

A Member of Brückner Group

STRETCHING THE LIMITS





Helmut Huber Managing Director CSO

Angela Strigl Managing Director CFO

Michael Baumeister Managing Director CTO

Our strategy for your success High-end film for a better world

Protecting all kinds of goods and providing technical innovations for a sustainable life

For more than 60 years, our primary goal has been to make a decisive contribution to the success of our customers – film manufacturers all over the world – and to be a reliable and innovative partner for them. As such we use our worldwide experience and competence in order to build the most efficient high-tech lines for our customers.

In addition to striving for economic success, as a family business we are also traditionally aware of our social and ecological responsibility. In order to reconcile all of this, strategic foresight is required. We at Brückner Maschinenbau therefore regularly sharpen our long-term and medium-term orientation and define clear goals and ways to achieve them. Our mission for the future is: High-end film for a better world. We invite you to discover on the following pages how we plan to get there and what role the terms PLANET, PROSPERITY, PEOPLE and PIONEER play in this.

Enjoy browsing and reading.

Helmut Huber, Managing Director CSO Michael Baumeister, Managing Director CTO Angela Strigl, Managing Director CFO

Machines sold: more than **1,000** Line running time: oldest one more than **40 years**

Number of patents over 450



Average turnover **tripled** since 2000

Nominal output: up to

80,000 tonnes per year

Brückner Maschinenbau

"Stretching the Limits" as a core component to be prepared for future requirements

We as Brückner Maschinenbau are the world's leading supplier of production lines for manufacturing a wide range of high-end monoaxially and biaxially stretched films. These are used as finest packaging material or in high-tech applications, for example for electromobility, energy generation and storage or media technology.

To our core expertise, the stretching of plastics into high-quality films, we add many other services, such as feasibility studies, pre-development of end products, support with financing, import and export handling, close support throughout the project and the development of upgrades to maintain the investment in the long term.

In our family business, we combine social, ecological and economic responsibility and have been a reliable partner for our customers for over 60 years. Machines: in around **60 COUNTRIES** on all continents

1 St choice for customers worldwide

High-end film for a better world

A clear mission for the future

We are the pioneers in stretching plastic and its alternatives, stand for the realisation of the circular economy and are strong as a global team in a permanently changing world. We reconcile environmental and social responsibility with long-term profitability. Our mission for the future: **High-end film for a better world.** This leads to economic success. Thus, each aspect stands for an important partial vision of our actions and serves as the basis for the active involvement of each individual employee of Brückner Maschinenbau.

Vision

PLANET NEXT GENERATION EARTH...

PROSPERITY

GOOD FORTUNE FOR ALL ...

PEOPLE

INSPIRE CUSTOMERS AND EMPLOYEES...

PIONEER

MARKET LEADING TECHNOLOGY...

Stretching the limits

A clear promise to our customers

Mission

PLANET

... we are committed and work for sustainability and a circular economy!

PROSPERITY

... we work for the benefit of our customer, society and our company!

PEOPLE

.. we act with passion und high commitment!

PIONEER

... "stretching the limits" is our core essence!

For us, the focus is on the customers along the value chain, and we always seek to close ranks with them. In this way, we also equate our mission with the promise to our customers: Stretching the limits.

This is also reflected in the clear demands we make on our daily actions. Through our permanent drive for innovation, the passion of each individual and combined with our long-term highend technology, we realise the best solutions for each project.

Planet

NEXT GENERATION EARTH We are committed and work for sustainability and a circular economy!

The protection of nature through the responsible use of resources and products has been a central goal of our family-owned business since its beginnings.

Despite all the necessary developments for the rapidly evolving circular economy, Brückner Maschinenbau is also sticking to its traditional goals of further decreasing raw material use and ever lower energy consumption in film production.

With all the justified demands for recycling and reusability, the challenge of climate change and the reduction of the CO_2 footprint within the entire value chain must not be forgotten. This also includes, for example, the use of bio-polymers, the reduction of process steps and the avoidance of waste in all phases of production.

A central task of packaging is product protection – for safe transport, a long shelf life, and for hygiene. This is important because food waste – at harvest, during transport, in the shop, at the consumer – is high and causes 4.4 billion tonnes of CO_2 equivalent per year. Food waste should therefore always be avoided as much as possible! Our innovations and experience enable us to offer state-of-the-art technology and services to counteract this development and to actively limit this global problem along the value chain.

