

Roto Inside

Customer and partner information | Issue no. 53 | 08/2023



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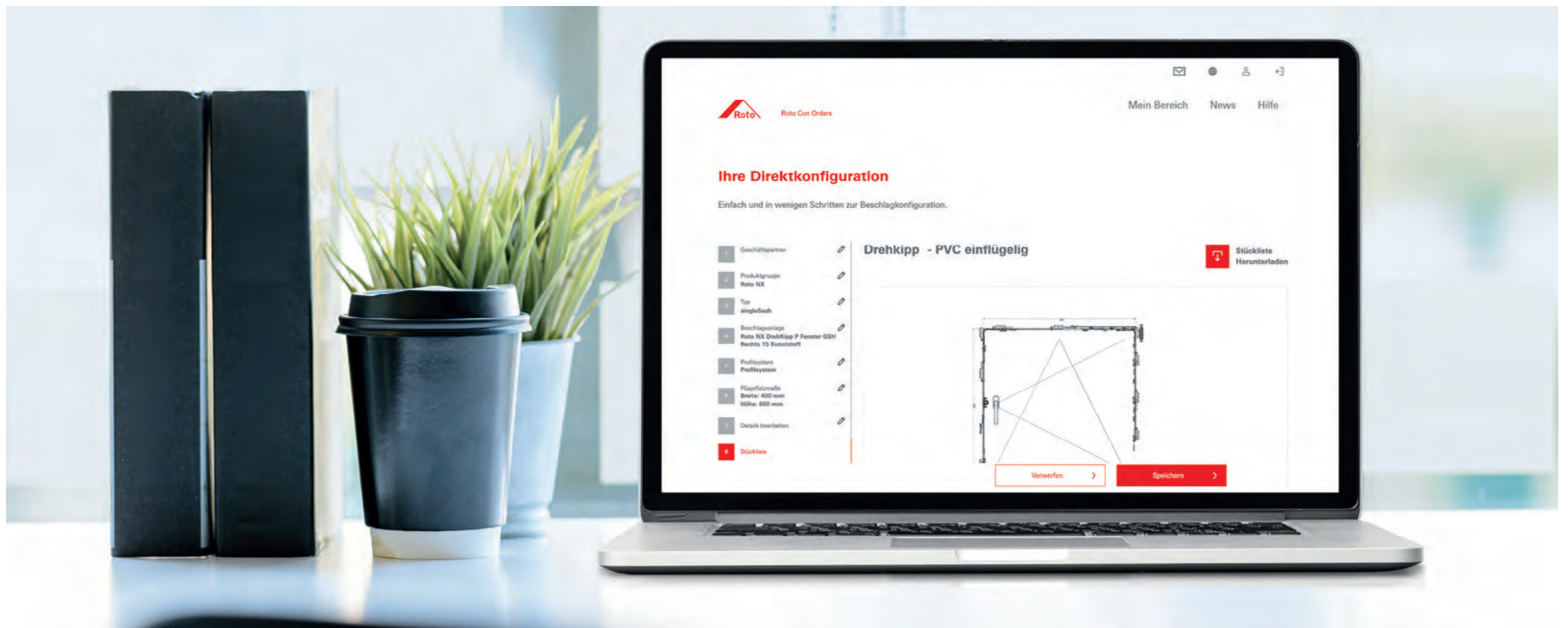
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Configuring hardware sets intuitively and without mistakes

Roto Con Orders 2.0: new functions and new design



■ **Digitalisation** The Roto Con Orders online tool supports fast and accurate planning of hardware. The proven configurator is now available with a new look that includes an optimised menu structure and extended functions in 18 languages.

The new user interface supports intuitive working and therefore makes it easier for beginners to get started. Self-explanatory access to the individual contents is ensured by the new menu guidance. There is also quick access to the new "Direct configuration" function, which takes you straight to the input mask.

Improved usability

All users benefit equally from the revised user guidance. For example, there is now a configuration progress bar, so the user can clearly see which process step is currently running.

Dealers and window manufacturers can export their completed hardware configuration to PDF, Excel and CAD file formats in order to integrate it into their own offers and orders.

With just one click, they can generate an illustration of the drilling pattern for the hardware solution just developed. Just a few operation steps are all it takes to produce a precise parts list for a hardware solution, including a technical illustration.

Contact: direct and fast

That's what users want from their exchanges with the creators of Roto Con Orders. And with the newly integrated contact form, their wish is met. With it, users can ask questions about hardware configurations and the configurator or can send their suggestions for the tool to the Con Orders team. Direct submission using the Con Orders form is the best way to ensure the fastest response.

Planning in a team

Using the "Key User" function, registered users can save their hardware templates or data in a separate, protected project folder within the database. On request, several users can access this data pool at the same time and can work together on an existing application.

Consistently digitalised

With immediate effect, all window or door manufacturers can send the hardware configurations they have created in Roto Con Orders directly to their shopping cart with their dealers. Dealers wishing to offer their customers this option, can provide this direct service jointly with Roto. Their consultants from the Roto sales department will provide support with the preparations and ensure further coordination.

The advantage: from hardware configuration in Roto Con Orders to order placement for the Roto hardware components, the same digital data is always accessed. This reduces costs in the value creation chain and eliminates error sources.

"We have established the technical requirements to ensure that dealers can offer their customers this option and warmly invite them to choose their optimum form of digital collaboration with us," said Eberhard Mammel, summarising this new feature. Mammel is the Head of Product Marketing and Product Adaptation at Roto Fenster- und Türtechnologie GmbH and is responsible for the Roto Con Orders 2.0 project.

Errors are ruled out

Working with Roto Con Orders guarantees technically correct results, as each configuration is tested for plausibility by comparing all parameters.

Some customers have already programmed interfaces through which the data from Roto Con Orders is automatically further processed into bills of materials and orders in their IT system. Bills of materials and prices from the user's PC can also be incorporated.

Free and mobile

The hardware configurator is still available to Roto customers free of charge. It is optimised for mobile use on tablets.

Additional new features will follow

In the coming months, the second programme release will complete the hardware configurator with further new functions, such as FAQs, glossary and "How-To videos". At the same time, an e-learning module will be made available. This module guides new users through working with the configurator and explains the full range of its functions.

After the second programme release, we will provide information on the further functions in the international industry press, via our worldwide social media channels and, of course, also in a future edition of Roto Inside. If you are interested, please ask your Roto sales department directly about the new functions and the e-learning module.



➔ **Roto Con Orders online hardware configurator**

ftt.ROTO-frank.com/en/rco

In conversation



An interview with Marcus Sander, CEO of Roto Frank Fenster- und Türtechnologie GmbH

Roto Inside: Mr Sander, Roto Fenster- und Türtechnologie took part in the BAU exhibition in Munich in April. Are you happy with the result?

Marcus Sander: We are very happy with our result. The decision to relocate to hall C4 and present product solutions for all frame materials brought 20% more guests to the stand compared to the last time we attended back in 2019. From our point of view, this visitor response is also a clear indication of the great importance of BAU within the industry and of the fact that face-to-face meetings at trade fairs are still very important to many of our customers and partners.

Roto Inside: What were your product highlights at BAU?

Marcus Sander: Using our Roto City virtual consultation platform, we illustrated the added value of our hardware technology based on different building types and room scenarios. Accordingly, we presented all product groups, the solutions of our Aluvision branch and the topic of gaskets. Two highlights were definitely the 400 kg version of the tightly sealed sliding hardware Roto Patio Inowa and our Tilt&Turn hardware Roto NX with its options for security-relevant equipment of building elements.

