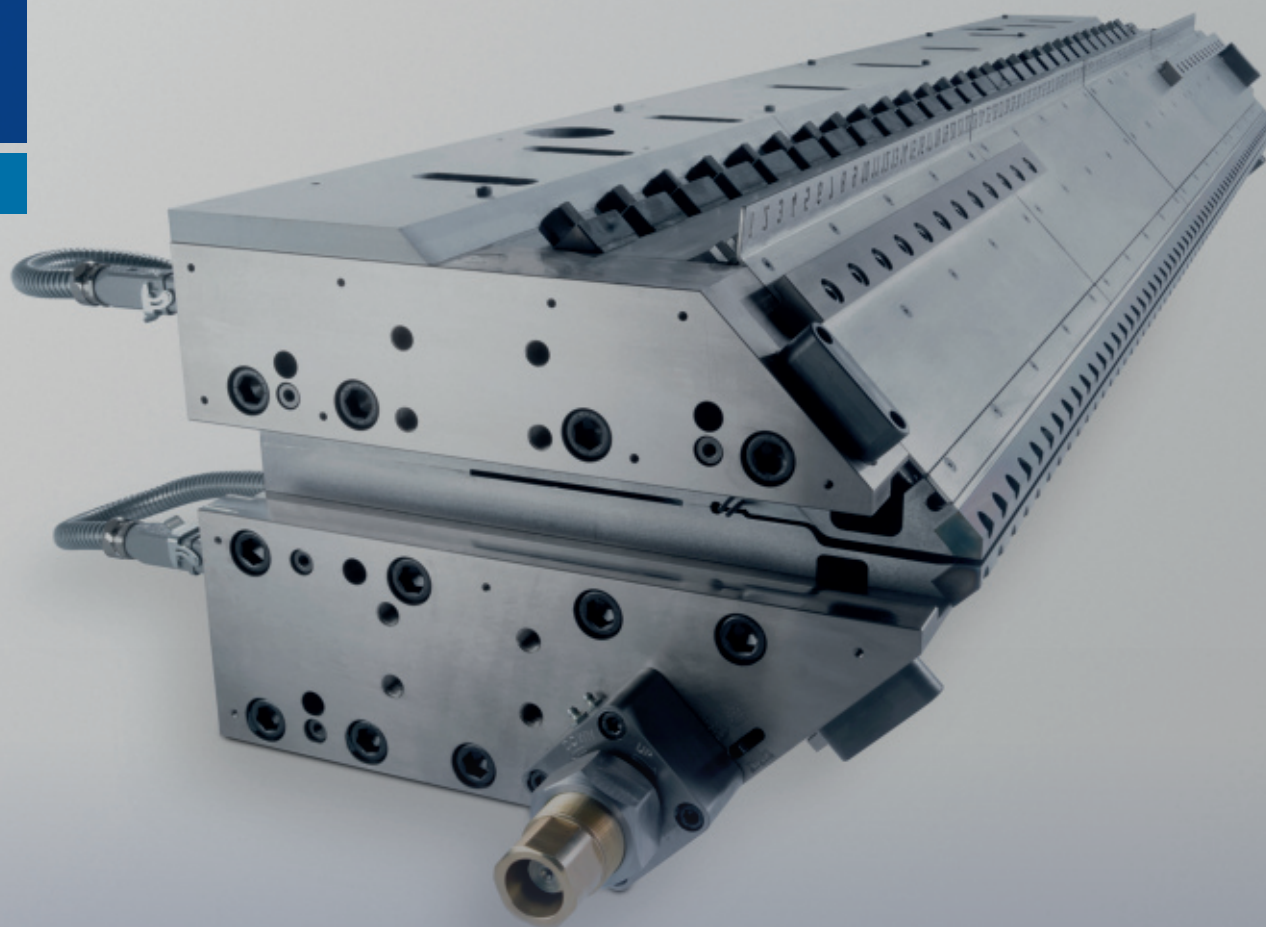




Reifenhäuser

EXTRUSION SYSTEMS

The Extrusioners



FLAT DIES & COEXTRUSION ADAPTERS

Tailored Solutions for Your Production.

**OFF-THE-SHELF COMPONENTS
ONLY DELIVER
OFF-THE-SHELF QUALITY**

If you are not achieving the quality you want with your production line, it may be because the die you are using is not aligned to the raw materials and production parameters. The right die and coextrusion adapter will help you quickly and easily achieve the quality and productivity that sets you apart from the competition on the market.

Reifenhäuser Extrusion Systems

TAILOR-MADE IS OUR STANDARD

No producer should leave business success behind just because line components are not aligned optimally with production goals. We therefore offer customized components at the price of standard solutions that are compatible with all line manufacturers and quickly pay for themselves. Benefit from our decades of experience, our process know-how from the Reifenhäuser Group, our own production processes, the direct contact between engineers, and solutions that have stood the test of time.

