

# Roto Inside

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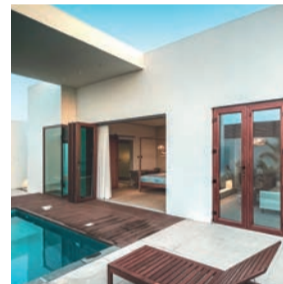
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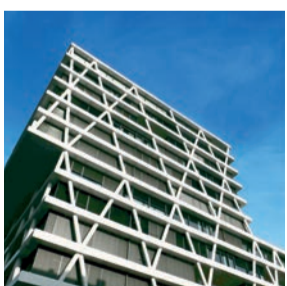
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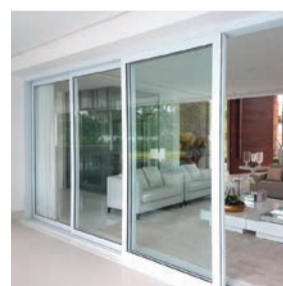
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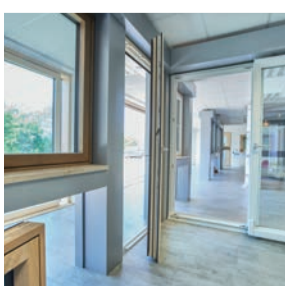
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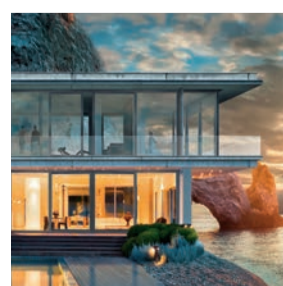
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# Roto Inside

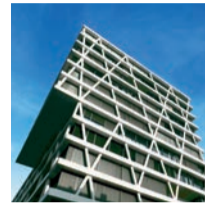
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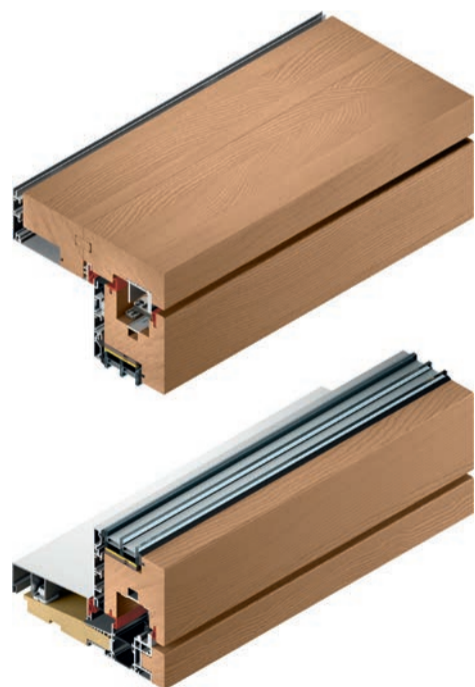
## System solutions in a group of companies: Roto and Deventer

### Optimally coordinated hardware and gasket

■ **Accessories | Aluminium | Timber** The building element of the future achieves top performance while the technology remains almost completely concealed. That is what most manufacturers expect – no matter where in the world they are. The Roto Group relies on networking to assist manufacturers in their innovation process.

Ceiling-height with heavy sashes, maximum transparency thanks to narrow profiles and tightly sealed – all of this regardless of the opening type. Anyone looking for a building element with these features is, without knowing it, asking for a product in which three components are in perfect harmony with the profile system: hardware, sealing profile and glazing method. Without the right mix of these components, a window or sliding system will not be reliable or convenient. Despite this, the importance of careful coordination of all components is still underestimated.

The gasket that Deventer tailored to the Roto Patio Inowa system ensures operating convenience.



**The perfect gasket for Roto Patio Inowa**  
The Patio Inowa sliding system, with its innovative closing movement perpendicular to the frame and circumferential TPE gasket, provides the best example of the added value offered by effective coordination. Jürgen Daub describes the added value of the smart system as follows: "Aluminium or timber window manufacturers who use Patio Inowa in their production work with a package of accessories that has been optimally coordinated in the Roto Group." He is responsible for research, development, application technology and product management at Deventer GmbH.



Tightly sealed: Timber sliding system with Roto Patio Inowa and TPE gasket from Deventer

"The Roto Group is the only hardware manufacturer with dedicated in-house expertise in sealing profiles and glazing methods." This is what makes it possible for the company to adapt the Inowa system to a specific aluminium or timber profile within a short period of time. No system supplier or window manufacturer has to worry about details such as the optimal design of the gasket to suit the movement geometry of the hardware. This task is completed within the Roto Group.