As far as our door solutions are concerned, lots of visitors were especially interested in our door lock Roto Safe A | Tandeo. As the first mechanical-automatic locking system on the market, it is already certified in accordance with the latest version of prEN 15685:2019. Readers can find details of this on pages 6 and 7 of this Roto Inside.

All of the hardware solutions presented in Munich have been integrated in Roto City and can be viewed virtually and discussed during a consultation with the Roto sales department.

Roto Inside: Roto City is highly reminiscent of your corporate theme of digitalisation. Is there anything new to report here?

Marcus Sander: All digitalisation measures have the aim of creating a benefit for the customer. Roto City generates a benefit in that customers can get to know our hardware technology in the correct building application, any time and any place.

However, beyond the hardware products, it is also especially important to offer beneficial solutions that our customers can use to produce their windows and doors more efficiently. To find these solutions, we have established the so-called "Innovation Lab". In this "creative workshop", we try out innovative approaches to digitalisation and discuss their benefits and added value. If using a tool or a solution will increase efficiency in the factories of window and door manufacturers, its introduction will be accelerated and a pilot project will be started together with a customer or partner.

Roto Inside: In the last edition, you named sustainability as a focus. Please specify this for our readers.

Marcus Sander: As a fixed part of our business strategy, sustainability is the basis for our commercial activity. Along our entire value creation chain, ecological and social aspects flow into our daily business.

Four long-term action fields that Roto will specifically implement and take into account for all activities and decisions have been defined. These are customer-focused solutions, dedicated and effective employees, comprehensive climate and environment protection as well as responsible corporate management.

Roto Inside: What exactly are sustainable, customer-focused solutions?

Marcus Sander: It's about producing safe products for the fabricator, its customers and the environment. Our products are verifiably durable in their respective application range.

The high product quality begins in the value creation process and continues throughout the entire life cycle. Examples include the corrosion-resistance of our hardware, cradle-to-cradle certifications, abstaining from the use of substances that are harmful to health and the environment, and new outer packaging. In the coming months, we will report in more detail about various projects in all four subject areas. Anyone who is interested, can find more information on our website:

➔ ftt.roto-frank.com/en/sustainability

Roto Inside: Finally, please tell us about your business plans for the second half of the year.

Marcus Sander: Our clear focus is on further expanding the maximum benefit for the customer by, for example, keeping our process reliability and flexibility consistently at their current very high level and thus ensuring punctual and reliable delivery.

On the product side, the compatibility of our hardware range is an important factor in achieving economical window and door production. The modularity of our Roto NX line, for example, or our hardware system Patio Inowa, means our customers only have to store a significantly reduced stock of hardware components on-site. This significantly reduces the necessary stock levels and thus our customers' fixed costs.

We are system providers. This means that our customers get hardware technology, gaskets, glazing blocks and supporting services, such as advice from Roto Lean to optimise window or door production, from one provider. But our services also include our Roto Campus with worldwide e-learning offers and our hardware configurator Roto Con Orders.

This edition certainly contains some interesting ideas for our collaboration in the coming months. I'm really looking forward to that.



➔ **Roto FTT – A resilient company**

ftt.roto-frank.com/en/resilient

Roto Fermax, Brazil

Part of the Roto Group for 10 years

■ **Company** The Brazilian hardware production company **Fermax in Colombo** joined the Roto Group ten years ago. And the whole team thinks this is a good reason to celebrate, according to **Marlon Amarante Neves, Country Manager for Brazil at Roto Frank Fenster- und Türtechnologie.**

In a joint statement in March 2013, Fermax and Roto wrote that combining the expertise of both companies would greatly increase the number of available products, recalls Neves. "Before long, we were able to keep this promise." The newly founded company, Roto Fermax, today operates with a large portfolio of hardware for building elements made of aluminium, PVC and timber. Its most important objective is to support customers by delivering custom windows in consistently high quality and on time.

Robust sales in Latin America

Roto Fermax supports customers in Brazil directly. But products from the metropolitan region of Curitiba are also exported

to other Latin America countries. The Roto subsidiaries in Argentina and Mexico help with providing support to customers there. In Brazil, revenue from European hardware is constantly growing. It is in especially high demand by customers serving builders in the high-end segment. The corresponding sales and technical support are provided by the sales office in São Paulo.

Be better every day

After 2013, the Roto corporate culture quickly took hold in Colombo. The products produced here run through a clearly defined continuous improvement process. "German made" – this is a byword for precision and technological leadership, for durable, corrosion-resistant products, and for outstanding delivery performance. It is demonstrated by the 250 or so employees on the approximately 3,800 m² company premises. Continuous learning is firmly established and is important if you want to maintain and manage quality standards in the long term, stresses Neves. HR Manager Silvina Isabel Don adds: "The experience of all employees is our greatest capital."

From continent to continent

"All business processes are shaped by reliability, rigour and vision," said Neves. "They are the same as those in the European or North American factories of the Roto Group." We collaborate closely and successfully with colleagues in the global organisation. "Whether in Latin America, Spain or Germany – we all work successfully with each other and on an equal footing."



➔ **Welcome to Roto Fermax in Brazil**

www.rotofermax.com.br

Some of the 250 employees in Colombo are shown in the picture.

Celebrating together with the staff (from left): Silvina Isabel Don, Head of HR at Roto Fermax, Marcus Sander, CEO Roto Frank Fenster- und Türtechnologie, Chris Dimou, CEO Roto The Americas, Wilson Cucchiarato Jr., Director of Sales and Technology at Roto Fermax, Marlon A. Neves, Country Manager for Brazil, Raquel Kneidl, Team Leader for Product Marketing for Brazil



Roto Aluision

Dobler Metallbau produces for "FOUR Frankfurt"

■ **Aluminium** Acclaimed architect Ben van Berkel declares on his website that the "FOUR Frankfurt" building ensemble designed by him is the fresh vision of a contemporary city. Dobler Metallbau supplied the facades for two of the four towers. Roto assisted the facade specialist by developing a special Turn-Only hinge side. It was presented to the general public for the first time at BAU 2023.



Around 5,000 Turn-Only sashes are integrated in the facade of the "T1" building, with a weight of around 200 kg each. Each sash is between 838 and 1,202 mm wide and 2,900 mm high.

Image: Groß & Partner, Frankfurt

Installation of the double-element facade on building "T4" began mid-March 2022. For this high-rise building, Dobler Metallbau produced around 1,800 Turn-Only sashes. Work began on "T1" in mid-June 2022. Dobler project manager, Dipl.-Ing. Gerald Spiegel, describes the procedure: "The complete elements were prefabricated in our factory in Deggendorf. Impact panes were integrated as sound insulation, and, in part, maintenance sashes or ventilation flaps, external blinds, pigeon guards and anchor points for the mobile maintenance system. Lighting was also added to the special 'frame' elements with their vertical or oblique pilasters." The elements were produced in a size of approximately 1.35 x 4 m.

Around 5,000 Turn-Only sashes are integrated in the facade of the "T1" building, with a weight of around 200 kg each. Each sash is between 838 and 1,202 mm wide and 2,900 mm high. They are therefore room-height sashes that are narrow to very narrow.