Food lost annually worldwide

1.3 billion tonnes

33% of the total production



20% of all meat products



35% of all fish and seafood

20% of all dairy products



45% of fruit and vegetable harvest



22% of all oilseeds and legumes



30% of all grain products

BRUCKNER MASCHINENBAU LITHIUM-ION BATTERIES

SEPARATOR FILMS FOR

With the shift in traffic towards e-mobility and alternative drives, our various stretching technologies offer unrivalled production efficiency and consistently high film quality for the production of high-quality battery separator films or ultra-thin high-tech capacitor films. In this way, we make an active contribution for future generations.





Resource conservation

Saving of raw materials and energy in film & packaging production!

Climate protection is first and foremost about reducing energy consumption and the emission of harmful greenhouse gases. Since 2000, we at Brückner Maschinenbau have reduced the energy consumption of our film stretching lines by around 30 percent. And we remain ambitious: we are constantly optimising our proven measures – always available as retrofits for existing lines. In addition to saving energy, the efficient use of raw materials is also a key factor for us. These are increasingly becoming a limited or expensive commodity. We work every day to make the best possible use of resources and to keep waste to a minimum. For example, edge trims and production waste are fed back into the extruder via an internal circuit.

Brückner Maschinenbau has for years accorded high and equally appropriate importance to the topic of sustainability in production.

Circular economy & recycling

100% mono material – best recyclability – minimal impact on the environment

Brückner Maschinenbau has developed mono-material packaging solutions together with raw material manufacturers, film producers, converters and brand manufacturers in order to close the cycle of plastic packaging. These coated and uncoated mono-material films with excellent mechanical and optical properties can replace previous multi-layer films made of different materials.

They are ideal for use in new packaging that is as pure as possible and guarantee good sortability in waste separation as well as the best recyclability. In addition to the proven materials BOPP and BOPET, BOPE opens up a new possibility.



More about our BOPE technology



Recyclability is a main topic for Brückner's film development



COR-Cycle Packaging Processing Constitution Constituti

We see very good opportunities in mono-material structures based on polyester, polypropylene and polyethylene.

Additionally we are working on solutions to be able to recognise, sort and recycle such film structures.

Michael Baumeister, Managing Director CTO

Prosperity

GOOD FORTUNE FOR ALL – we work for the benefit of our customer, society and our company!

Brückner Maschinenbau draws its strength not only from itself as a technology and market leader, but can also rely on the strength of a family-owned corporate structure. This creates reliable stability and contributes to the long-term success of our customers and ourselves.

Helmut Huber, Managing Director CSO

We combine a drive for innovation and engineering skills with overlapping market knowledge – for ever better solutions for global customers throughout the value chain. Our decisions are based on economic considerations, as long-term economic success is crucial for the continuity of an independent family business. Through our long-standing ties with our customers and partners and our social responsibility, our economic success benefits everyone.



Since our founding, we have had a clear goal in mind by helping film manufacturers worldwide optimise their business with:

- Shortest time-to-market, highest line performance from day one and highest film quality
- Lowest energy and resource consumption
- Innovations in process and product through excessive research & development

We supply state-of-the-art technology for film stretching lines of the highest quality and offer an individual, efficient and personal service. In this way, we ensure growth, security and the monetary return of our customers.



The cooperation with Brückner is characterised by pioneering spirit, fairness, willingness to perform, long-term success. We meet each other at eye level. We take responsibility to get things moving.

Global competition is our home. We think and act globally. For our customers, we and our partners are available around the globe at all times.

We inspire our customers with the high quality of our products and services. This claim is reflected in our behaviour, our skills and our expertise. We fulfill our promises and solve our customers' problems. Every single one of us makes the difference. In our many years in this demanding business, we had never experienced having good film on winder within one day.
Thanks to our team and the Brückner specialists for such a fantastic effectiveness.

Mr. Chen Liang, President, Changzhou Senior

It was a tremendous line start: In no time we have been able to produce saleable film with incredible winding quality. And just as quickly we then reached high production speeds – what else could you want?

Erik Sosa, Technical Director, Oben Holding Group



People

INSPIRE CUSTOMERS AND EMPLOYEES We act with passion and commitment.

A decisive factor for the success of our family-owned business are our highly qualified employees. Many of them have been with us for more than 30 and 40 years.