**"Speaking with Roto saves time and acts as a shortcut to an excellent mix of components."**

#### By your side from the outset

Daub explains that Deventer was involved from an early stage in the development of the basic version of Patio Inowa. "Our task was to design a gasket for a system in which the sash is retracted from the fixed segment by 8 mm in parallel during sliding." This large distance is a good thing as it ensures that the gasket cannot rub against the mullion when opening. "We also had space for a gasket with a lot of volume, which results in a very gentle movement when closing the sash." The user requires minimal force to close the sash. "At the same time, we managed to design the gasket so that a Patio Inowa system remains tightly sealed for decades with minimal maintenance requirements."

Deventer, a specialist in sealing profiles made from thermoplastic elastomers (TPE), has been part of the Roto Group since 1<sup>st</sup> January 2016. The company operates production sites where it was founded in Berlin, in the Netherlands, in Poland and in Russia. All of Deventer's products are tested to allow reliable statements to be made regarding a window's air-tightness and driving rain tightness, as well as the gasket's elongation and cutting characteristics.

The Deventer designers were able to start working on the optimal geometry for the sealing profile even while the hardware was still being developed. They took the time to make it especially easy to install. "On every window and balcony door, the space available for the gasket results from the movement sequence of the sash or leaf towards the frame," explains Daub. Sealing profiles must be tailored to the available space, as well as the expected tolerances and movement sequences that are predetermined by the design of the element and the hardware. "This is why it makes sense for the gasket designer to be involved early on in the innovation process."

#### Gasket affects the user's experience

Moreover, the window or door manufacturer's requirements regarding the features that should characterise a building element are crucial for the development of a sealing profile. "The gasket directly affects the consumer's experience. We can decide on whether they find the movement of the lever handle as gentle and smooth or as forceful and firm."

TPE materials can be welded together or with other polymers. Thanks to their almost limitless compounding alternatives, Deventer gaskets can be well and truly tailored to different purposes. This is why Daub underlines the fact that: "Regardless of the technical requirements that the gasket has to meet, a building element manufacturer should always tell us what kind of experience we should create for the user. Then we can produce the perfect profile for their system."



Jürgen Daub,  
Head of Application  
Technology,  
Research and  
Development,  
Deventer GmbH



## In conversation



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

**Roto Inside:** Mr Sander, during the Trade Press Day in November, you predicted good things for Roto Window and Door Technology for this year. And this was despite the ongoing difficulties associated with the coronavirus and shortage of raw materials?

**Marcus Sander:** That's correct. Both extremely challenging aspects shaped the year. Despite this, we are expecting our results to be better than anticipated for 2021. This achievement is due to the global growth of the window and door market and the rise in European construction volume, among other reasons. In Germany alone, the drastic increase in planning permissions is encouraging. All of our business regions are recording a higher number of renovations. We were able to acquire market shares all over the world.

**Roto Inside:** So the growth is due to increased market demand and a focus on customers.

**Marcus Sander:** Exactly. However, the compatibility of our hardware systems also plays a crucial role. We make choosing us an attractive option for manufacturers. For our customers, this means producing a reduced number of parts, catering to end user requirements in the best possible way, and on-time delivery – all over the world! This is why we were able to acquire new customers around the world over the past few months. Our reliability, not only in terms of delivery performance, is clearly recognised on the market.

**Roto Inside:** How did you handle the shortage of raw materials? Many construction suppliers had to deal with this challenge.

**Marcus Sander:** Especially in the second half of the year, we increasingly had to strike a delicate balance between material availability and customer requirements. We benefited once again here from our globally networked production structure and timely stocking of raw materials. Thanks to multi-level stocking, we are able to compensate for sudden fluctuations in demand relatively well, although the material supply side has posed some challenges for us.

Our production model follows Lean principles. It ensures the greatest possible flexibility, allowing us to adapt machine and personnel capacity according to requirements. Our FTT production network covers eight sites in Europe. This is supplemented by factories in North and South America, Russia and China. This allows us to produce goods where they are needed.

**Roto Inside:** In previous issues, you described various investments. Will you continue to invest?

**Marcus Sander:** Of course. Growth needs investment, and this year we had to invest more than planned in production and logistic capacity. By doing so, we responded flexibly to the increased demand caused by the acquisition of new customers. Investment in capacity also clearly means an investment in our customers and is proof of our agility.

**Roto Inside:** Lean and agile, yet successful. What concrete steps are you taking to ensure that your success also benefits customers?