Project solution of Roto Aluision

The architect wanted the window frame and sash frame of the Turn-Only elements on the inside to be flush. Roto Aluision developed a fully concealed Turn-Only hinge side that meets specific requirements to match the chosen profile system from Schüco. For instance, there is the option to install an opening restrictor which limits the opening of the Turn-Only window to 40°. It ensures that a Turn-Only sash which has to be installed behind a load-bearing concrete support does not damage it when opened. At the same time, it should be possible to fully remove all sashes – including those with an opening restrictor for repairs.



Roto designed the Turn-Only hinge side so that, after undoing the safety screws on the bottom pivot rest and top Turn-Only hinge, their bolts can be pulled out in an upwards and downwards direction, respectively. This means that even hard-to-reach sashes can be removed quickly. Dobler Metallbau also stipulated that the hinges had to be height adjustable by ± 1 mm for on-site installation. This request was also incorporated in the design.

Each bottom corner hinge was combined with two central hinges. This configuration ensures tight sealing and optimal load transfer of the 200 kg sash weight, even with a sash height of 2,900 mm.

Hardware without precedent

The Turn-Only sashes developed jointly with the Schüco engineering team were tested in Roto's International Technology Centre (ITC) in Leinfelden-Echterdingen. As an accredited test centre, not only can the Roto ITC implement a continuous test of 20,000 cycles, but it can also certify the successful completion of the test. All of the hardware components from Roto Aluision which Dobler Metallbau prepares for the "FOUR Frankfurt" project meet the requirements of corrosion protection class 5. This means that they offer ultimate protection against damage to functionally relevant surfaces, such as damage caused by pollutants in the outside air.

Close collaboration between industry and facade construction

Project developer Groß & Partner and the architects in charge emphasised the importance of close collaboration between Schüco Engineering and the Roto Object Business when assisting with the construction work, as well as a reliable after-sales service. "Given the extremely innovative facade design, this is completely understandable," explains



Roto Aluision developed a fully concealed special Turn-Only hinge side for "FOUR Frankfurt", to match the internal, flush window profile system from Schüco: it allows for the installation of an opening restrictor and, if necessary, enables easy removal of a hard-to-reach maintenance sash behind a concrete support.

FOUR is the new face of the city – right next to the sun, clouds, wind and weather. With 600 apartments of different sizes, some as subsidised housing, with high-quality offices, hotels and urban flair. www.4frankfurt.de

The four futuristic towers of this group of buildings reach 233 metres into the Frankfurt city skyline, based on a design by Ben van Berkel. Roto Object Business supported Dobler Metallbau with the implementation of the challenging facades for "T1" and "T4".

Image: Groß & Partner, Frankfurt

Jordi Nadal, Roto Aluision Head of Sales for Europe and America. Projects of this kind should always be supported by industry in close collaboration with the specialist companies performing the work, like Dobler Metallbau.

"This is precisely why the Roto Object Business was established some years ago: to provide support, so that exceptional architecture can successfully be brought to life."

Dipl.-Ing. Gerald Spiegel, Dobler project manager for "FOUR Frankfurt", confirms: "Every facade specialist takes pleasure in designing and constructing something special. And when industry partners like Roto and Schüco are on board and contribute their expertise, it means added security and quality for us and the builder." www.dobler-metallbau.com



➤ **Roto Object Business: Aluminium special solutions for windows and facades**

ftt.rot-frank.com/en/rob-solutions

A look back at the BAU 2023 trade show

Working together to achieve high-quality windows and doors

■ **Event** According to information released by the Messe München exhibition centre, some 190,000 professionals visited BAU 2023, evidencing its importance within the industry, despite the numbers failing to match the figure of 250,000 visitors in 2019. The situation was somewhat different for Roto.

“The decision to relocate to hall C4 and present solutions for all frame materials brought 20% more guests to the stand. I can only agree with the estimation of the trade show organiser. From our point of view, our visitor response is also a clear indication of the great importance of BAU within the industry and, of course, of the fact that face-to-face meetings at trade fairs are still very important to many of our customers and partners.” This is CEO Marcus Sander’s satisfied summary of the six-day trade show.

For every building, for every room

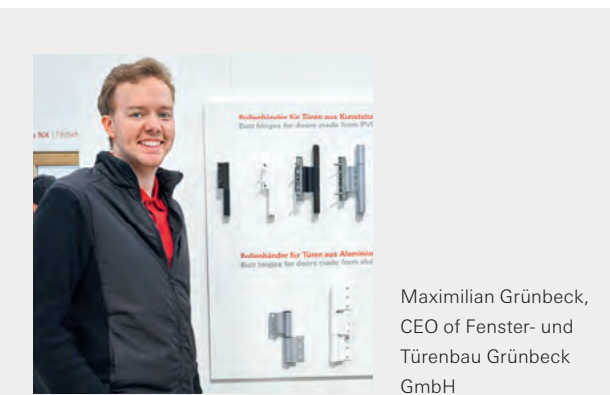
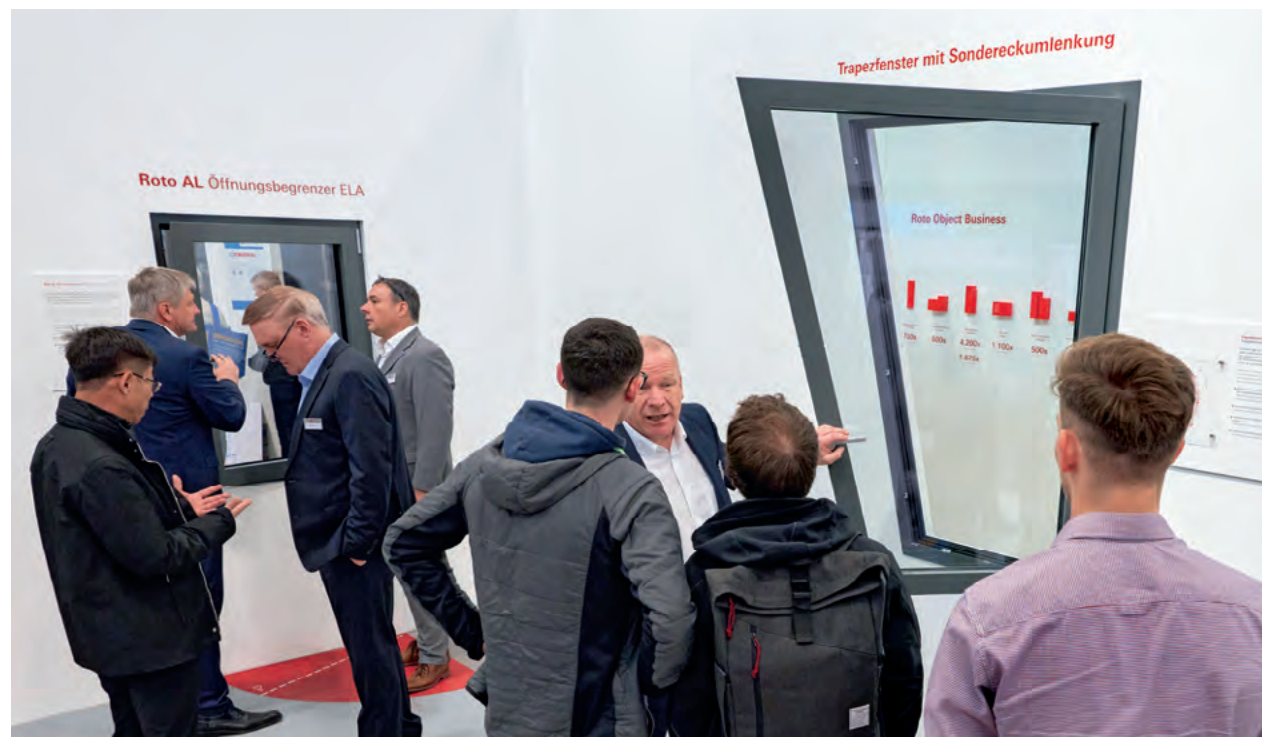
At the Roto stand, the visitors to the BAU trade show discovered numerous ideas for this: whether it be versatile sliding systems, flexible modular hardware systems for Tilt&Turn windows, attractive door hinges, modern automatic locking systems, high-performance gaskets or custom-made products for aluminium construction – Roto once again made it clear why it pays to look for the perfect hardware.

