

AUSTRIAN LIVING COMFORT

WE ARE OPENING NEW DOORS TO **DESIGN, SAFETY & COMFORT FOR YOU**

FENSTERBA FRONTALE

FENSTERBAU FR@NTALE



FLUSH, CONCEALED HORIZONTAL HARDWARE & MORE

Page 06

Maximum protection

INTELLIGENT SECURITY MACO INNOVATIONS DETER BURGLARS & NATURAL FORCES

Page 08



Limitless living comfort

1dC

()

MORE FREEDOM IN LIFE EFFORT-SAVING OPERATION, MODERN ACCESS MANAGEMENT & CO

Page 10

WELCOME TO THE FENSTERBAU FRONTALE 2016

WE ARE OPENING **NEW DOORS TO** DESIGN, SAFETY AND COMFORT Go to www.maco.eu/ austrian-living-comfort and reserve your free ticket

Dear readers: Dear friends of MACO:

Austrian living comfort – That is MACO's mission statement at this year's Fensterbau Frontale. We supply quality from Austria which you can rely on. We are contributing to our customers' living comfort with our products that make windows, doors and sliding units safer, more energy efficient and more user-friendly.

At the same time, we are responding to the most important trends we are monitoring in the current living and construction industries: We are responding to the increasing number of single households with smart solutions, such as MACO openLife. This new product is a comfortable intelligent access management solution that provides control for windows and doors with a smartphone app.

We are responding to the aspect that people are getting older while living in their own

homes longer with hardware solutions free from barriers and with an increased operating convenience. We are approaching the trend toward increasingly large energy efficient and thereby heavy-weight portholes with products for window and sliding elements that lift heavy weights, permit minimum frame widths and that allow for fixed glazing.

.

0

0

0

.

The focus is on design, comfort and safety aspects, which we have translated into products for you that not only simplify processing, storage and logistics, but that will also be exciting for your customers. This edition of TECHNOgramm will provide you with a little taste of it.

We are inviting you to visit us in Hall 1 at Booth 347 in Nuremberg to test our new innovations live. We have all highlights on display for you. More than 70 consultants look forward to talking with you!

CONTENTS

THE TRADE SHOW EDITION

- 03 Performance leadership is our top priority
- 06 Modernity has arrived
- 08 Maximum protection for your home
- 10 Living comfort without limits 12 We live our commitment
- to customers 14 Standard-compliant connection
- of floor-depth units
- 15 MACO is engaged in the environment & society
- 16 Experience "Austrian living comfort"

INTERVIEW: THE NEW MANAGING DIRECTORS OF MACO

PERFORMANCE LEADERSHIP IS OUR TOP PRIORITY

In September 2015, three new managing directors took the lead at the MACO group. Guido Felix, Ewald Marschallinger and Ulrich Wagner are continuing on the successful path of the reorganised company to ensure MACO's sustainability in the future. In the interview, they talk about future trends, the development of the industry and the new market direction of hardware professionals.



THE NEW MANAGING DIRECTORS OF MACO

GUIDO FELIX (52) is responsible for the functional areas of technics, production, logistics, purchasing and material planning (SCM). At the same time, he serves as "Chairman of the managing board".

ULRICH WAGNER (50) is responsible for the areas of finance & controlling, IT, human resources & legal and also quality management.

EWALD MARSCHALLINGER (40) is responsible for distribution, marketing, product management, sales back office and research & development.



"We are strongly committed to expanding our program with access control systems, Smart Home and other reticulated solutions."

ULRICH WAGNER MANAGING DIRECTOR

The year 2015 presented great challenges for many companies in the window industry. How did MACO do? Wagner: Not only MACO but our competitors as well had to face clear market downturns and increasing pricing pressure in 2015. We were hit hard by the major drop on the GUS market and, because of our leading position in the market, in the war zone of the Ukraine. This made measures to stabilise the company necessary: Therefore, we have worked intensely on reorganising MACO since mid 2015.

The reorganisation of the company is under way. What has changed so far? Felix: We have set ourselves up to be sleek and agile enough for the future. This has not just focused on cost savings or headcount reductions, but also on organisational simplification. This is what allows us to proceed with the product development process. In addition, we have also significantly sharpened the strategic alignment of the company. All of these measures are already showing results: You can feel a new

dynamic and speed within the company.