- › 30 years of **experience** in die manufacturing
- › State-of-the-art machinery for **high-precision manufacturing**
- › **Excellent development competence** for highly automated functions
- › **Understanding** of the overall process



WE ARE THE IDEAL PARTNER FOR YOU IF YOU:

want to be
known for
top quality.

want to secure
a profitable
production.

want to reduce
expenses for
maintenance.

want to
produce stress-
free - despite
frequent product
changes.

PAM CONVENIENCE YOU WILL NEVER WANT TO MISS AGAIN

Do you know those features that make you wonder how you ever got along without them once you get to know them? PAM has a good chance of becoming such a feature for you. That's because PAM makes your production life so much easier. No more wasting time and money. No more searching for the best setting. Never again put up with fluctuating quality. No more frustration over long product changeover times. No more worrying about high energy costs. As you can see, PAM is a convenience that also pays off for you economically.

Convenience Features That Pay Off



Automatic product changeovers ensure reproducible quality, making you a sought-after supplier.

PAM Dies

The mechatronic, reproducible die adjustment minimizes your product changeover times so that you improve your OEE.

Automatic die settings reduce waste, so you produce more sustainably and save on material costs.

Operation without thermal expansion bolts reduces your energy consumption, so you can face rising energy costs with peace of mind.

Operatorless adjustments reduce user errors, so that line availability and work safety increase.

PRECISE. AUTONOMOUS. MECHATRONIC.