**Marcus Sander:** Maintaining sufficient capacity and responding agilely is one way we are doing this. To create added value for window and door manufacturers, we have to be in constant dialogue with them concerning their requirements and aims. This means recognising the signs of the times, optimising our customer communication and making targeted investment in other product innovations. And I don't just mean architectural hardware products. We also have to consider new business models.

**Roto Inside:** You mentioned "signs of the times" – I assume you are referring to digitalisation.

**Marcus Sander:** That's right. Digital channels and solutions are changing and broadening our understanding of what is meant by customer benefits and which criteria are decisive for our customers. For us, digitalisation is a tool for becoming

faster, more transparent and more focused in our processes. Over the past few years, we have already been working on our e-business framework and will further extend it. This will ensure our viability.

**Roto Inside:** Could you give us some specific examples?

**Marcus Sander:** In production, this concerns, for example, 3D printing, machine data analysis, driverless transport systems indoors and outdoors, collaborative robots and a drone-based autonomous system for stock control. In the field of production innovation, visualised product tests significantly reduce development times. We are fully integrating our global enterprise master data based on SAP. This consolidated data forms a standardised and comprehensive information source and is the key to digital communication.

With Roto Con Orders, our customers can put together their own hardware sets 24/7 in any technically permissible configuration. In any opening type, in any frame material, in 17 languages, locally and mobile. We link Roto Con Orders to SAP and dealers' websites. We are currently developing a personalised customer portal for global access to tailored content and functionalities. In addition to maximum flexibility, it offers our customers greater transparency and efficiency in daily collaboration. We should not forget our Roto City, a digital communication platform for product consultation and shared dialogue.

**Roto Inside:** You have announced that you will be participating in the "Fensterbau Frontale" trade fair. What can attendees expect there?

**Marcus Sander:** Alongside product innovations in our Sliding and Door segments, the main focus will be a lot of space for in-person discussions. We have transferred our concept of the Roto City to our trade fair stand. Come and experience it for yourself!

I would like to take this opportunity, also on behalf of our staff around the world, to thank all of our customers and market partners for everything we have accomplished together this year. Our customers have held up well. It is a privilege to be able to support them on their journey.

Stay healthy and take care. I wish you and your families a relaxing time at the turn of the year, and a happy start to the new year.

## Re-experiencing hardware technology

# Roto 3D printing makes customers faster

■ **Company Building element manufacturers can now benefit from a much shorter time to market for individual components. Using the 3D printing method, Roto quickly, reliably and flexibly provides components in small and very small series, as well as prototypes for testing.**

The possible production range also includes jigs, sample parts and spare parts. The mechanical properties of the PVC components generated from the 3D data are comparable with those produced by injection moulding. This means that 3D-printed prototypes can also be used in prototype windows for tests, for example, thanks to their proven strengths.

Roto uses Multi Jet Fusion technology from HP. Unlike the SLS alternative, this powder-based printing method does not use a laser for the melting process, but uses an infrared lamp instead. This melts the powder material in layers. The heat-absorbing liquids used – fusing agents – only fuse certain areas of the powder bed. This leads to sharp outlines and high dimensional accuracy of the printed components. The multi-stage printing process results in a finished component, functional element or complete functional assembly.



Steel frame locking component with 3D-printed PVC packer for use in an RC 3 compatible window



Process Manager Sebastian Schönewolf (left) and Jesse Wengerek in front of an RC 3 hardware combination of the Roto NX Tilt&Turn system. The colleagues are part of the Installation Technology & Engineering team in Leinfelden. The five-person team takes on a leading role in implementing 3D printing technology in Roto Frank Window and Door Technology's entire production network, alongside other tasks.

### Proven in practice

A Roto 3D-printed component has already proven its suitability for practical use in England. The Alexandra Hospital in Redditch, Worcestershire, is fitted with 1000 Tilt-Only windows. They were produced by 3D Aluminium, Oxfordshire, using a profile system from Hydro Building Systems. In order to meet the delivery schedule, Roto was able to print the required amount of PVC packers for the frame

centre closers at the Leinfelden production plant just in time. The 3D printing method based in production is one of many projects that form part of the strategic digitalisation initiative, which includes all divisions of Roto Frank Window and Door Technology around the world. The Roto City is one example of a customer communication project. It was launched at the start of the year and is designed to provide virtual product consultation.