What path will MACO follow in the future?

Felix: We want to evolve from a pure hardware and lock manufacturer to a provider who is in demand for ventilation, shading and security technology. We are hardware specialists but we want to expand our portfolio with the integration of electrical engineering, control technology or cloud based solutions and thereby offer added value to our customers. Together with world market leaders in these areas, we are researching new solutions that are based even more on the needs and wishes of our suppliers and their customers. A possible future scenario: Sensors for alarm systems could be installed in the window frame and be powered by an integrated photovoltaic unit in the window. Marschallinger: In the future, we want to establish ourselves more as a provider of system solutions. This means that we are not only thinking about our hardware for a lift/slide element but also the threshold and wall joints, which means the entire system. We are already very successful in the area of large spaces and will now expand to the business segments windows and doors. We thereby allow our suppliers to set themselves apart from their competitors thanks to a comprehensive portfolio and higher level of service. Therefore, this is greatly included in the development process.

Wagner: The lock area is an important growth segment for us. Until now, MACO has mainly been recognised as

a window hardware expert. However, we are the market leader in the door lock area in the UK, for example. Over the next few years, we will intensively work on expanding our program with access control systems, Smart Home and other reticulated solutions.

The Nuremberg Fensterbau Frontale trade show is just around the corner. What should visitors expect to see at the MACO booth? Marschallinger: We will introduce products that were specifically designed to meet the demands of a changing society. Given the increasing average age and increasing



"The owners clearly stand behind the Austria location where we continue to invest heavily."

GUIDO FELIX CHAIRMAN OF THE MANAGING BOARD number of single households, topics such as constructions without barriers for disabled persons, operating convenience, safety and design are becoming more and more important. We have intentionally directed our focus toward these trends.

For example, we are introducing a unique access control system with MACO openLife that offers control of windows and doors remotely with an app on the smartphone. This app can be used to regulate ventilation remotely or close the windows on time in the event of an expected thunderstorm. Residents can also manage access very comfortably: Let your son, who has forgotten his key again, into the house, even though you are still at work. Operating convenience is becoming a completely new dimension here. (You will find other product highlights on the following pages.)

Which markets does MACO currently focus on?

Wagner: Our export rate is in the high 96th percentile. At 20 percent, Italy is currently the most important market for MACO, followed by Germany, Poland, Russia and Great Britain. Asia is a future market. We have been represented together with a strategic partner in China since 2014, which increased our hardware sales significantly. The Chinese have great brand awareness and demand "made in Europe". Our selection that is completely manufactured in Austria especially supplies the premium segment. We are scoring with products that contribute to energy efficiency.

MACO manufactures 100 percent in Austria. Will this strategy remain in the future?

Felix: The owners clearly stand behind the Austria location where we continue to invest heavily. For example, we will expand our headquarters in Salzburg to become a high-performance location. In addition to the modernisation of the production site, an expansion with a research and development facility is also planned. This future facility will be used for technological innovations, system solutions and topics such as reticulation. This facility offers the perfect conditions for this purpose because the region has many resident companies that deal with topics such as mechatronics.

What makes MACO successful?

Marschallinger: Our company is marked by a uniquely high in-house production share of 98 percent. This makes us extremely flexible because we can respond quickly to short-term customer requests, which is an important competitive advantage. We are thereby independent from the dependability of the supplier and maintain control over the quality of the hardware components. Our work is highly automated. In addition, we count on highly qualified employees who are technical experts and significantly contribute to our ability to keep our promises.

What are your expectations for 2016?

Wagner: Except for the GUS countries, we are finally able to increase sales in all



markets. In the past year, the extension of the season to late fall has returned good business and our production is currently running at its peak. Because of our broad and stable national portfolio, we are now able to prevent break-downs in the individual markets. We are growing worldwide and the positive signals from many countries allow us to start the new year optimistically. "In the future, we want to establish ourselves more as a provider of system solutions."

EWALD MARSCHALLINGER MANAGING DIRECTOR

MAKING HIGHEST DEMANDS ON DESIGN A REALITY

MODERNITY HAS ARRIVED

Modern architecture is defined by clean lines and the absence of superfluous elements. Flush installations, concealed hardware and ever narrower frames are some of MACO's responses to these requirements.