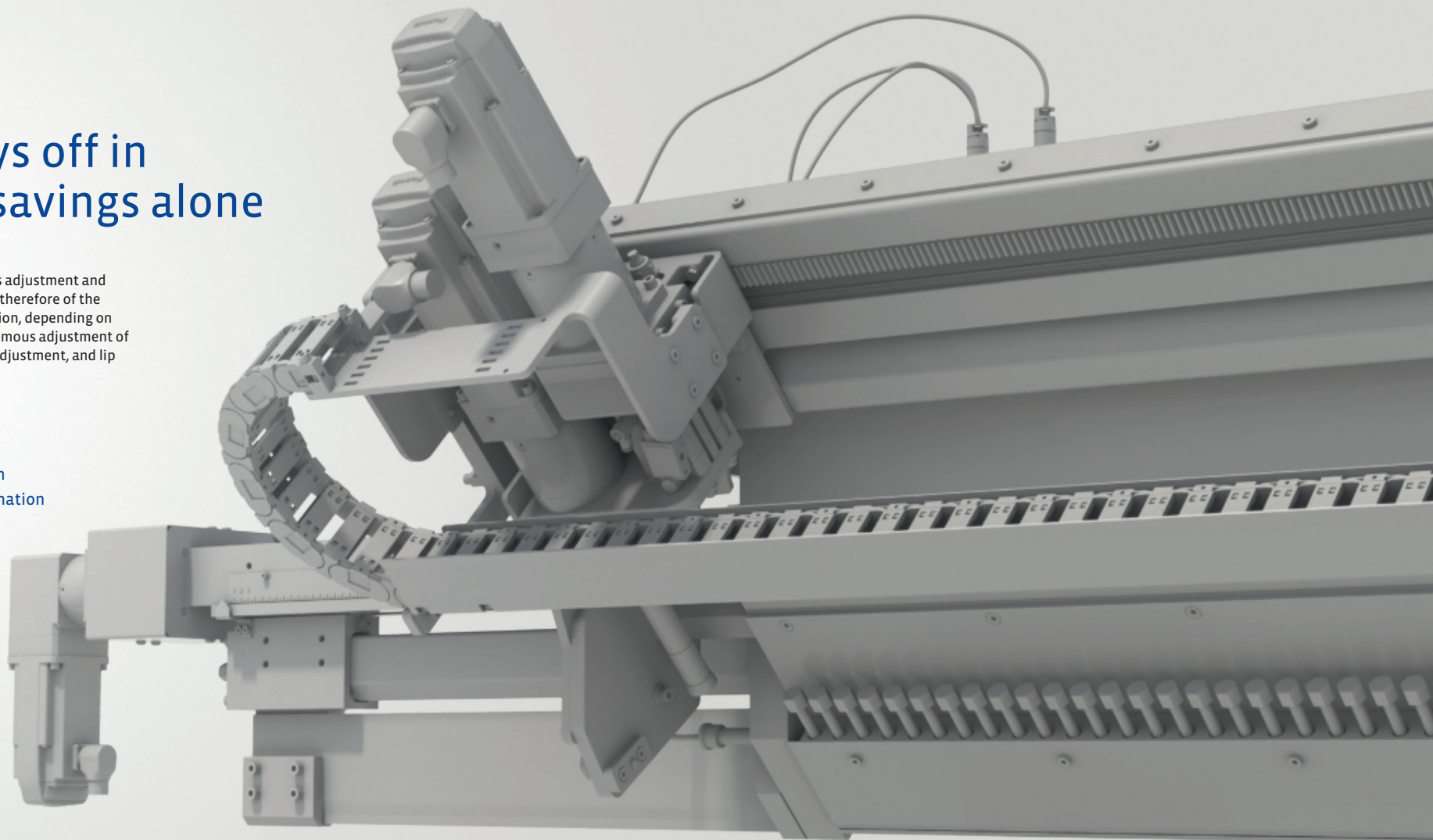


PAM pays off in energy savings alone

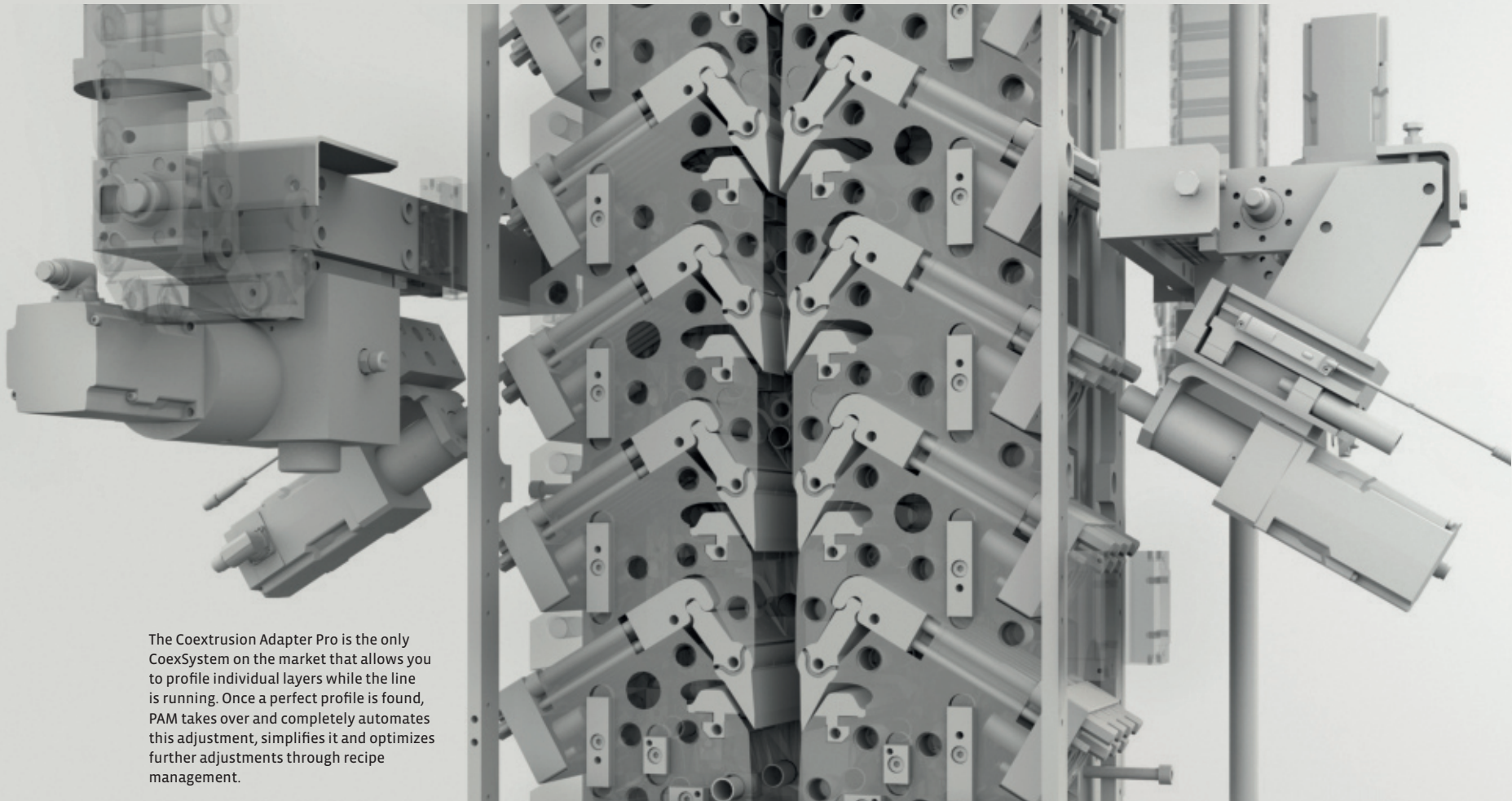
PAM enables autonomous adjustment and control of the flex lip and therefore of the thickness profile. In addition, depending on the configuration, autonomous adjustment of the restrictor bar, width adjustment, and lip opening can be achieved.



Scan
to watch
the animation



PRECISE. AUTONOMOUS. MECHATRONIC.