## Roto NX

# Steel frame components for burglary protection up to RC 3

■ **PVC | Timber Roto NX security tilt strikers and strikers made from hardened steel, when combined with security locking cams, form the perfect basis for RC 3-compatible Tilt&Turn elements made from PVC or timber.**

Whenever windows and balcony doors with a high level of burglary protection are required, NX users can meet this demand flexibly and quickly. And all this even if their production process is automatic. A new component geometry increases the dimensional stability and optimises the connection between the top and bottom parts of tilt strikers and strikers. This also makes the new steel frame components ideal for automated assembly.

### Operating convenience ensured

An optimised run-in curve of the cam makes operation simpler, even for building elements equipped with many locking points and security strikers. The security locking cam runs in smoothly and reliably.

The security tilt strikers have a symmetrical shape for use on the right and left. This reduces the variety of parts in the NX modular system. Its bottom part is made from PVC and seals the frame components at the side. This helps with ensuring fault-free functioning in the long term,



Ground-floor windows pose an extremely high burglary risk. The Roto NX steel frame components provide the best protection for windows and balcony doors up to resistance class RC 3.

### Configured for E-Tec Control

If a window is to be additionally secured using the E-Tec Control locking and opening monitoring system, concealed MVS-B magnetic contacts can be inserted into the new security tilt strikers and strikers in the base area without any hassle. These do not have to be reworked to fit the contacts.

### Strong with Roto NX TiltSafe

Using the new steel frame components makes even TiltSafe windows safer. They are simply combined with the Roto NX security strikers for the tilt position, Roto NX V locking cams and a lockable handle (100 Nm). With this configuration, elements can achieve resistance class RC 3 when closed and resistance class RC 2 in the tilt position.



The security striker for tilt ventilation and the Roto NX V locking cam, together with the steel frame components, ensure that TiltSafe windows comply with RC 3 when closed.

➤ **Economical, safe, convenient, design-oriented: Roto NX at a glance**

<https://www.youtube.com/watch?v=uSoumAYVao0>

TiltSafe window with security tilt strikers and strikers made from hardened steel: RC 2 in the tilt position | RC 3 when closed

## New for Roto Safe E multipoint locking systems

# ZKS Eneo 4in1 access control system

■ **Door A new, particularly convenient and flexible access control system is now available for Roto electromechanical multipoint locking systems. ZKS Eneo 4in1 opens main doors and back doors when activated via Bluetooth on a mobile phone, via a finger scan, RFID, or by entering a numerical code.**

The external degree of protection IP66 of the device installed in the door leaf prevents dirt and moisture from penetrating. It is bonded easily and reliably. Coordinated components, such as preassembled connectors, which ensure the reliable connection via Plug & Play as well as the fast commissioning, make installation simple.

### Full comfort, full control

With the intuitive app, it is easy to create an unlimited number of users who are to have access via smartphone. This authorisation in the access control system can be revoked at any time using a smartphone with administrator rights. If a smartphone is lost or has been taken out of service, it can be simply deleted from the list of authorised devices. The administrator also has the option to assign individual access rights for certain time periods. A digital log means that the administrator can find out at all times who has accessed a building via the access control system and when this took place.

The app required to manage access rights is available in 27 languages for iOS 9.0 and more recent versions, as well as for Android 4.4 and more recent versions. The administrator rights can be easily transferred from one smartphone to another as required.

### Two variants

Roto offers two multipoint locking systems, which the ZKS Eneo 4in1 access control system can be used to operate. With the Roto Safe E | Eneo A version, automatic bolts extend once the door is closed. From an insurance point of view, the door is considered locked immediately without the use of a key. The powerful yet quiet motor ensures a particularly quick unlocking and opening process.

Roto Safe E | Eneo CC is a multipoint locking system which opens and locks the main lock and additional lockings fully electronically. Thanks to the convenient opening, locked main doors can also always be opened from inside using the door lever handle. This turns a main door into an escape door in an emergency.

### Third innovation in the Door range

With the new access control system, the Roto Door range has been extended for the third time in just a few months. Thanks to the recently launched retrofittable deadbolt switch contact, flexible cable junctions and ZKS Eneo 4in1, main doors and back doors can be adapted to individual customer requirements without any hassle. All the components in the Roto Safe E range have been designed to work smoothly together, ensuring that they can be quickly and easily installed via Plug & Play.

### Flexible cable junctions

The cable junctions, for instance, provide quantifiable time savings when cabling. Two different junctions are available for the leaf and frame. They can be combined in any way you choose according to the profile material and installation situation. Once they have been installed on the leaf and frame side, the cable is routed to the motor lock, and is then simply plugged in. The cable is connected to the access control system from the motor.