MACO hardware contributes to the best design in two ways: In terms of movement and fastening technology, energy-saving, multi-glazed turn&tilt units are a weighty challenge, which MACO pivot posts and scissor stay hinges easily master. As our hardware can accommodate enormous sash weights of up to 220 kg on window (doors) and up to 400 kg on lift/slide units, any large-format glazing required by current residential architecture can be created. Of course, the necessary functionality of the elements remains the focus of our day-to-day operations.

On the other hand, the product design always includes a focus on reducing the discreet appearance as much as follows beginni with a variable colour design and attractively covers to concealed hardware.

Hidden strength

The manufacturers can use the MULTI POWER hinge-side not only to fabricate single and double sash windows (window doors), but also 3-sash windows or tilt windows with concealed hardware with burglar resistance up to burglaryresistance grade RC 3. Additionally flush, only the window handle remains visible at the sash and the frame and sash become one unit. Another innovation is that even extremely narrow frames are now visible with only up to 10 mm profile depth in many window dimensions and barrier-free wood and PVC window doors of up to 130 kg are becoming a reality.

Perfectly laminated Window doors up to an impressive weight of 160 kg

DOOR FLATTERERS Partially concealed door hinges, variable colour design and discrete access system

solutions make doors shine.



TECHNOGRAMM

06



FLOODED WITH LIGHT The largest possible glass areas are becoming a reality thanks to narrow frames, fixed glazing, concealed hardware components and discretely installed space saving gasket tracks.

are manufactured with the program extension of the existing dual-drill hole hinge-side: DT160. These elements are becoming optical highlights as well with visible hinge components that are laminated with covers or the concealed necessary milling for 4 mm clearance systems that are discretely hidden under recess cover caps.

Barrier-free panorama

Benefit from a full range of the highest quality from a single source even for large area elements. The Panorama design line offers a range of design options for timber/ aluminium and now also pure timber systems: Frameless fixed glazing, very narrow frame designs of just 80 mm in width, and the large range of versions cover all possible design requirements.

Another example is the lock that is nearly invisible: This is because the steel locking hooks only emerge and pull the lift&slide sash to the frame when the door is closed. When open, there are no protruding

> WINDOW OPTIMISATION Whether concealment, narrow frame widths or beautiful covers - MACO hardware make windows a design element in the room.

closure parts and nothing disturbs the aesthetics.

Maximum impermeability, discreetly concealed

Another unique innovation is the narrow thermo gasket strip, which is mounted horizontally at the top of the sliding sash. Thanks to its extremely space-saving design, it is barely noticeable and enables more light to enter the passage area. It also impresses with its thermal properties, high wind and watertightness plus it reliably prevents condensation formation.

Design variety

The doors reflect a perfect design including partially concealed door hinges, such as the PRO-DOOR T100R. As you can see: A variety of element shapes, opening modes, combination possibilities and additional functions can be realised with our hardware portfolio. Set yourself apart from your competition and offer your customers the ultimate flexibility in design.

DETERS BURGLARS AND NATURAL FORCES

MAXIMUM PROTECTION FOR YOUR HOME

MACO security is not only developed at the laboratory. We are working in practice and with professionals. Our partners include the police, insurance companies and professional associations, with whom we collaborate continuously. This means that we are at the heels of criminals' burglary practices at all times.

Our findings continuously flow into our product developments. This is why we will present several innovations at the Fensterbau Frontale that will set you apart from the competition.

Safe ventilation (r)evolution

Do you want to provide ventilation by tilting the window but still enjoy the security offered by burglaryresistance grade RC 2? MACO's innovation. the further reduction of the ventilation position on turn&tilt windows makes it possible. The sash protrudes no more than 10 mm at the top of the frame, ensuring permanent ventilation - even while the residents are away. The combination with a tough lockable handle, such as the TRESOR handle, is required for the burglar-resistant grade RC 2.

The advantage for you as a fabricator: This unique solution can be easily retrofitted with just one additional item and impresses due to its easy storage and logistics. It is available and proven for select PVC windows. MACO is currently working on extending this to as many timber and PVC profiles as possible.

Additional basic security

Our product developers have designed a self-blocking espagnolette that makes moving the deadbolt and/or supporting pins impossible even after it has been exposed during an attempted burglary. The hardware combination remains unchanged. Convince yourself of this unique new innovation on the market at the Frontale.