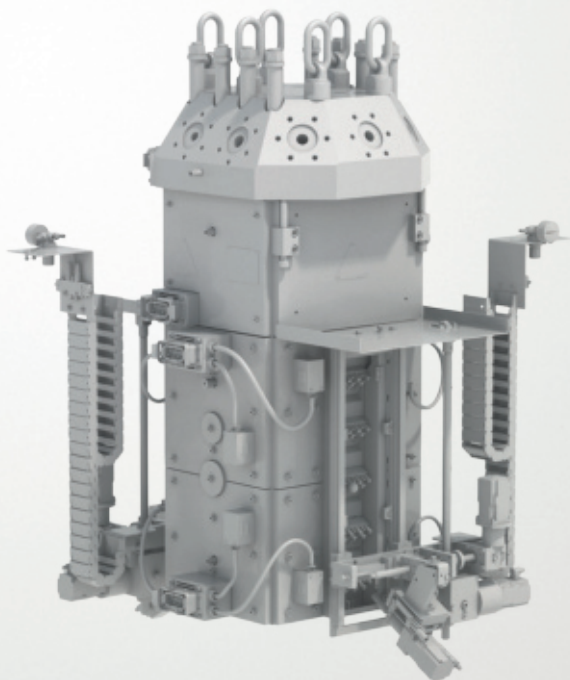
The Coextrusion Adapter Pro is the only CoexSystem on the market that allows you to profile individual layers while the line is running. Once a perfect profile is found, PAM takes over and completely automates this adjustment, simplifies it and optimizes further adjustments through recipe management.



Scan
to watch
the animation

PAM Coextrusion Adapters

Convenient Features That Pay Off



Recipe memory for quick adjustment while the line is running. This increases your good production and makes you less dependent on the qualifications of individual line operators.

Contactless adjustment while the system is running. This offers operators a higher level of work safety.

Optimized layer distribution for reduced scrap and material usage, to increase your margin.

Automatic profiler control to minimize setup and changeover times, and that improve your efficiency.

Digital fingerprint for traceability of setting parameters to make it easier for you to provide documentary proof to your customers.

PAM

PRECISE. AUTONOMOUS. MECHATRONIC

Higher Productivity

+180
t/a

With the PAM option, you produce significantly more barrier film per year because you can adjust both the die and the coex system on the fly.

-70%
Savings

Save the investment for a new die. We refurbish any type of flat die – regardless of the manufacturer.

Best Hot Part

With perfectly matched components from extruder to die, we deliver the best hot part on the market.





We understand the overall process because we benefit from the know-how of the large network within the Reifenhäuser Group.

1,500

EMPLOYEES 2025



**We Manufacture
All Core
Components
In-House.**

130,510
kwh/a*

Energy Savings

By switching from thermal expansion bolt technology to PAM, you protect the environment and save money. *Example based on a 3000mm wide cast film die.



78%

**Faster
With PAM**

when changing the width of a cast application with internal width adjustment

PERFECT SHAPING FOR HIGH PRODUCT QUALITY

As experts in complex production processes, we know that the quality of flat dies has a critical impact on the quality of the end product. So, only a custom solution is the perfect solution. Today, you benefit from the technical innovations that have brought about individual developments.



**High
Performance**

Various Designs

You decide whether we design your die as a mono die or – for maximum precision in coextrusion – as a die with multiple manifolds.

High Productivity

Our dies are always tailor-made to your individual requirements. They do what they are supposed to do, always to maximum efficiency – for maximum productivity.

Wide Range

You choose your flat dies from variants optimized for different applications – all available with slot widths from 50 millimeters to 8 meters.

Rapid Die Lip Gap Adjustment

A central adjustment unit changes the die lip gap to obtain the best setting even while production is running.

Rapid Flex:

Second lower flexible lip with central adjustment and opening range of ± 2.5 mm.

Rapid Slide:

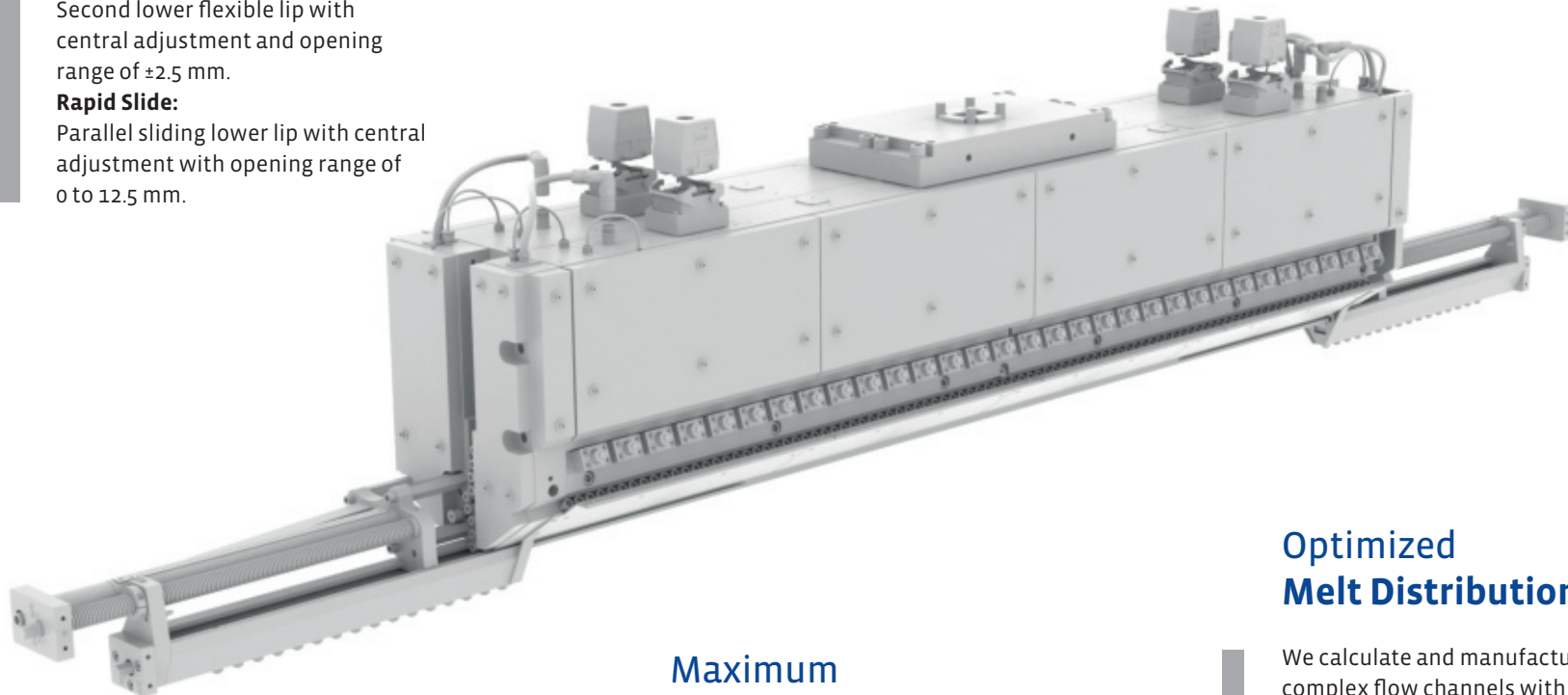
Parallel sliding lower lip with central adjustment with opening range of 0 to 12.5 mm.

Replaceable Die Lip Inserts

Lip inserts can be quickly replaced by a new identical set, or by lip inserts made from other materials or coatings. This raises flexibility in production.



Special Features



Production Quality

Maximum Uptime

High-grade steel and the skilled craftsmanship of our specialists guarantee reliable production processes with maximum service life.

Optimized Melt Distribution

We calculate and manufacture complex flow channels with optimized flow characteristics to achieve perfect product quality. We use state-of-art 3D simulation and design technology, software-supported polymer flow calculation, 5-axis machining, and the hands of our specialists.



Scan
QR-Code
and learn more!



Portfolio

FLAT DIES

We optimize our flat dies for each application. All models are linked by well-designed handling, simple maintenance, high product quality, and a wide selection of different coatings.



Scan
for data sheet

THERMOFORMING SHEET

For thicker films up to 6 mm

High product quality through the combined use of restrictor bars and manual or automatic lip adjustment - added as an option to any die design.

Quick product change through centrally adjustable die openings and various width adjustment options.

Optional such as die lip heating and cooling, heated side plates, insulation and more.

Typical raw materials:

PP, PET, PA, PLA, PS, EVOH, HV, TPO, TPE, and others



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for data sheet

CAST FILM

For mono and multilayer films ranging from 15 to 350 µm

Extremely fine profile control by manual or automatic flex lip adjustment.

Optimized positioning of flat die to casting roll also possible with external width adjustment

Edge encapsulation within the die to save raw materials are also available.

Typical raw materials:

PP homo, PP copo, PET, LDPE, LLDPE, HDPE, PA6, EVOH, EVA, TPU, PLA, and others



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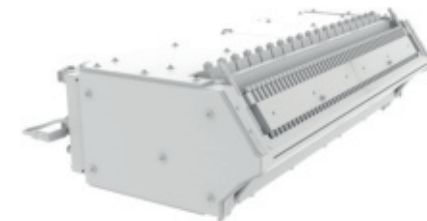
SHEET

For compact and foamed sheets

Removable and/or sliding lower lip and replaceable upper lip for wide die gap opening range for versions with restrictor bar in various executions.