Can be operated using a smartphone, via finger scan, RFID, or a numerical code.

The cable junction with integrated power supply unit is installed in the door frame. This means that a 230 V connection is the only other thing that needs to be provided for installation of the door on site.



ZKS Eneo 4in1 achieves external degree of protection IP66.



➤ **Electromechanical multipoint locking for doors: Roto Safe E | Eneo A**

[www.roto-frank.com/en/safe-e-eneo-a](http://www.roto-frank.com/en/safe-e-eneo-a)



➤ **Electromechanical multipoint locking for doors: Roto Safe E | Eneo CC**

[www.roto-frank.com/en/safe-e-eneo-cc](http://www.roto-frank.com/en/safe-e-eneo-cc)



## Expert team for Roto Door Innovation

# Roto Solid C for customer-specific profiles

■ **Door** Roto has adapted the Solid C concealed hinge for aluminium main doors to well over 30 different profile systems since its market launch three years ago. If a door manufacturer uses their own system, the expert team for Door Innovation examines how the required hinge can be tailored to the customer's individual requirements, and how long this will take. Mathieu Vanderhasten, Head of Product Development at Belgian family-owned company Pierret, thinks this is "a great service".

Available for well over 30 different profile systems: The Roto Solid C concealed door hinge, shown with frame and sash hinge.



Mathieu Vanderhasten (left), Head of Product Development at Pierret S.A, is pleased about the successful start to the collaboration, like the Roto Door Innovation experts; from left to right: Tom Vermeulen, Head of Sales Door & Door Innovation, Martin Pauritsch, Head of Product Development Door, Thomas Rieger, Application Manager Door, Chris Cauwenberghs, Head of Product Adaptation and Marketing for Western Europe. (Image Mathieu Vanderhasten: Pierret)

Tom Vermeulen, Head of Sales Door & Door Innovation, presented Solid C to him and his team at the start of 2021. The design and function of the concealed hinge were impressive straight away. But the next step was to adapt the product in order to achieve the perfect interaction between the company's own profile system and the attractive hardware. Vermeulen recalls: "The aim was to design the hinge for Pierret so that it can be used for both inward and outward opening doors."

### Application management

The members of the Door team – based in Leinfeld, Germany, and Kalsdorf, Austria – assessed the likely need for adaptation together. Thomas Rieger, a design engineer with years of experience, ultimately took on the task of planning an application of Solid C for Pierret and working out a reliable start date for production.

In just a short space of time, he was able to adapt the design of the Solid C hinge supports and hinge support casing as required for use in Pierret's profile system. That was no surprise for Martin Pauritsch, Head of Door Product Development: "Solid C has a clever design, allowing it to be adapted to a large number of profiles, usually with short deadlines."

After the customer quickly double-checked the design, a prototype of the concealed hinge was produced in Kalsdorf. Application Manager Rieger travelled from Austria to Belgium for initial installation and final acceptance of the hinge. "It was a nice moment when the customer and I could witness the excellent performance of Solid C in Pierret's doors for ourselves," he recalls.

### Passing the baton

At this point, Vermeulen and his colleague Chris Cauwenberghs had already defined the framework for delivery methods and services with the management of Pierret. The collaboration had to be discussed in as much detail as possible to make the launch of Solid C a success from the start. Cauwenberghs, who manages product adaptation and marketing for Western Europe, is pleased about the agreement that was entered into with the renowned door manufacturer in April 2021. "Our concealed door hinge is the perfect addition to Pierret's product range, and the expert team for Door Innovation has acquired a customer who we look forward to supporting from Nivelles. We picked up the baton and are looking forward to working together."

### Successful first year

Vermeulen and his colleagues in Door sales are focusing on winning over companies like Pierret with Roto products and services. Pauritsch, who is based in Kalsdorf, believes that it is now easier for the design engineers and product managers who formed the Door expert team a year ago to play a bigger part in achieving success:

**"The closer networking between Door specialists clearly improves customer service."**

Roto set up the expert team for Door Innovation at the start of the year. Pauritsch is pleased that "since then, communication has been more direct and collaboration has been closer." This is backed up by an increase in the number of customer-specific applications, for example, that can be successfully completed within a year.