Building element manufacturers and architects from Europe, Asia and America discussed the future of high-quality buildings and building elements with the expert consultants from Roto. “Our hardware solutions meet all specific functional, comfort and design requirements for windows and doors in the best possible way – in all opening types and frame materials, for all building types and room concepts around the world. We therefore enjoyed very intensive face-to-face discussions – something we have all missed for a long time,” says Eberhard Mammel in summary of the trade fair events. As Head of Product Marketing and Product Adaptation, Eberhard Mammel is also in charge of the corporate process for trade fairs, events and showrooms.



Greater comfort and quality of life

Window and door manufacturers, who have dedicated themselves to this mission, felt at home at the trade show stand. This is because it provided helpful suggestions when discussing important questions, such as what we can do together to meet the expectations of end users with regard to their building elements. And how do you develop the optimal building element for certain rooms and buildings with special hardware solutions? What can we do together to ensure flexible, economical and simple production?



Maximilian Grünbeck,
CEO of Fenster- und
Türenbau Grünbeck
GmbH

■ **Customer testimonial** “It’s great to be able to look around at a trade show again. I spoke with our Roto consultant about the Solid B door hinges and the Patio Lift sliding hardware. We find both products very interesting. Roto has been our partner since 1990, in particular in the Tilt&Turn segment. We are able to install many parts from the Roto NX programme equally well when working with PVC, timber, timber-aluminium and aluminium. That makes us efficient and fast, reduces the risk of mistakes, and relieves the burden on storage. Improved burglary protection through additional locking points with mushroom cams and matching strikers are now standard and, of course, are also available with Roto NX. For over 30 years, we have been very satisfied with the collaboration and the product range development at Roto.”

www.gruenbeck-fenster.de





■ **Customer testimonial** “We are planning to add Roto locking systems for aluminium main doors to our programme. That’s why we came to Munich. As a system supplier, we see it as our job to visit international trade shows like a scout for our customers. Centro Alum wants to stay abreast of trends and technical solutions as soon as they emerge. This allows us to continuously further develop our offering. Customers of Centro Alum should always have the possibility of being leaders in the production of aluminium windows and doors. We recently had very good experiences with Roto door hinges. Our customers value their tested quality. In Spain too, Roto represents a high level of security. That’s why this exchange here in Munich is so important for us. It is good to be able to come together face-to-face again after the pandemic years.”
<https://centroalum.es>



Glòria Segarrés Gisbert,
Business Development
Manager,
Centro Alum, S.A., Spain



New trade fair experience

Even during the fair itself, some manufacturers set up appointments with their consultants for a further meeting in the Roto City – the objective being to discuss technical details of the products presented in Munich with a larger team from their own company. The presentation of BAU topics in this Roto City virtual exhibition centre should also be exciting for architects who were unable to attend the fair in person. At a time that suits them and helpfully guided by a Roto consultant, they can take a “tour” there to find out about the solutions exhibited in Munich.

Sought-after specialists

Ahead of the trade fair, partners in aluminium facade and window construction were invited to a separate conference room to join a discussion on special solutions and services from Roto Object Business with expert consultants from Roto Aluvision. Special presentations were held twice a day. “Our consulting service supports architects, planners, system suppliers and investors worldwide in successfully implementing outstanding architecture. A recent example is our fully concealed special Turn-Only hinge side, which we developed for the ‘FOUR Frankfurt’ building complex. Alongside the proven added value of the products, it is clear that the large number of people attending our presentations and the tremendous response to our Aluvision trade fair exhibits are an expression of the fact that the industry was genuinely yearning to be able to gather again at a trade fair at long last,” says Jordi Nadal, Sales Manager of Roto Aluvision, in summary.



Marcus Sander,
CEO of Roto Frank
Fenster- und Tür-
technologie



Eberhard Mammel,
Head of Product
Marketing and Product
Adaptation at
Roto Frank Fenster-
und Türtechnologie

Digital design meets trade fair construction

The design of the trade fair stand corresponded to that of the digital “Roto City”, within which Roto partners have long been learning about product solutions during online conferences or visits from their customer adviser. At BAU, two buildings from the virtual city became reality: one half of the trade fair stand was modelled on the hotel of the digital consultation platform. Building elements and hardware were shown here, as they are in demand for public buildings. Right next door, smart solutions that make living spaces both safe and comfortable were displayed in a cosy setting.

The special design of the trade fair stand made it possible to experience the products in a truly authentic way. Visitors were able to view hardware and gaskets that are optimally coordinated to ensure that each building element functions perfectly within a specific room and building type. Once again, the visitors to the trade show learned that product concepts are created that ensure added value for the manufacturer and for the users of the windows and doors, and how.



Aleksander Vukovic,
Sliding Product
Manager at
Roto Frank
Fenster- und Tür-
technologie



Jordi Nadal,
Sales Manager
Roto Aluvision

Integrated communication

The daily video messages from the stand that were posted on social media also generated a lot of interest. Individual trade fair exhibits were presented in short clips under the title “Product of the day”. According to Sliding Product Manager Aleksander Vukovic, some trade fair visitors dropped by in person as a result. He had presented the 400 kg version of the tightly sealed Roto Patio Inowa sliding hardware in a video.



■ **Customer testimonial** “Aluprof works with many Roto Aluvision products. The business relationship began more than 30 years ago. A visit to Roto at the BAU trade show is therefore both important and a matter of course for us. This year, we were primarily concerned with getting to know the potential of the sliding hardware Roto Patio Lift and the Roto NX system in the version soon to be available for aluminium profiles. The support provided by Roto was outstanding even during the pandemic, but I personally was really looking forward to speaking to long-time colleagues face-to-face in Munich. It was a great idea to set up Roto City as a platform for discussing product innovations. In the coming weeks, we will be able to view and discuss the innovations that I have seen here at the BAU trade show in the virtual city with colleagues who were unable to travel to the trade show this year. I think that’s useful and helpful.”
<https://aluprof.eu>



Michał Marcinowski,
Head of Building
Systems Development,
Aluprof SA, Poland



➤ **Information and registration for Roto City**

ftt.roto-frank.com/en/roto-city



Comfort and security perfectly combined: Roto Safe A | Tandeo and Roto Safe E | Eneo A

Roto Safe multipoint locks

Automatic and secure locking

■ **Door Automatic locking without a key at three locking points – With Roto Safe A | Tandeo and Roto Safe E | Eneo A you can offer your customers maximum operating convenience and the good feeling of security. Both multipoint locks were the first locking systems on the market to be certified in accordance with the latest version of prEN 15685:2019.**

Automatically secure

Simply leave the house, close the door, and the lock will be securely locked, because the deadbolt in the main lock and the automatic power wedges extend as soon as the door is closed. So there's no need for you to lock the door additionally. All three security locking points are push-back safeguarded. The automatic locks are also RC 2 or RC 3-capable.