Innovative locking mechanism

The basic security of our large area elements is guaranteed by components that are made of solid steel. The most recent example is the hook drive gear. This innovative locking mechanism utilises the dead weight of the sash to firmly anchor the hooks in the frame. It is similar to multi-locking for front doors. When the door is open, the steel locking hooks are fully retracted into the lift&slide sash via the handle position. No protruding closure parts, nothing disturbs the aesthetics. When the door closes, the hooks engage into the frame-sided flush recessed striker plates without contact. Depending on the individual element equipment, the lift&slide door RC-2compatible.

A different approach to security: Flood protection setup

We are not only leaders in burglar-resistance. When it comes to protection from extreme weather phenomena, MACO is a strong partner with specific building elements: For example, doors that are fitted with the C-TS door lock with flood protection setup can easily withstand a water column of almost one metre

CLEVER LOCK

The dead weight of the sash is used to firmly anchor the hooks in the frame.





for 48 hours - and this has been externally tested and proven!

The C-TS handle operated combination lock also makes life difficult for burglars: Hooks made of cast steel and solid steel striker plates are enhanced with our proven i.S. security striker plates and the proven burglarresistance (burglary-resistance grade RC 2 and PAS24) is thereby optimised. Despite the total number of 15 locking points in the flood setup, the C-TS impresses with its high level of operating convenience.

BECOME A BURGLAR...

2

At the trade show in Nuremberg, we are introducing modern highly secure access systems for front and back doors including electronically integrated security solutions in frames for windows and large area elements. Test them directly on site. If you are interested, we will also show you at the booth of the ift Rosenheim just how simple retrofitting with MACO burglarresistant hardware can be. Try to break in yourself!

uvex

The same same

LIVING COMFORT WITHOUT LIMITS

Operate windows and doors by remote control or smartphone app. Take the threshold in your stride. Attach huge large area elements with ease and little effort. MACO offers a variety of user-oriented solutions to you and your customers.

Today, comfort is clearly the focus of renters and owners: Windows which keep the heat in and thereby keep energy costs down. Large-format units which are drawn back towards the frame as if they are acting by themselves. Doors which can be conveniently unbolted using a smartphone app or a car key and then open automatically. These are only some of the solutions for our daily lives that can become a reality with our products. Highest operating convenience possible in any installation, situation and at any age.

Fully motorised access

Based on the tried-and-tested Z-TF 3-latch lock, MACO is now launching a fully motorised solution: The Z-TM motor driven 3-latch lock. It complements the advantages of the adjustable and automatic gasket compression, the improved impermeability and the optimised heat and sound insulation of our proven 3-latch technology with a 100 percent secure motorised lock.

Combined with the openDoor access control system, the doors now unbolt automatically, by unlocking them with a car key, fingerprint or credit card. Thanks

> THE DOOR BECOMES A DOORMAN When the Z-TM 3-latch motorised lock is combined with the openDoor access control system, the front door can be opened easily finger scan, for example. Thanks to the revolving door drive, the door now opens all by itself.



EFFORTLESS OPERATION - Thanks to the integrated spring mechanism on the roller, the sash is almost drawn towards the frame by itself when it is closed.

to the revolving door drive, the door now also turns to open by itself. Extremely convenient for situations such as when your hands are full with shopping bags.

Keep control over your home even in your absence

Open the door to your home from your office for package deliveries. Tilt the window remotely while you're out and about, so you can come home to a ventilated house. MACO openLife provides this freedom in your life, the modern, location-independent access management in real-time.

We combine our motorised hardware (such as Z-TA 3-latch automatic locks or the E-hardware for windows) with electronic components from the global market leader (wall readers, E-cylinders, etc.) to create a completely new, unique access system. For you, it is wireless and can be installed with little effort. Easy and intuitive operation for your customers.

Barrier-free design

Smooth transition between living space and balcony or garden – tripping and related injuries are a thing of the past with PVC and timber casement doors. This is thanks to MACO threshold solutions with foot-friendly rounded edges and the 20 mm flat design.

0 mm are sufficient

The absolutely stepless threshold for casement doors is an innovative highlight for convenience: It does not protrude at all. Still, the integrated locking points in the threshold guarantee a new level of security.

In addition, MACO classics, such as deluxe hardware for windows that are difficult to access, E-hardware that can be controlled with remote control or the tried-and-tested crank opener for maximum living comfort at the window.