Typical raw materials:

PP, PET, PA, PLA, PS, ABS, PMMA, PC, PVC, and others





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for data sheet

TAPES

For film tapes

Versatile design due to replaceable lip which is smooth on one side and optionally grooved on the other side, depending on customer specifications.

Version with manual and automatic flex lip adjustment by means of thermo-extension bolts.

Typical raw materials:
PP, HDPE, LDPE, PLA, and others



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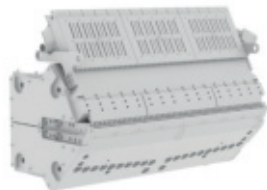
BIAXIAL FILM

Single or multi-channel dies for biaxially oriented films

Long service life due to a lip design that is optimized in terms of material selection and shape.

Outstanding end product quality due to high-precision manufactured plane-parallel and flat surfaces at the die lip outlet zone.

Typical raw materials:
BOPP, BOPET, BOPE or BOPA



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COATING

For extrusion coating

Precise, fast adjustment of product widths using a combination of external and internal width adjustment.

Reduce the edge bead with separately adjustable deckling blades within the internal deckling system.

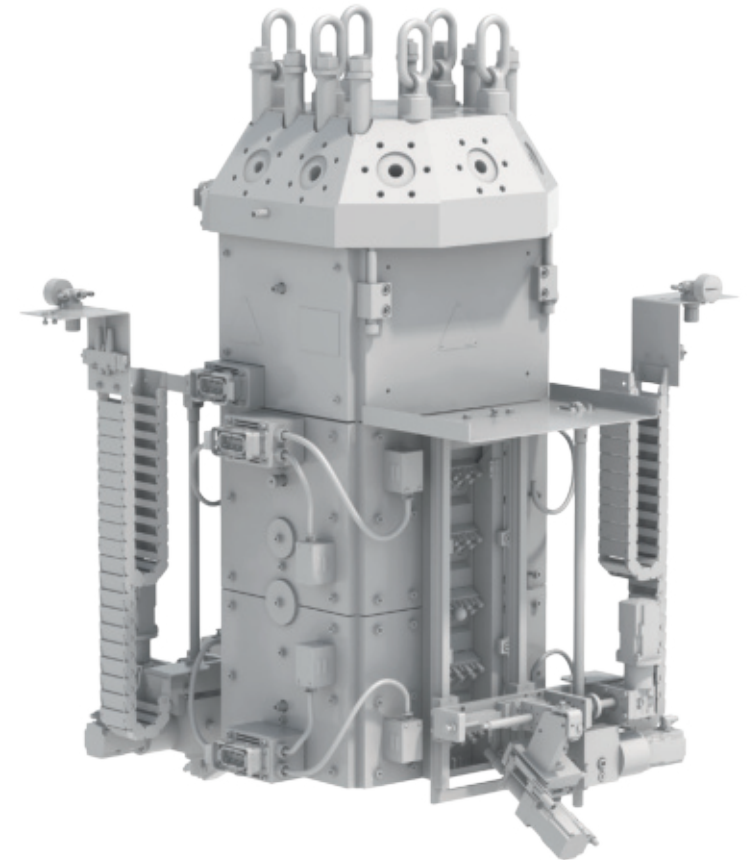
Typical raw materials:
PP, PET, PA, PLA, PS, EVOH, HV, TPO, TPE, and others





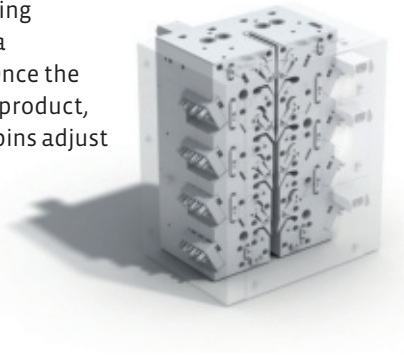
PRODUCING MULTILAYER FILMS WITH MINIMUM TOLERANCES

Are you one of those producers who lose money because you overlook the importance of single-layer tolerances? Every deviation from the ideal layer thickness unnecessarily increases your manufacturing costs. We have developed coextrusion adapters to give you precise control over raw material consumption, avoid waste, and increase profit margins.



100 % Reproducible Results

Once perfect, always perfect. Achieving consistent quality is effortless with a Reifenhäuser coextrusion adapter. Once the optimum settings are adjusted for a product, they are totally reproducible. Index pins adjust the settings of individual profilers.



