

New Technology Center Brochure

Updated information about the unique R&D facility

Brückner Maschinenbau has updated the „Unique Technology Center for Film Orientation“ brochure, presenting the current set-up of our equipment for manifold R&D film stretching features. Check out the latest information about:

Pilot Line



The pilot line was established in 1998 and is upgraded each year and tuned for new film types and applications. The proven LISIM® technology for simultaneous stretching as well as sequential biaxial or mono-axial stretching is used as a platform for our own developments as well as service for our customers.

Some recent highlights give an outline of our activities:

BSF EVAPORE® process

- Battery separator films with lower production cost
- Enhanced mechanical stability using UHMWPE blends
- Downgauging for high energy density lithium ion batteries

High filled synthetic paper

- Sequential stretching of PP with 65 % inorganic fillers
- Low density of 0.59 g/cm³ and high opacity
- Low production cost

BOPA cold-form blister film

- Simultaneous stretching with our LISIM® technology for good cold forming properties inside a BOPA/Aluminum Foil/PVC laminate
- Good mechanical and friction values

PA666 film

- Simultaneously stretched PA666
- Achieving high puncture resistance and good elongation of break

Capacitor film made of blends PP-C / COC

- Successful sequential stretching of PP-C / COC blends
- Effective downgauging to 6 µm with good shrinkage and roughness

In case of interest for trials you can directly send your request to Norbert Brunner, norbert.brunner@brueckner.com, +49-8662-63-9183.

Laboratory Extrusion



The new laboratory extruder consists mainly of one main extruder and two satellite extruders enabling the creation of up to 3-layer plastic films with optional MDO stretching. The twin screw extrusion with 56 D length gives good mixing and degassing function.

Further manufacturing of film samples is possible for later stretching tests either in sequential or simultaneous mode at our pilot line or on the KARO laboratory stretcher.

If you are interested in trials please contact Dr. Jan Barth, jan.barth@brueckner.com, +49 8662-639850.

Labstretcher Karo IV



A unique facility of our technology center is our KARO IV lab stretcher. In two high temperature chambers, film samples of 90 x 90 mm are heated up and stretched at temperatures up to 400°C. The lab stretcher is a compact tool for any basic analysis of stretching parameters and related film properties in a short time. This data can be implemented for pilot line or even production line operation.

For further information and reservations please contact Mr. Florian Sporer, florian.sporer@brueckner.com, +49-8662-63 9472.

Film and Chemical Laboratory



A well-equipped film and chemical laboratory is available for any analysis of film properties

- Mechanical properties
- Optical evaluations on film (e.g. laser scanning microscope, SEM)
- Electrical tests on films
- Special measurements such as gurley and pore size of battery separator films
- Resin examinations by, e.g., IR spectrometer, DSC etc.

For further information, please contact Dr. Martin Wolf, martin.wolf@brueckner.com, +49-8662-63-9548.