Our business organisation and our corporate culture provides scope for independent thinking and action. Individual knowledge, creativity, the courage to come up with unconventional ideas and many years of practical experience enable joint decisions based on teamwork – such as on important future topics like e-mobility, intelligent packaging, sustainability in film production and the circular economy.

Our long-standing customers trust in the performance of our products – we trust in the motivation and innovative strength of our employees.

Angela Strigl, Managing Director CFO

Passion to the core A very special spirit

We are high skilled experts and professionals and we love what we do. This enthusiasm drives us, never lets us be satisfied with the existing and, if necessary, carries us the extra mile for our customers and ourselves.





We value diversity among our staff, promote inclusion and place great importance on equality among ourselves. The mix of long-standing, experienced experts and young motivated professionals alone creates a constantly inspiring basis for cooperation. In this way, we have been able to grow steadily and healthily over the last few years without neglecting the quality of our service to our customers.

This is not least characterised by our overarching team spirit. In addition to work, we also respect and value spending time together in other ways: whether at joint running, mountain biking or climbing groups, social events such as summer festivals or after-work beers on the construction site.



We provide for our employees a modern working environment, the possibility of home office, with flexible hours. For working parents we have our lovely crèche and kindergarten in the centre of our campus. In addition, an extensive range of further training opportunities and the chance to work abroad provide a solid basis for personal development. This is not least one of the reasons why our long-standing colleagues have been so happy to stay in the Brückner family.

Pioneer

MARKET LEADING TECHNOLOGY "Stretching the limits" is our core essence!

Future up to 90,000t p.a. BOPP line

2019 **60,000t p.a.** BOPP line Thailand

1995 **30,000t p.a.** BOPP line USA

1987 **16,000t p.a.** BOPP line Taiwan

1974 **7,000t p.a.** BOPP line Italy

1967 **3,000t p.a.** BOPP line Japan For us at Brückner Maschinenbau, continuity and change through lifelong learning belong together. With the necessary expertise, trust, respect and fairness, we thus strengthen our technological development as well as our personal relationships.

> Since the foundation of our company, we have developed into the leading specialist in the field of film stretching thanks to extensive research and development work and can now look back on over 60 years of experience.



We make a positive contribution to global megatrends such as the circular economy, climate change and energy demand.

For example, we are developing packaging films that are becoming thinner and thinner on the one hand, but retain their protective function on the other.

Michael Baumeister, Managing Director CTO





We see each individual project as a new exciting task and work together as a team to achieve the best possible result. Because talent wins in the short run, but teamwork and intelligence win in the long term.

> Thus, we continue to see our film stretching lines as our core business, we are available to advise on project initiation, e.g. feasibility studies and financing solutions, we are absolute specialists for engineering, installation and commissioning of BO lines and we drive process and machine technology developments forward on a daily basis.

> In doing so, we can draw on a technology centre that is unique in the world. Our Siegsdorf site offers an extensive R&D environment with pilot plant, laboratory stretching frame, laboratory extrusion, chemistry & film laboratory and Innovation Test Centre. Only a few steps away from each other, almost unlimited possibilities open up for new research and development projects.





Pilot line

Laboratory stretching frame

Laboratory extrusion

Pilot line

The highlight of Brückner Maschinenbau's technology centre is the pilot line, which is unique in the world. Numerous types of film with up to seven layers can be produced on it in all stretching modes: BOPP, BOPET, BOPA, BOPE, BOPLA, MOPET-G, MOPS...

Chemical & film laboratory

We and our customers have access to a state-ofthe-art chemistry and film laboratory for the analysis of films, raw materials and components. In addition to comprehensive in-house research, our experienced laboratory specialists also train customers in training sessions on site or in Siegsdorf.

Laboratory stretching frame

With our laboratory stretch frame "KARO® 5.0" for mono- and biaxial stretching, films can be tested in a very simple and economical way - both in sequential and simultaneous stretching mode.

Laboratory extrusion

For the perfect recipe and the development of new types of film, we use our own laboratory extrusion, equipped with various components, e.g. for the basic development of battery separator films.

Innovation Test Centre

In addition to R&D for the perfect film, we also extensively test our system components and continuously optimise our machine elements. Whether it's a high-speed transport system test stand, an oven test field or a roller test stand: the Innovation Test Centre leaves none of the components that are crucial for perfect film production untested, thus ensuring quality "Made in Germany".



The best way of predicting the future is shaping it

Driven by innovation, we develop solutions for the markets of today and tomorrow. Constantly increasing speeds and outputs with growing quality demands make the operation of modern film stretching lines a highly complex matter.