### Main doors from Pierret with Roto Solid C

Family-owned business Pierret, which is one of the largest producers of main doors in the Benelux region with a turnover of around €80 million, recently told its customers about the new option in the range. All aluminium main doors from Pierret can now also be ordered with the Roto Solid C concealed door hinge on request. "We are all excited to see how turnover will develop next year," acknowledges Vermeulen, who is happy with how the past year went. "The expert team for Door Innovation is happy to be part of this journey. As the team leader, I am of course pleased to see that. But what makes me especially proud is being able to offer manufacturers like Pierret what I think is a really good service." [www.pierret.net](http://www.pierret.net)

Not just a specialist for main doors in Benelux: in its showroom at the company headquarters in Transinne, the Belgian family-owned company showcases its whole range of window solutions made from PVC, timber, aluminium and timber-aluminium. Image: Pierret



➤ [Overview of the Roto Door product range](https://www.roto-frank.com/en/doors)

[www.roto-frank.com/en/doors](https://www.roto-frank.com/en/doors)



# Security meets aesthetics

■ **Aluminium** Family-owned company Sommer, from Döhlau in the Hof district of Franconia, has developed its own profile systems for the production of aluminium facades and steel structures. Almost always featured in windows and doors: Roto hardware technology.

More than 130 years ago, Eduard Sommer founded a metalworking shop in Hof, which the generations after him would transform into a successful metal and steel construction company of national and international renown. Today, it is active in facade construction, building security, high-security technology and hazard prevention. The company manufactures project-specific facades, building elements and security systems from a variety of components that it designs and manufactures itself.

Sommer also supplied windows and a variety of hardware from its long-standing partner Roto for the 50Hertz Netzquartier office building in Berlin, built in 2016, with its eye-catching facade supports that cross over one another. Image: Sommer, Döhlau



## Scope for innovations

With more than 465 members of staff, Sommer covers the entire value chain from product development through to preassembly of facade elements, for example, at the Döhlau site. Over 60 patents document the inventiveness and passion for innovation which spurs on the family that owns the company. "Perhaps this is why Roto is such a good match for us," grins Oliver Sommer.

## "A coming together of inventors."

Oliver Sommer and his sister Iris Sommer-Pechstein have managed the family-owned company since 2002. From the very beginning, their aim was nothing less than internationalisation. Subsidiaries have been founded in the United Kingdom, France and the USA, while successful sales cooperation was set up in Russia. Among customers, there is a clear demand for the "Made in Germany" product quality that Sommer represents.

More than 465 members of staff work for Sommer Fassadensysteme – Stahlbau – Sicherheitstechnik at the company's site in Döhlau. Image: Sommer, Döhlau



Almost 2500 hardware sets from Roto are an important part of this building on Budapester Straße in Berlin, which was completed in 2019. Sommer worked with the AL surface-mounted Tilt&Turn hardware up to 180, 200 and 300 kg, as well as 1000 pieces of special hardware for ventilation flaps based on AL Designo. Designed by Grüntuch Ernst Architects, the building has an unmistakable octagonal shape. It is certified in accordance with LEED Gold. Image: Sommer, Döhlau

The businessman is certain: "In the same way that tyres and drive technology for the family car of tomorrow are developed and tested in car racing, our hardware experts use Roto solutions that often gain widespread traction on the market after just a short time."

## Constantly increasing weights

For years now, Sommer has required hinges for sashes with heavy glazing far more often than other window manufacturers. "Windows with bullet-proof glazing result in high weights, just like triple-glazed sound insulation elements," explains Oliver Sommer. His team and Roto have therefore concentrated on meeting this requirement. "Nowadays, a hinge side for sashes up to 200 kg as standard is used by many window manufacturers, but this development is by no means finished." Oliver Sommer now expects to see a large number of sashes weighing up to 300 kg in the industry given the increasingly stringent sound insulation requirements.

## Sustainable construction and refurbishment

The entrepreneur is optimistic about the future of aluminium window construction, including in the market for standard building elements: "Sustainable construction has become an important issue in most of our sales markets. And for this, you need windows and doors that can be dismantled into their separate materials during demolition. With our products, this is not a problem; what's more, our industry is much more advanced than others when it comes to recycling, for example of aluminium."

Oliver Sommer believes that the only thing that could slow down the industry's positive development could be long-lasting procurement problems. This is why a supplier like Roto is an important support, as its delivery ability and adherence to delivery deadlines, more than anything else, are "really decent". No matter how difficult the future might be, the family-owned company will do everything in its power to improve its adaptability and performance.