Tightly sealed for energy efficiency

The latches of the new locks pull the door leaf against the frame profile with a consistently tight seal all the way round. This prevents draughts and reduces heat loss through the door. At the same time, the consistent passive gasket compression counteracts door warping.

Motorised unlocking

Eneo A is an incredibly convenient way of opening a door. This electromechanical version is equipped with a preassembled drive unit. Thanks to the powerful motor, the door lock unlocks remarkably quickly. And the motor is very quiet. A Plug&Play connection makes installation easy.

Access made easy

The Eneo A electromechanical locking can be combined with all common access control systems, such as the Roto ZKS 4in1 access control system. In this way, a door can be opened via an app, PIN code, finger scan, Bluetooth-enabled mobile phone or an RFID-enabled medium. The drive unit also comes in a version with a radio receiver.



Additional lock with latch and automatic power wedge



Main lock with deadbolt, whisper latch and integrated trigger unit for the automatic function



Optional for Eneo A: 4in1 access control system

More identical parts

The modular design of the Roto Safe range as well as the uniform pattern of the new locks reduce the complexity of the product range and relieve the strain on your storage. The frame components from the Roto Safe range, which are coordinated with the geometries of a variety of profiles, can also be used with Tandeo and Eneo A. This means that the frame components, which are always identical, can be flexibly combined with one of the various locking systems from Roto in order to meet specific customer requirements.

Tandeo and Eneo A are suitable for DIN right and DIN left doors alike, as their latches can simply be turned around on site if required after door installation. When using extensions, Tandeo is suitable for doors up to a sash rebate height of 3,000 mm.

Comfort in everyday life

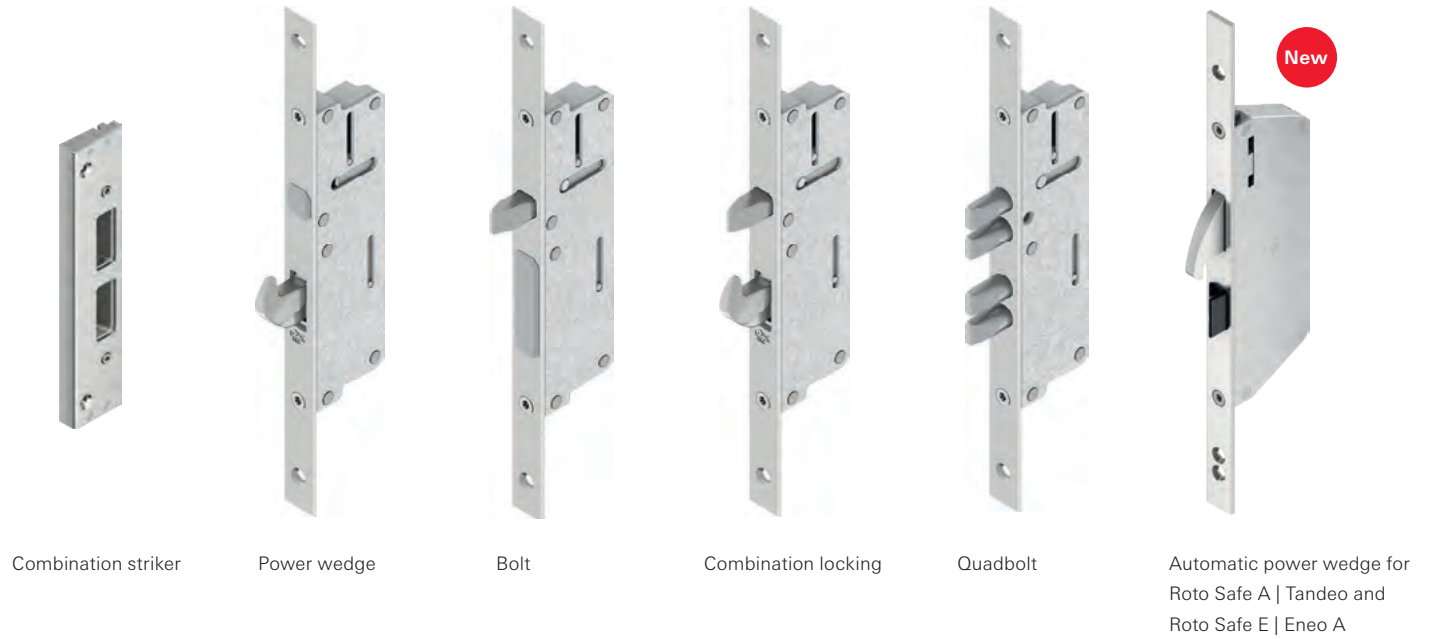
Users find the robust and effortless design of the new locking systems to be particularly pleasant and high-quality. The door opens with just a slight turn of the key. The optional day-time unlocking for Tandeo is activated simply by flipping a switch on the main lock. The lock latch holds the door with proven reliability. With day-time unlocking activated, the entrance door can be opened without a key.

Incidentally, doors with Tandeo or Eneo A close almost silently. This is down to the whisper latch in the main lock and the high-quality PVC latches on the additional locks.

Tested quality

Tandeo and Eneo A passed the tests on the continuous operation cycles in accordance with DIN EN 1191 (200,000 cycles) as well as the tests carried out by ift Rosenheim to obtain QM-342 certification. They are also certified in accordance with VdS and SKG**.

Roto Safe multipoint locks: A single frame component for five different locks



Combination striker

Power wedge

Bolt

Combination locking

Quadbolt

Automatic power wedge for Roto Safe A | Tandeo and Roto Safe E | Eneo A



Optional for Tandeo: day-time unlocking



➤ **Roto Safe A | Tandeo: mechanical-automatic multipoint lock for entrance doors**

ftt.roto-frank.com/en/tandeo



➤ **Roto Safe E | Eneo A: electromechanical multipoint lock for entrance doors**

ftt.roto-frank.com/en/eneo-a



Roto Safe E | Eneo A: electromechanical variant with motorised unlocking

One system – Four variants

Roto Patio Alversa: Minimal. Universal.

■ **All frame materials** One Tilt&Slide and three Parallel Sliding solutions including different ventilation functions for sash weights of 160 to 200 kg in all frame materials – That's what the universal hardware Roto Patio Alversa offers.

The special feature of the system: parallel sliding and tilt ventilation are combined. The advantage for production: the modular system design means window manufacturers can produce all four variants on one and the same production line.

Patio Alversa enables designs with a sash rebate width of up to 2,000 mm and a sash rebate height of up to 2,700 mm. The hardware is also suitable for larger profile depths, if, for example, triple glazing is required.

Simply open and close

The sash elements of the three Parallel Sliding solutions are operated in the same way as Tilt&Turn windows: the sequence is intuitive and therefore extremely user-friendly. The 200 mm long handle lever is always operated in the same sequence.

Quadruple fresh air

In the Tilt&Slide version Roto Patio Alversa | KS, air exchange is achieved via the tilt ventilation position of the sash.

The three Parallel Sliding versions allow you to choose between night ventilation on the Patio Alversa | PS and tilt ventilation on the two Patio Alversa | PS Air and Patio Alversa | PS Air Com versions.

The night ventilation on the Parallel Sliding version Patio Alversa | PS is not visible from outside, and instead the parallel retracted sash looks as if it is locked.

The Parallel Sliding version Roto Alversa | PS Air Com offers particular operating convenience: turning the handle tilts the sash automatically – without manual pressure against the sash.