Effort saving & intuitive sliding solution

As a high-quality sliding solution with parallel stop, the PAS hardware completes the selection of large-scale systems - Operating convenience has been implemented as a substantial requirement for impressive solutions. The sash can be closed with minimal tractive force or pressure. This ease of operation is thanks to the integrated spring mechanism in the roller and the damper on the scissor stay. As a result, the hardware pulls the sash towards the frame as if it is acting by itself. In addition, the unit can be intuitively operated like a turn&tilt window without a problem.

CONSTRUCTION WITHOUT BARRIERS With a flat design of 20 mm, MACO thresholds do not present any obstacles whatsoever. Now also available for PVC profiles.



mm, t ss.

INNOVATIVE With MACO openLife, windows and doors can be operated remotely by smartphone app or transponder tag. **MACO SERVICES FOR FABRICATORS**

đ

WE LIVE OUR COMMITMENT TO CUSTOMERS

1

200 ST

94491

200 ST

94491 s



94491

200 51

THE MACO SUPPLY CHAIN With perfectly coordinated processes, we guarantee a high level of quality and reliable delivery.



Reputable and expert advice ensures the mutual success of partnerships. Our advice is centred on your sustainable growth. We develop solutions for and together with you that enable both of us to excel in the market: Not just with products, but also with services and consultation services. We continue to work on designing them even more customer friendly and user optimised.

OUR SERVICE – YOUR ADDED VALUE

Logistics

A group-wide, integrated supply chain process guarantees optimum supply for our Trieben logistics centre and the six regional warehouses. This and our global sales and distribution network ensure quick and timely delivery throughout Europe and worldwide. At MACO, you know your contact partner. This is because our emphasis on personal contact reflects our commitment to our customers.

Test centre & license

MACO is a partner and official external partner agency of the accredited testing and inspection body gbd LAB GmbH. Customer tests for impermeability, wind loading and burglary resistance are carried out at our test centre in Salzburg and documented with an internationally valid test certificate. This means you can easily meet your CE marking obligation.

Customer portal & order platform

All customer-specific and technical information and documents are collected in the "extranet" customer portal, where they can be accessed at any time. The integrated order platform is the simplest and quickest way to send us your order requests. Shopping basket templates, a complete overview of all your orders, invoices and delivery notes and useful search functions all help to make ordering a breeze.

New: If you are already a user with order rights, the pricing simulation has been made available to you since the beginning of the year 2016 as well. This enables you to calculate the actual prices including discounts or minimum quantity surcharges.

TOM –

Technical Online Catalogue MACO

Updated daily, intuitive, custom-made -As part of the customer portal, the interactive TOM platform provides access to full technical information and notes for correct processing of the hardware. Item tables, data sheets, drawings, clickable hardware combinations and even market-dependent price indications. As a finishing touch, you can even order the desired item directly via the TOM platform in some countries. NEW: TOM is now also available for RUSTICO and VENT and thereby all main product groups - in nine languages!

Hardware calculation program

In just a few steps, MACOWin 2.0 generates a complete parts list of the hardware components that you need for your quotations and calculations. All you need to do is select the type of window and enter the sash rebate dimensions. Thanks to the link to TOM, you are also given the relevant technical information for each item for easy processing.

New online presence

New country-specific web presences for Austria (**maco.at**), Germany (maco.de), Russia (maco.ru) and Great Britain (macouk.net) cover the various market conditions better: Products are introduced marketspecifically, advertising campaigns are targeted by country. You thereby receive information that is relevant for your market quickly and optimised by use. www.maco.eu provides all information about the MACO group in German and English versions. Of course, the information is provided in modern responsive web design, can be operated intuitively and its content is always up to date.

THE FIRST SOLUTION IN THE BUILDING CONNECTION PROBLEM

STANDARD-COMPLIANT CONNECTION OF **FLOOR-DEPTH UNITS**

The greatest challenge for many building caulkers: Sealing floor-deep large-format units long-term because of a lack of sufficient connection options. MACO is now providing the suitable solution.

Of course, you know that today, it is more important and yet more complicated than ever before to plan standardcompliant perfect connections to buildings. As a large-scale element manufacturer for balconies, flat roofs and terraces, in particular, you are faced with numerous requirements.