High-Precision Single-Layer Profiling

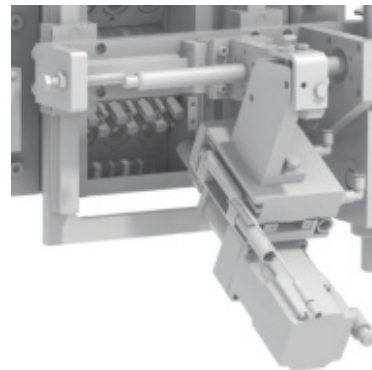
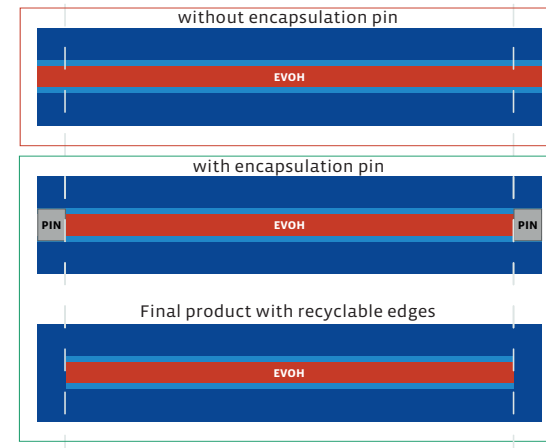
Save raw materials with minimum single-layer tolerances. Reifenhäuser coextrusion adapters allow you to profile individual layers precisely, including the core layer.



Outer layer (low viscosity)
Core layer
Inner layer (high viscosity)

Edge Encapsulation of Middle Layers

Filter our expensive raw materials, such as EVOH, from the edge trim of the film by mounting exchangeable inserts in your coextrusion adapter and replacing the raw material there with lower-cost material. This reduces manufacturing costs and makes edge trim fully recyclable at the same time. A regenerative extruder recycles trim directly.



On-The-Flight Product Changeover

Change layer profiles and layer thicknesses during production and significantly reduce changeover times by adjusting individual profilers or adjusting through central bolt.



Scan
for data sheet

Portfolio

COEXTRUSION ADAPTERS

If you are looking for cost efficiency as well as quality for your multilayer film production line, it's worth your while to take a closer look at our coextrusion adapters. In fact, our solutions enhance film function and minimize the use of raw materials because you can specifically adjust each single layer. This makes sustainable production of multilayer films child's play for you.

COEXTRUSION ADAPTER FIX

Produces comparable multilayer products on the same line.

- High reliability
- Easy to handle
- Compact size

Number of Layers: 3 - 5

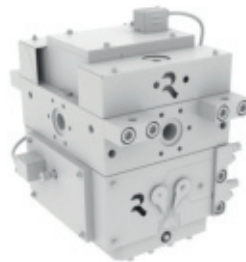


COEXTRUSION ADAPTER FLEX

For requirements involving multilayer composites with complex rheology and special emphasis on the quality of layer thickness distribution.

- Correct layer thicknesses on the fly, including middle layer
- automatic fine-tuning of shear velocity during production.
- High layer accuracy
- Changeable layer structure

Number of layers 2 – 5



COEXTRUSION ADAPTER PRO

The premium solution for demanding multilayer structures.

- Extruder connecting unit configured to your requirements
- Correct layer thicknesses on the fly, including middle layer
- Reproduce settings at any time
- Available with IE option and PAM option

Number of Layers: 3 - 11



Option 1: IE

The IE option gives you all the advantages of the Pro coextrusion adapter including edge encapsulation of the core layers in the feedblock. In addition, you benefit from encapsulation without an edge encapsulation extruder:

- more space
- less energy
- easier line operation

Option 2: PAM

With the PAM option, your coextrusion adapter works precisely, autonomously, and mechatronically.

A photograph of three men in a factory setting. On the left, an older man with glasses and a dark suit jacket over a light blue shirt is smiling and looking at a large, complex metal die. In the center, a younger man with a beard wearing a light blue button-down shirt is also smiling and looking at the die. On the right, another younger man in a dark blue button-down shirt and khaki pants is holding a transparent plastic sheet and looking at it. They are standing in front of a large industrial machine, likely a die casting machine, with various metal components and a blue frame visible. The background shows a typical factory environment with overhead lights and structural elements.

**WE TAKE CARE OF ALL
YOUR DIES – ALSO FROM
OTHER MANUFACTURERS**

If you do not use
Reifenhäuser dies,
but those of other
manufacturers, you still
do not have to dispense
with good service.
Please contact us.



Scan
to learn more

Productive in the Long Term

SERVICE

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to learn more



70%
Costs Savings

Die Refurbishment

A complete refurbishment is often the cost-efficient alternative to replacing a component or machine, whether it is a matter of scratched dies, damaged edges, wear, or mechanical and electrical components that are in need of repair. We make your components fit for production again – and, by the way, this is independent of the original manufacturer.