➤ **Roto Patio Alversa: the universal hardware for minimal effort with Tilt&Slide and Parallel Sliding systems**

ftt.roto-frank.com/en/alversa

No matter how stormy the weather...

With multiple glazing in particular, the centre of gravity of the Tilt&Slide sash is outside. Nevertheless, thanks to the optional additional lock-in position, a Patio Alversa sash does not blow shut even when the wind load is high. The additional lock-in position is integrated in the sliding scissor stay of the two Alversa | PS Air and Alversa | PS Air Com tilting variants.

No ifs or buts

The ball bearing roller units of high-quality, low-wearing PVC ensure quiet movement of the sliding sash with maximum system protection in all four versions. Its run-in and run-out characteristics are additionally optimised by special damping elements. Anti-lifting protection is integrated in all roller units. The anti-lifting device does not have to be activated manually after installation.

Ultimate efficiency

Its intelligent design makes the Patio Alversa product range a real cost-saver. The universal central locking system stems from the Tilt&Turn systems Roto NX or Roto AL. Bogies, sliding scissor stays and track sets can be used for several versions. In addition, four identical corner drives are used for central espagnolettes. This means greater standardisation and fewer parts, which significantly reduces storage and logistics costs.

Fewer parts, faster processing

The prominent use of identical parts across all four versions enables quick processing in the line without having to spend a lot of time converting the production plant after each order. Administration and, above all, the master data processes are also significantly reduced. Replacement of the hardware version does not require any or only minor conversions in production, as only individual components have to be replaced.

Reliably secure

All four Alversa variants provide resistance in accordance with RC 2, especially through the use of four components that fabricators are already familiar with from the Tilt&Turn hardware portfolio: security mushroom locking cams installed around the frame, robust security strikers with multiple screw connections, lockable handle and invisible drilling protection installed in the groove. The security mushroom locking cams are adjustable in terms of height and gasket compression.

Where there are increased requirements for security, electronic components from the Roto E-Tec Control range can additionally be used. The sensors of the magnetic locking and opening monitoring system are integrated into the striker. Like all other security components, they remain invisible.

Ready for Smart Home

Roto Patio Alversa can be digitally extended by including Roto Com-Tec. Its sensors detect any manipulation of the sliding element and can also warn homeowners via Push message depending on the Smart Home system used. The Roto Com-Tec sensors Comfort and Comfort S identify the position of the sliding sash and indicate whether it is securely locked. The durable, reliable function of the sensors is supported by their concealed and therefore low-wearing position on the corner drive.

Roto Patio Alversa | KS



Tilt&Slide system



with tilt ventilation

Max. sash weight 160 kg

Roto Patio Alversa | PS



Parallel sliding system



without / with night ventilation

Max. sash weight 200 kg

Roto Patio Alversa | PS Air



Parallel sliding system



with tilt ventilation

Max. sash weight 160 kg

Roto Patio Alversa | PS Air Com



Parallel sliding system



with Comfort tilt ventilation

Max. sash weight 200 kg

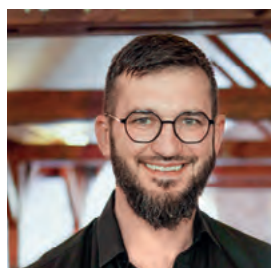
■ **User feedback** "We have supplied more than 300 aluminium sliding doors with Roto Patio Alversa | PS for the Donna Tower project in Dubai Silicon Oasis. Our employees find the elements easy to produce and install. At the same time, the customer is very satisfied with the systems, because they provide high operating convenience for the residents. Did Roto provide good and reasonable support at the start of production? I would score them 10 out of 10. The service and advice were faultless and made it easy for us to get started. The two Donna Towers are being constructed as mixed use real estate by Aakar Developers and offer studios and apartments on 35 floors. With their extensive service installations, large panoramic windows and Italian interior design, they are attractive to tenants from across the globe. We are convinced of this." www.sykon.ae

■ **User feedback** "Sliding doors and windows are becoming increasingly popular as a space-saving solution. At Avante, we have been fabricating the Roto Patio Alversa modular hardware product range since 2019 in PVC window production for Parallel Sliding and Tilt&Slide systems. Our retail partners very successfully sell sliding systems with the three hardware versions Alversa | KS, Alversa | PS and Alversa | PS Air Com. For our production, it is of course an advantage that many of the components can be used in all three versions. This reduces the number of components to be kept in storage. Employees in the factory have been able to establish a great routine. And the assemblies are so well coordinated with each other that there is little waste. That's also becoming increasingly important: reducing waste, handling expensive raw materials efficiently and recycling what little it left over. We agree with Roto about that." www.avante.pl

■ **User feedback** "Since Prestige Ablak was founded in 2012, we have been fabricating hardware from Roto and are impressed by the Patio Alversa range. We were one of the first Hungarian manufacturers to introduce this range and we have been using it for several years now. We have already ensured high levels of satisfaction among many of our customers with the Alversa | KS and Alversa | PS Air Com versions. In particular, our customers are impressed by the easy operation via the handle and the simple tilting with the PS Air Com. As we have been selling Parallel Sliding and Tilt&Slide elements for both versions for many years, we know that there are practically no complaints. And if ever a customer does experience damage, the spare parts are very easy to procure from Roto. Since we also work with the Roto NX Tilt&Turn range, we only need a few additional parts for a sliding door. That helps us to produce economically." www.prestigeablak.hu



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Managing Director,
Sykon GmbH
General Trading LLC.,
Dubai



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Avante windows &
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Prestige Ablak Kft.,
Hungary

Marlex d.o.o., Croatia

Growing with the latest technology

■ **PVC** With more than 260 employees and over 110,000 elements delivered in 2022, Marlex is the biggest manufacturer of PVC windows and doors in Croatia. Three years ago, the market leader expanded its product range with the aluplast smart-slide sliding system, which is based on the Roto Patio Inowa.

Executive Director Ilija Ponjavić describes the system as “technically unique”. It is sold by Marlex under the name smart slide.

Marlex’s production area today covers over 18,000 m². The company management has always focused on consistently high quality and delivery reliability, explains Ponjavić. That’s probably why it has succeeded in increasing revenue by 15% over the last ten years. By 2026, another 18 million euros are to be invested, to double the production capacities. Already today, the level of automation in the company is high.

Growing with the latest technology

Marlex has production lines for building elements made of PVC, aluminium and timber-aluminium as well as its own insulating glass production facility. PVC window construction represents around 80% of revenue. We are continuously working on the implementation of new production technologies and efficient components, reports Ponjavić. Alongside Roto, other important industry partners include the system suppliers aluplast and Schüco, as well as Saint Gobain Glass. Ponjavić explains why:

“We prefer renowned specialists as partners.”



Marlex produces its smart slide sliding system up to a total width of 5,800 mm and a height of 2,400 mm.

In the meantime, Marlex is itself very well known, but we want our own brand to be seen as being closely linked with the market leading companies in the European building elements industry.

Convincing and self-explanatory

In 2021, they started collaborating with aluplast and Roto on the Marlex smart slide system. “In my opinion, it owes its success to the innovative closing movement, with which the sash is pressed tightly against the frame, and the pleasant operation,” said Ponjavić, summarising his observations after three years of successful marketing.

“Thanks to our smart slide sliding system, based on the Roto Patio Inowa, even large sashes are easy to slide and close.”

The professionals in Marlex’s dealer network as well as the end users are impressed by how the smart sliding system works. Thanks to the gentle self-closing sash, the system is so easy to operate that it’s almost impossible to get it wrong.