As part of the "Sommer agile" project, the company is working on digitising its processes. "I dare say that medium-sized companies have huge potential for increasing their efficiency through digitalisation." Is there the potential to collaborate with partners outside the company? "Definitely," agrees Sommer. "For me, it's a certainty that we will work closely with Roto when optimising processes too." www.sommer-hof.com



➤ **Roto AL – universal hardware for aluminium windows and balcony doors**

[ftt.roto-frank.com/int-en/roto-al](http://ftt.roto-frank.com/int-en/roto-al)

## Making the impossible possible

In the facade design business area, the aim was nothing less than to "make the impossible possible". The around 100 specialist planners at the company excel in producing even highly complex shapes using the Sokaltherm® aluminium profile system, supported by 20 engineers and structural specialists. "Roto is involved in designing the individually tailored windows and doors." And the partner's hardware was also used to construct steel doors.

More than 1000 jointly developed Roto hardware configurations are stored in the databases at Sommer. "And quite a large number of them can now be found in the Roto standard range," reports Heiko Straub, Head of the Roto Aluvision Object Business. He has been coordinating the cooperation for four years.

Many architects who ask Sommer for facades or building elements will go on to use specially developed designs multiple times. This generates publicity and increases the demand for specific hardware.

## Tall and narrow

"For example, ventilation flaps are a topic that we picked up on very early," adds Oliver Sommer. "In high-rise buildings, they ensure natural ventilation of rooms in cases where windows cannot be opened freely for safety reasons." But especially when constructing tall, very narrow sashes, the design of the hardware is crucially important for functioning and durability.

## "We found the solution with Roto."

Sommer still generates two thirds of its company turnover through projects involving Roto hardware. This is why they maintain a close "partnership for development and testing".



Oliver Sommer,  
Managing Director,  
Sommer Fassaden-  
systeme – Stahlbau –  
Sicherheitstechnik

Image: Sommer, Döhlau



Heiko Straub,  
Head of the Roto  
Aluvision Object  
Business



## Z-Fenster-Technik KG, Germany

# Investment in the future

■ **Timber | Timber-aluminium** Z-Fenster-Technik KG got the new decade off to a flying start. The company completely modernised its production facilities for timber windows and also extended its production facilities for timber-aluminium systems so that it could once again offer more product variants than before. The aim is for the marketing of the extended range to “pick up pace”.



Z-Fenster-Technik has once again invested in extensive modernisation of its systems.

### For greater sustainability

The major investment in the production of timber-aluminium systems is a decisive response to changes in demand patterns. “We are observing a strong trend towards sustainable products,” explains Martin Zizlsperger. This is leading to an increased demand for timber building elements, while also provoking the discussion about maintenance requirements and the durability of products. He summarises the most important demands, especially those from architects and a growing number of municipal clients: “In future, windows should as far as possible be made from renewable materials and be extremely long-lasting without maintenance, and it must be possible to dismantle them into their separate materials.” Stefanie Zizlsperger concludes, therefore, that it is almost inevitable that the market in the premium construction segment will show an increasing shift towards timber-aluminium windows. The married couple is certain that even the major challenges currently affecting the procurement of good timber won’t be able to hinder this development.



The fifth generation of entrepreneurs: Married couple Stefanie and Martin Zizlsperger are impressed by the potential of their in-house, highly flexible timber window production facility.

The window professionals take the time to advise their customers, and not only in their impressive showroom.

Married couple Stefanie and Martin Zizlsperger are the fifth generation of the family to own the company based in Hausen, south of Regensburg in Bavaria. You can feel their enthusiasm for their work. The around 160 members of staff are like one big family and appreciate the opportunities offered by the economically healthy company and a creative management team.

“In our interviews with young applicants, we make one thing clear: we never stand still and we are constantly adapting this company,” explains Martin Zizlsperger, who is responsible for the HR and Marketing departments. The technology, product range and contact with customers are sensitively adapted to changes in the markets and demand patterns. This means that there are always new opportunities for staff who would like to progress in their career and access further training.

### So much is possible

During the interview, Stefanie Zizlsperger, a graduate in timber technology and great-great-granddaughter of the founder, proved herself to be a clued-up observer of the market and an enthusiastic engineer: “It became apparent to us years ago that the market specifically for timber windows may develop in com-

The company’s 160 members of staff are like one big family. The image shows Karl Pernpeintner.



pletely different directions in future.” This ultimately depends on the political direction for residential construction.

**“In residential construction, different developments are currently possible.”**

Stefanie Zizlsperger explains that if many more new development areas were to be established on greenfield sites where comfortable detached houses and apartment buildings were to be built, entirely different windows and doors would be needed than if cities were to become more densely populated. She has been the Head of the Kelheim Professional Association of Carpenters for ten years and is always in active dialogue with her colleagues.