A rude awakening

If the end customer has to contend with water damage or even with resulting mould, the question is: who takes responsibility? A range of tradespeople are involved in the installation of floor-depth units, often making it hard to determine who is really at fault.

MACO saves you work

MACO is aware of this problem. Our aim is to not only provide you with high-quality products, but also to offer comprehensive services and to strengthen your competitive position with complete solutions. Therefore, together with building caulkers, window fitters and experts, MACO has most recently developed an installation solution for the connection of floor-depth units using MACO thresholds. This optimally complies with common standards in Germany, Austria and Switzerland.

Assure yourself: We will introduce the new standard-complaint connection solution with the MACO Panorama system at the Fensterbau Frontale. Experience anticipation!

> MAKING THE INSTALLATION EASIER The MACO installation solution for connecting floor-depth units optimally fulfils common standards.





MARCH 2016

MACO IS ENGAGED IN THE ENVIRONMENT & SOCIETY

MACO takes its social and economical responsibility very seriously. There are three select projects that we do not want to keep from you:



EXCELLENT! f.l.t.r. Andrä Rupprechter (Federal Minister for Land and Forest Resources, Environment and Water Management), Stefan Wallmann (MACO Production Site/Maintenance Management) and Karl Schwarzer (MACO Project Management).

MACO IS ENGAGED IN CLIMATE PROTECTION CLIMATE ACTIVE AWARD

At the end of November 2015, the Climate Active Initiative honoured MACO for the fourth time for the successful implementation of an energy efficiency measure, this time the "Long-distance heating connection instead of oil tank". Switching to long-distance heating is consistently included in corporate energy policies. The overall system optimisation results in high energy and cost savings.

Environmental protection as a central challenge

MACO's basic principle is to align all of its activities with the improvement of its environmental performance. Numerous measures include the increased use of renewable resources, optimisation of internal and external transports and the improvement of energy efficiency of systems and sites. External sources have acknowledged this engagement repeatedly: Examples are four Climate Active awards, the DIN EN ISO 14001 certified environmental management system and the Climate Alliance and DGNB membership.

ENVIRONMENTAL SPONSORING IS A WIN-WIN PROJECT COMMITTED TO THE HONEYCOMB

For MACO, sustainability means acting to preserve resources and the environment. This does not only apply to daily business, production processes and products. A current example is also the cooperation with the Bienenlieb bio-beekeeping company. MACO sponsors the "Bees at the training farm" project. The project teaches children directly about the life of bees and correlations in the natural circle of life with a display model very early on. At the same time, the endangered species is relocated to the training farm and re-established.

MACO thereby connects ecological and social commitments. In the end, you also benefit from the result of this sponsorship - in form of honey. Visit us at our booth in Nuremberg and try it yourself!

MACO PROMOTES APPRENTICESHIPS FOR CARPENTERS/JOINERS FIRST TSM3 COURSE IN GERMANY NATIONWIDE

Training in-house apprentices to become top experts has been a tradition at MACO for more than 50 years. The hardware professional has now also supported the first TSM3 machine course for joiner trainees with in-depth focus on window construction throughout Germany. The one-week course curriculum has taught young craftsmen everything there is to know about construction planning, machine equipment/operation and installing the hardware for window construction. The focus was especially on security technology requirements and frame construction.

MACO not only helped with the required hardware components but also trained the participants for the various versions. During a practical segment, the self-made windows were installed, sashes hung in the frames and the possible applications for the hardware were explained. The positive feedback from the trainees: "The knowledge of the details of constructing a window enormously improves our understanding of the important points of assembly."

11 JOINER APPRENTICES attended the first TSM3 course nationwide in Germany





IMPRINT

Proprietor and producer: MAYER & CO BESCHLÄGE GMBH
Chief editor: Karin Paschek | technogramm@maco.eu
Editorial board: Robert Andexer, Gerhard Kaiser, Hanspeter Platzer, Michelle Staudinger, Stefan Walkner
This document is the intellectual property of MAYER & CO BESCHLÄGE GMBH.

Images: MACO | fotolia.com

All rights reserved and subject to change.



MAYER & CO BESCHLÄGE GMBH

A-5020 Salzburg, Alpenstraße 173 Phone: +43 662 6196-0 E-Mail: maco@maco.eu www.maco.eu