Efficient production – Fast installation

The employees in Marlex’s production facility find it very easy to produce a smart-slide system and to install Patio Inowa. They can draw on the existing machining centres and installation robots and thus work in the usual optimal cycle time. Thanks to the completely weldable door frame, only the sash has to be produced and packaged separately. The fixed glazing is simply secured with a glazing bead directly in the door frame.

Class RC 2 burglary protection

On request, Marlex also supplies smart slide with resistance class RC 2 in accordance with DIN EN 1627, i.e. with robust strikers on the mullion. They are part of the standard Roto Patio Inowa range and are exactly matched to the aluplast profiles. The innovative mechanism for the soft self-closing sash is not disrupted by the additional locking points. Around 30% of the smart-slide systems produced by Marlex are now supplied with RC 2.

Strong service partner

Marlex was very satisfied with the support received from Roto during the production launch. Top marks were also awarded for the delivery performance, explains Ponjavić.

“We were able to build on Roto’s delivery reliability.”

He also sees the continuous further development and expansion of the Roto Patio Inowa hardware product range as optimistic for further development: “There is increasing demand for space-saving sliding elements. The fact that we are able to supply smart slide systems very flexibly in many formats is a great opportunity.”

www.marlex.hr

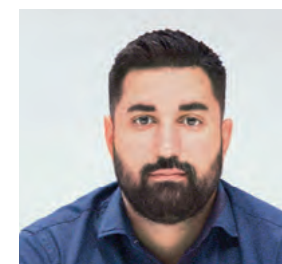


On a site larger than 18,000 m², Croatia’s biggest manufacturer of PVC windows and doors has also been producing the smart slide system based on the Roto Patio Inowa sliding hardware for three years now.



➔ For more information on smart hardware with concealed technology for tightly sealed sliding doors

ftt.ROTO-FRANK.COM/en/inowa



Ilija Ponjavić,
Executive Director,
Marlex d.o.o.

AR.MA. S.r.l., Italy

Face-to-face consultation – Flexible production

■ **PVC** In 2010, the brothers Marco and Andrea Aramu established their own company. Now their younger brother Enrico has also joined the company, because AR.MA. is on a growth track.

In 2022, a team of 70 employees produced around 15,000 PVC windows and doors for private builders, mostly from the Piedmont region and the metropolitan region of Turin.

In April 2020, AR.MA. commissioned a new production facility in Caluso, a few kilometres north of Rondissone, where it all began. "From the outset, our vision has been to produce elements that meet particularly high demands of technology and design," reports Marco, the oldest of the three brothers. He is responsible for production technology and for training new employees. By using modern production plants and solid manual labour, they have been able to achieve their objective with every product sold.

Specialists in window replacement

"We were and are very ambitious when it comes to quality and customer satisfaction," confirms his brother Andrea, who keeps an eye on the commercial concerns of the family company. At the same time, however, they want to be able to react quickly to demand trends. Since the Italian State supports the energy-based refurbishment of existing buildings, there is a small team of specialists at AR.MA. that deals with the special challenges of window replacement, for example.

Step by step to Roto

A few years after establishing the company, the Aramu brothers changed both their profile supplier and their hardware supplier. "We absolutely want to meet the individual expectations of the market and of our customers," explains Marco. To do this, we need the right components and committed partners. They began collaborating with Roto at the end of 2015, originally in the door product segment. By the start of 2016, they had already decided to start using Tilt&Turn hardware in window production.



Photo above: a Tilt&Turn window from AR.MA. with a hook as an additional centre lock to improve burglary protection.



The showroom shows the entire AR.MA. range: Tilt&Turn elements with Roto NX, a Patio Alversa sliding system and main doors with the locking system Roto Safe A | Tandeo.



➤ **Economical, secure, convenient, design-oriented: overview of Roto NX**

ftt.roto-frank.com/en/nx

In summer 2019, AR.MA. switched to Roto NX. "We like this modular hardware system a lot, because we can produce window sashes of any size with it, even with heavy weights. And there's also the option of improving burglary protection without significant effort," explains Marco. Even the standard night ventilation does exactly what AR.MA. wants to offer its customers:

"Simply above average even as standard."

Flexible even with narrow profiles

Since customers primarily want windows with very narrow profiles, we really rate the Roto Tilt&Turn hardware. The "Light" ThermoFibra profile from Deceuninck and the NX module with its many components complement each other perfectly.

"With Roto NX, we flexibly produce what our customers are looking for."

If a sliding door is requested, we are happy to fall back on the Patio Alversa hardware that is 90% made up of components from the NX module. Around two percent of the balcony doors produced each year are sliding doors. And what about the collaboration with Roto today in main door production?

Developing and growing together

AR.MA. produces around 400 main doors per year, and the demand for mechanical and electronic multipoint locks is constantly growing. Demand for modern electronic access systems is also growing. "Our customers are discerning," says Andrea. "We are happy to have had Roto as a partner for many years, who is willing to engage with us and with builders with high demands. Together, we have worked on the development of the new Tandeo lock, and now new main door hinges are about to be launched."

"The Solid B door hinges are slim and extremely easy to install."

Always innovative and technological leaders

They – the founders and owners – find this very important, but so too do the employees, stresses Andrea. "Customers who come to us want the technology of today, or better still, the technology of tomorrow. And of course they want our service." Offering more advice and service than the countless competitors has also been an ambition from the get go. "We have a wealth of knowledge about Roto hardware and know what and how much is technically possible today," adds Marco. A window from AR.MA. offers as much burglary protection and operating convenience as a builder could desire.

Establishment of decentralised service offices

For the near future, the brothers are gradually establishing a network of consultation and sales offices. "Customers travel long distances to visit us and be advised by us," reports Andrea. That's flattering, of course, but good service always requires customer proximity. And that's what AR.MA. wants to ensure permanently. Apropos customer proximity: are they impressed by the presence and "proximity" of Roto? Both brothers nod. Marco Aramu puts it in words:

"We are well equipped for new requirements."

Now, as before, Roto Italy is reliably at their side. Introducing new products is usually really quick. And the support provided during the launch or conversion is good and practical.

www.armacoinfissi.it



The company owners, from left to right: Enrico Aramu, Head of Production and HR, Andrea Aramu, Commercial and Administrative Management, Marco Aramu, Head of Technology

Cutting and machining centre



AR.MA. produces PVC windows and balcony doors. The images show the installation of a Roto comfort weather profile strip.

The production site in Caluso near Turin



EuroLine Windows Inc., Canada

Roto Patio Inowa: Top selling system exceeds customer's performance requirements

■ **PVC European-style windows and doors are as popular in North America as those with an American design. The Canadian company, EuroLine Windows, in Delta, British Columbia, offers its customers both and therefore decided years ago to work with Roto Frank of America. Their new top seller is a tightly sealed sliding patio door based on the Roto Patio Inowa hardware system.**

Founded in 1993, EuroLine Windows is focused on tightly sealed and perfectly insulating building elements made of uPVC. The company's vision is to contribute to a reduction, and the eventual elimination of carbon pollution caused by heating and cooling in buildings. That is why the management focuses on the highest performance products. Both their customers and society benefit from the company's commitment to the sustainable development and manufacturing of windows and doors.

Tightly sealed guaranteed

Wilbert Giesbrecht, Vice President of Operations at EuroLine Windows, ensures that all building elements leave the production line in consistently high quality and are thus guaranteed to meet customers' ecological requirements. EuroLine Windows has been working with Roto hardware since 2007. At the time, the company wanted to buy European Tilt&Turn hardware directly from the world market leader, but this was just the beginning.

