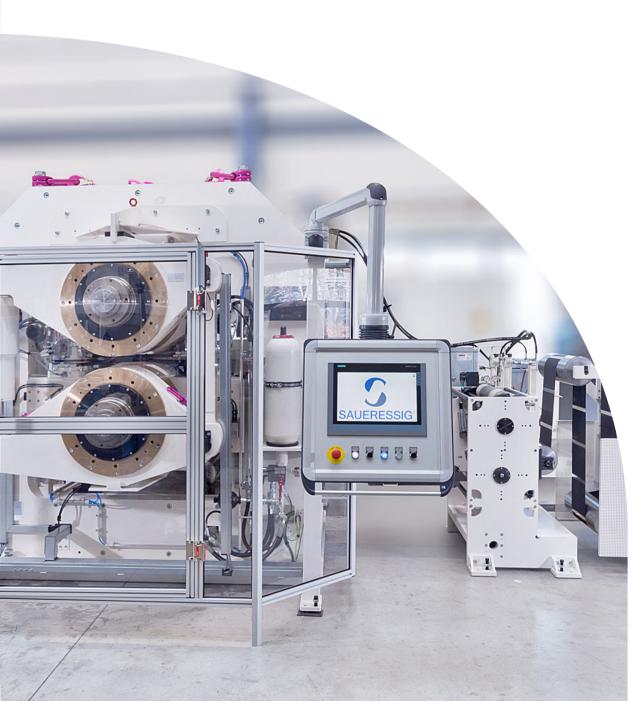




Turning ideas into powerful technologies

ENERGY STORAGE





Technologies full of innovative power

As a leading and innovative full-service provider of calender, embossing, and rotary processing systems in standard and custom designs, we have decades of experience in the energy and storage market. Our battery solutions include advanced specialized equipment to produce lithium-ion batteries and capacitors for stationary and mobile end-use applications. In the production lines, our published patents for the use of dry electrodes in the manufacture and reprocessing of batteries are applied.

We build machines for pioneers of tomorrow.



Battery Solutions – our Application Portfolio



Calenders for continuously coated electrodes meet the highest quality standards of the battery industry due to a high degree of automation and optional measuring and control equipment.

Intermittent Coated Electrodes



We offer patented and turn-key solutions for intermittently coated electrodes. A constant roll gap, even with dynamically changing compaction forces, and optionally expandable inspection systems ensure a consistent quality of the electrode

Dry Battery Electrode



Our multi-roll calenders allow for the production of dry electrodes. The innovative dry process technology enaoles powder processing and lamination of electrodes in only one production step.

Coating Lines



Our dry and wet process coating lines are tailored to he needs of our customers. We also offer separator film and battery wrapping lines.



Continuous Coated Electrodes



Our laboratory calender enables the mapping of scalable laboratory processes of the battery industry. The flexible vertical and horizontal usability of the calender allows for the processing of dry electrodes in addition to the processes of compressing, laminating and embossing.

> "We are dedicated to empowering the pioneers of tomorrow through the development and delivery of cutting-edge machinery and equipment, that are unique in the battery industry – worldwide."

Brandon Babe | Sr. Director, Engineering & Energy