To this end, Brückner developed a completely new operating concept for the line operation at a very early stage – Easy Operation (EOP). It is a completely new integrated operating concept and part of the brand-new digitalisation solution **"Brückner ONE"**. In contrast to the usual systems, the new operating concept has far-reaching advantages:

- Better overall equipment effectiveness
- Reduction of breakdowns
 - Easier handling of the equipment
- Better asset management
- Predictive maintenance

We are used to work in cooperations. Espacially with our customers but also along the whole value chain, which is the key to finding solutions for a sustainable future.



R-Cycle

PrintCYC is an initiative for the recycling of printed films. The project group has achieved remarkable results with regard to the mechanical recycling of printed plastic films and the further processing of recyclates from printed plastic films.

R-Cycle is a cross-industry consortium working on an open and globally applicable traceability standard that ensures recycling, based on the complete documentation of recyclable packaging along the value chain. To retrieve the stored information, a mark – for example a QR or digital watermark code – is applied to the packaging.

High-end film for a better world

Clear for the future

The world is on the threshold of change. Old patterns and habits need to be critically questioned and some need to be discarded. As competent solution provider, we also see ourselves under an obligation!

> For our next generation earth we are committed and work for sustainability and a circular economy!

For good fortune for all we work for the benefit of our customer, the society and our company!

With our pioneering mindset "stretching the limits", we realise the ideas for tomorrow. With passion and high skills we want to inspire customers, the value chain and employees with new solutions and opportunities.

Worldwide presence

We know the local and regional situation

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We are ensuring holistic and integrative services for the entire film stretching community to securing sustainable production at highest availability."





A Member of Brückner Group



Tobias Fuchs Managing Director/CFO

Markus Gschwandtner Managing Director/CEO

Serving your success

We ensure the maximum availability of your production line – along the entire life cycle

While you focus on the profitable and sustainable film production, we make sure your equipment & processes are available – 24/7 throughout the life span of your production line.

A fast and competent service for you is guaranteed by the extra mile our local teams walk, close to your production base. Your needs to smoothly operate the film production line all day and night are also supported by our experts remotely. Your daily challenges to enter new markets, reduce the resource consumption, enhance the film quality and ensure the overall efficiency are our key drivers. Gaining from the unique developments performed by our sister company Brückner Maschinenbau, we offer a vast range of upgrades for your production line along the entire life cycle.

Your quests to get conveniently a reliable and quick supply of spare parts, competent refurbishment of key components or easy access to maintenance plans and instructions are vital to optimize our service packages. Supported by our unique Brückner ONE digital service platform – your teams get important information at any time, at any place, using any digital device at their fingertips.





We are convinced that lasting success is based on excellent products as well as fair dealings with employees and business partners. Furthermore, we see ecology and social issues as a prerequisite for long-term economic success – and not as a contradiction.

Dr. Axel von Wiedersperg, CEO Brückner Group GmbH

BRUCKNER GROUP





Dr. Axel von Wiedersperg Managing Director/CEO Maximilian Schneider Managing Director/CFO

We are the Brückner Group

Long-term thinking - the key to success

The Brückner Group has been family-owned since it was founded in 1960. This has shaped the group to the present day and is reflected in particular in its long-term strategic orientation – a significant success factor for our customers and ourselves in the past and for the future.

The Brückner Group members are market and technology leaders for machines, systems and services in their global niche markets. But we are also more than that: we provide solutions that make our customers successful. Brückner Maschinenbau, Brückner Servtec, Kiefel and PackSys Global form the foundations of the group. While exploiting their advantages, such as a strong worldwide presence, the transfer of technological expertise and their leading position in a globalised world, they act independently and can concentrate on their specific markets. This allows each company to focus on meeting its customers' individual requirements and on delivering complete customer satisfaction.

The group has more than 2,900 employees and over 21 locations in 14 countries worldwide. It is led by the strategic management holding, Brückner Group GmbH. Brückner Group GmbH defines the group-wide long-term strategy and provides the individual companies with a strategic direction. It is also responsible for group merger and acquisition

Strategic management hold	
Brückner Kiefel	Brückner
Service Technologies	Maschinenbau

activities. Besides setting standards and guidelines in order to ensure transparency and compliance, the management holding supports group members by providing a variety of central services as well as expertise in a number of specialist areas.

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