Wide range of hardware

Today, in addition to Roto NX, EuroLine Windows' orders also include the X-DRIVE hardware for Casement & Awning windows, Roto Safe H650 door lock, Patio Lift Lift&Slide system, and the Parallel Sliding and Tilt&Slide system Patio Alversa. "Roto offers exactly the products we need in consistently high quality while providing excellent customer service," emphasizes Giesbrecht. Another aspect that is important for performance and decisive for the choice of supplier, he says:

"Roto's deliveries are reliable and on time."

Worthwhile use

The Patio Inowa sliding system was introduced by EuroLine Windows amidst the Corona pandemic. "The preparations leading up to the start of production took us several months, as we established a new partnership with Aluplast, and trained our team for production and sales," recalls Giesbrecht. "Technically," he says, "the innovative closing mechanism across the frame and the variability of the system are impressive. The sash does not

EuroLine Windows is a leader in manufacturing custom high-performance windows and doors, specializing in working closely with customers to design custom fenestration meeting target performance goals.



Opening rooms smartly – Tightly sealed sliding systems have been part of the EuroLine Windows product portfolio since 2021.



➤ For more information on smart hardware with concealed technology for tightly sealed sliding doors

ftt.roto-frank.com/en/inowa



The quality of design and work shine in something made by hand. EuroLine Windows prides itself on 30 years of craftsmanship experience and high attention to detail.

have to be lifted to open and close, which ensures ease of use and makes the system simple to operate. We all agree that this product was absolutely worth our effort." Recalling Patio Inowas launch, Giesbrecht says:

"Roto offers excellent technical support."

Bright prospects for the future

EuroLine Windows is constantly looking into the question of which features give a building element special durability and the best energy efficiency, while retaining a contemporary design. "When we got to know Patio Inowa, we were honestly thrilled by the concealed hardware technology, even in very narrow profiles. It was clear to us that as a window and door manufacturer for demanding and ecologically oriented builders, we could not pass up this sliding solution." As expected, the new sliding system "got off to a flying start."

In the meantime, management is convinced that the share of EuroLine Windows' new sliding system will continue to grow steadily. This is great news for the production staff, who are happy to work with Patio Inowa because of the simple installation of the system.



EuroLine Windows pays high attention to detail with every window and door made. Quality assurance is conducted for each unit.

The right choice

"In addition to energy efficiency, sound insulation and burglary protection are now playing an increasingly important role in North America," says Giesbrecht. "Regardless of whether an element is opened by turning or sliding. No matter what size it is and what profile customers choose. We will be able to offer them an efficient solution for all functional aspects thanks to our hardware supplier." Roto's wide product range allows EuroLine Windows to adapt to customer's requirements while also guaranteeing a tight seal, noticeable operating comfort, and a sleek design.

Convinced of the future viability of the Patio Inowa sliding system, EuroLine Windows is investing heavily in advertising and training to arouse the interest of important industry influencers and new customers. Giesbrecht is convinced, "the more comprehensively we inform architects about the variety of possible Patio Inowa solutions, the better it will be for the homeowners and the environment."

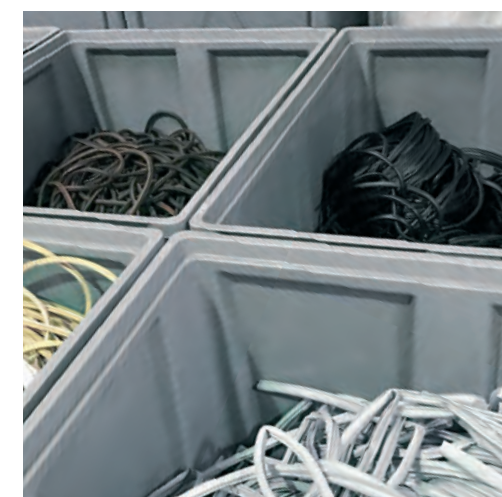
www.euroline-windows.com



Wilbert Giesbrecht,
Vice President
of Operations,
EuroLine Windows



Customer-specific: gaskets can be individually developed and prototypes produced in a short time with modern production methods.



System solutions from one provider

Hardware and gasket from Roto

■ **Gaskets** Windows and doors increase the comfort and energy efficiency of buildings. Especially when they are sealed. That's why Roto is working on further expanding its product portfolio globally. It not only offers hardware, locks, thresholds and handles, but also highly efficient gaskets for modern windows and doors.

"By providing a variety of components from one provider as well as coordinating them optimally with each other, we want to establish the maximum benefit for the manufacturers of windows and doors," says the CEO of Roto FTT, Marcus Sander. "This objective and self-image has motivated us to integrate the gasket specialist Ultrafab from the USA." The acquisition of Ultrafab makes Roto one of the global market leaders for sealing profiles for building elements, because the European gasket manufacturer Deventer has already been part of the Roto Group since 2016.

Integrated consultation on both components

Deventer and Ultrafab's range of products is extremely wide. The two companies produce at a total of seven sites worldwide. Window and doors manufacturers that collaborate both with Roto and with one of the two sealing profile specialists benefit from well-coordinated support services as well as integrated consultation on hardware and gaskets.

Joint developments

A particularly successful example of the combined efforts of Roto and Deventer is the tightly sealed sliding system Patio Inowa. In the meantime, it is produced for all frame materials and is sold worldwide with great success. The locking movement and the circumferential gasket are both so innovative, that fabricators speak of a genuine revolution in the building elements with sliding opening type. "Ultrafab too will cooperate in the development of such powerful systems through its collaboration with Roto," stresses Sander.

Sought-after experts

Like Ultrafab, Deventer also produces profiles in large quantities and provides them on-time and in consistent quality. Both companies are considered to be technological leaders and they support their customers from an early phase of product development. Their advice is sought-after when a specific window design is being developed or when production processes are being streamlined. Both companies

construct special profiles on demand, and test building elements as well as their sealing concepts in in-house testing facilities. Prototypes can therefore be created at short notice. Many products from the European or American sealing profile plants of Deventer and Ultrafab support sophisticated design for windows and doors. They are therefore effective for sealing the elements and for the energy efficiency of the building envelope, noise protection as well as for sustainable construction and living.

Modern production

Both Deventer and Ultrafab have vast expertise in the processing of different synthetic materials. Industrial companies from all sectors, including the automotive and electronics industry, medical technology and the precast concrete industry, therefore turn to Ultrafab or Deventer when particularly efficient gaskets are required. Production is eco-friendly, using consumption-optimised, modern plants. Production residues are immediately recycled in the factories, and the use of regenerative energies is also consistently promoted. The high product quality begins in the value creation process and continues throughout the entire life cycle.

Customer benefits in focus

Deventer and Ultrafab both represent the Roto Group's mission to be leaders in the performance criteria that are crucial for their customers. "All Roto companies aspire to quality, design, technical support, reliability

Sustainable: production residues are prepared and recycled.

and high delivery performance," emphasises Sander. "That's how the company can claim its position as one of the world's leading manufacturers of architectural hardware and sealing profiles for windows and doors."

If you would like to find out more about the products and services of Deventer and Ultrafab, please contact your partner in the Roto sales department. They will be happy to respond to your questions and concerns.

DEVENTER

Member of Roto Group

Ultrafab inc.

Member of Roto Group

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To improve the reading flow, only the male form is used in some parts of the text.

Within the meaning of equal treatment, the corresponding terms apply neutrally to all genders.