



New calender successfully commissioned

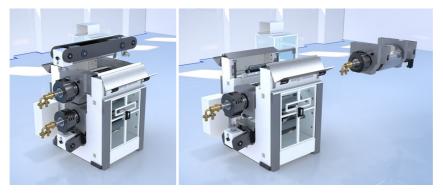
BREYER IONPressThe powerful and flexible calender for cell production.

Future mass production of battery cells will require a flexible calender concept in order to be able to produce economically and in a forward-looking manner. BREYER already started in 2010 with the construction of the first battery calender for cell processing. End of February 2023 the 2nd generation of the calender, **BREYER IONPress**, went into operation successfully.

Ready for mass production - Leap into series production

The new modular calender is designed for a speed of up to 100 m/min and has the option of **quickly exchanging rolls** as standard. A clever mechanism allows replacement within a few hours. In the record time of **less than 3 hours**, both rolls were removed and installed in the BREYER practical test and production readiness was restored.

The new system is **now available for customer** trials at BREYER.



For anode production, the calender can be set up in **tandem** in the line in order to recompact the electrodes in a second calendering step. If you want to remain flexible in order to be able to adapt your machine to future cell properties, choose the **hydraulic counterbending device**. This allows the deflection of the calender rolls to be adjusted variably. Each roll can be adjusted independently.

A particular advantage: The new **modular calender concept** allows the reverse bending function to be retrofitted. In addition, the system can be supplied with **automatic winding machines** (auto splice).



Extreme forces in constant use

The **enormous roll feed force** in connection with highly compressed special roll steel allows **line pressures of up to 4000 N/mm** and acts directly on the substrate surface without any detours. This gives you plenty of reserve to also achieve extreme compaction.

Each machine is equipped with the tried and tested, high-precision **BREYER** "fast & easy" gap setting. In this way, the electrode can be compacted very quickly to the desired target size. Depending on the requirement, you have the choice between force or gap control, which can be switched "on-the-fly".

Safety in the manufacturing process

The system can also be equipped with thickness control systems, inspection systems for quality assurance, track & trace for the precise allocation of production data, code readers for reading in data from previous processes, and marking printers.

Some benefits in brief

- Fast roll change
- Adjustable counterbend (optional)
- High line loads
- Extremely resilient roller steel
- Fast and precise gap adjustment
- Direct nip measurement
- Power flow acts directly on the coating



Take advantage now

from the advanced BREYER calender technology and expand your lead in the development of future generations of electrodes. Contact us: <u>Joachim Bormann</u>

Note important event:

Visit Battery Europe from May 23-25, 2023 in Stuttgart. You will find us at booth 8-F78. We look forward to you.

PREVIEW

Preview of our next newsletter

BREYER IONDry

Latest technology of dry coating



In our next newsletter you will learn more about the new future-oriented dry coating technology with BREYER IONDry.

Dry coating using extrusion technology or calendering offers new possibilities in cell production. The energy-intensive drying of the electrodes is no longer necessary. At the