Manufacturer-
independent services

PAM-Retrofit

Retrofit convenience that also pays off economically. The PAM option for precise, autonomous, and mechatronic control of your dies can be retrofitted, regardless of the manufacturer, for:

- flex lip adjustment
- restrictor bar adjustment
- any coextrusion adapter Pro



For Future Success

RESEARCH & DEVELOPMENT



If you are wondering why Reifenhäuser is so successful at achieving such a high degree of die customization and adaptation to different production requirements – look no further than our Research & Development Center and our close cooperation with our sister companies. These are the line experts with an eye for the overall process. Our colleagues mirror to us what works on the line, regularly challenge us with new requirements and – like you – are not satisfied until everything is perfect.

Our own metallurgical laboratory, a technology center for dies and extruders, and the world's largest technical center for the production of films and nonwovens provide us with ideal conditions. These facilities allow us to optimize until the technology satisfies our biggest internal critics and delivers competitive benefits to ensure your success.

- ☆ Technology center for dies, extruders, film lines and nonwoven lines
- ☆ Close cooperation with experts for the overall process

LET'S TALK ABOUT YOUR GOALS

Your Contact

Sales

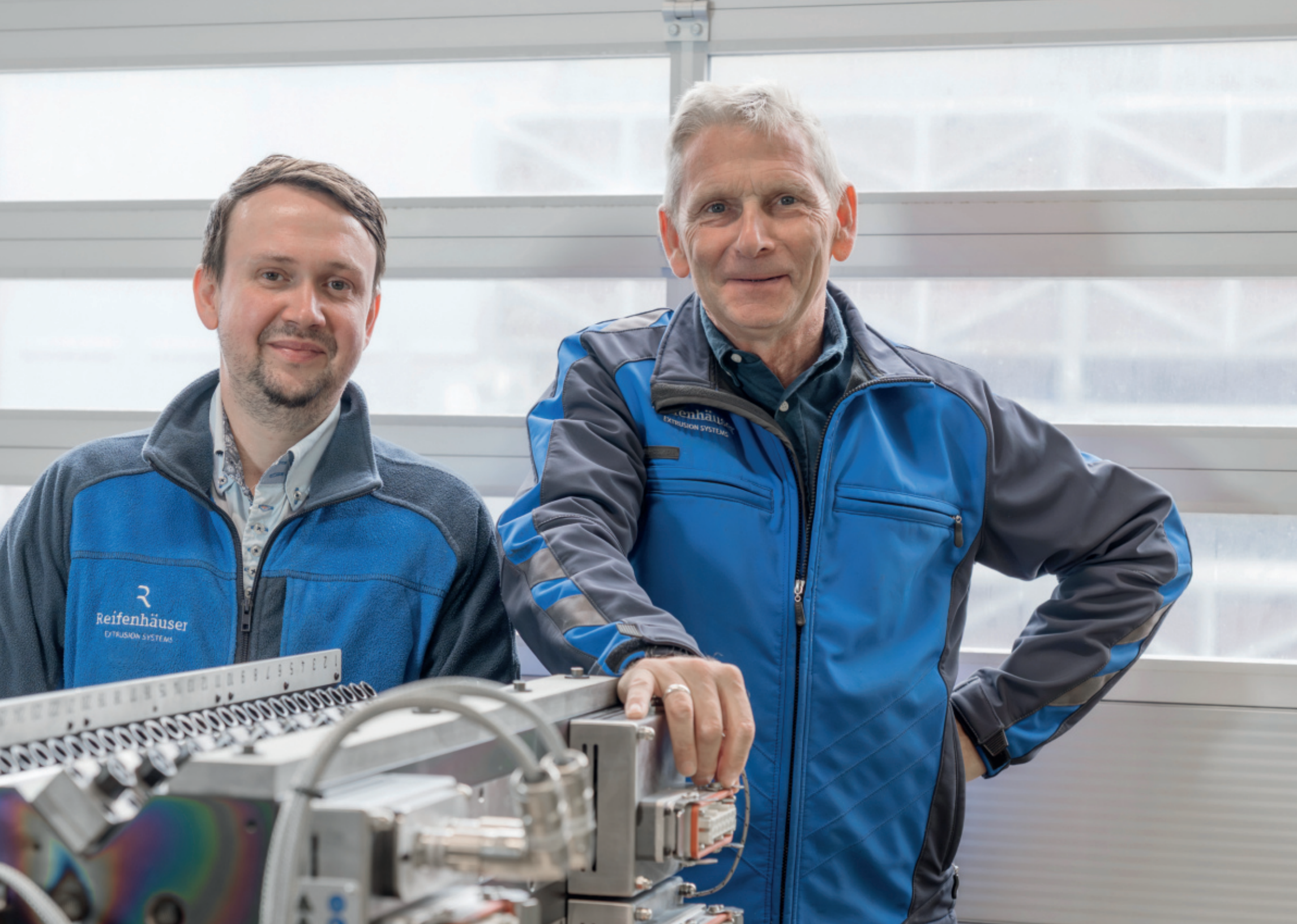
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sales@reifenhauser.com

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/reifenhausergroup





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