### Remain a leader

This is why her company’s own strategy focuses on flexibility and quality. She summarises her considerations over the past few years: “When we were planning to extend and modernise our systems engineering, all of our decisions were made so that, in the end, we would be well equipped for producing a wide range of different products. When developing them, we always try to bring together the best components in terms of technology and appearance so that we will remain a leader in quality and design as far as possible.”

Years ago, from the perspective of her father Alfons, this led to Z-Fenster’s decision to only produce Tilt&Turn windows with the NT Designo fully concealed hardware, for example. “That was a brave decision back in 2008,” describes daughter Stefanie. And now the family is taking on a pioneering role again. As the first timber window manufacturer in Germany, Z-Fenster has started producing timber-aluminium sliding systems with Patio Inowa. For Alfons Zizlsperger, that is no coincidence.

**“We are often a little faster and more determined than others.”**

### Sliding is the trump card

“From our perspective, this hardware has exactly the potential we’re looking for. It makes very easy-to-use sliding systems possible in all formats that will be important in future.” Customers from the prefabricated house industry in particular, as well as many architects, have seized on the idea of incorporating wide sliding windows into kitchen plans. Wide, ceiling-height sliding systems are also popular in rooms with access to a garden or terrace. Another exciting trend is emerging: “A trend towards sliding windows and doors has become apparent in apartment buildings in cities, where every expensive square metre of space matters.”

### Sealing more important than ever

Since the legislative requirements for thermal insulation in buildings will become more stringent at the same time, it is clear to Stefanie Zizlsperger that: “In future, sliding systems must prove that they too can be tightly sealed, and as a manufacturer we must be prepared to produce systems in many different formats.” The expert states that with the sliding system from their supplier Roto, Z-Fenster has found exactly what they were looking for.

**“Patio Inowa is a sophisticated system for timber and aluminium sliding systems.”**

In 2018, the companies Gutmann, Leitz, Roto, Deventer, Weinig and Prologic decided to join forces to make it easier for manufacturers of timber-aluminium windows and doors to produce sliding systems with Patio Inowa. To do so, they precisely coordinated their system components, i.e. gasket, hardware, profile, threshold, aluminium casing and the routing unit required for production. Z-Fenster benefited from this cooperation when setting up the new production facility.

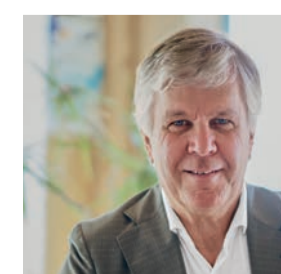


Flexibility and quality are at the core of the company’s policy. All images: Roto

The company is going into 2022 with a lot of optimism and the aim of “making people aware of our new products and the additional possibilities for special solutions and custom productions on the market, for example in the protection of historic buildings and monuments,” states Stefanie Zizlsperger. Together with the Roto Lean advisors, for example, the aim is to further optimise the processes from order to delivery and to set them up for large quantities.

Impressed by the potential of their in-house, highly flexible timber window production facility and Roto Patio Inowa for sliding systems of any size, the company is set to invest a lot of energy into providing architects in particular with information and advice. “With this in mind, over the next few months we will continue what we trained to do during the coronavirus pandemic, which is to have individual conversations,” explains the businesswoman. “Anyone who likes to take on a pioneering role has to go to the effort of having many individual consultations. For us, that’s simply a matter of course. We remain in contact with our customers and I believe that’s what sets us apart.”

www.zfenster.de



Alfons Zizlsperger, management, Z-Fenster-Technik



## Kleidco Yapı Sistemleri, Turkey

# Tightly sealed: Smart Slide



Kleidco was recently commissioned to produce 4000 Smart Slide sliding systems and 7000 Tilt&Turn windows with AL 540 and AL 300 for the Düşler Vadisi Riva project. Like for virtually all projects, Kleidco tailored the series-produced products according to the client's requirements for the 1600 villas that make up the housing development near Istanbul.

Images: Düşler Vadisi Riva



■ **Aluminium Şafak Şentürk, Director of Sales and Marketing at Kleidco, is also an architect. This is why he is dedicated to assisting with the implementation of his colleagues' complex drafts involving aluminium facades and building elements. One of his partners: Roto Frank Turkey.**

"I've been at Kleidco for six years now," he reports. The collaboration between Roto and Kleidco began at around the same time he joined the company. "Of course I've been familiar with Roto as a brand for much longer than this, definitely for at least 20 years, but then I got the opportunity to find out more about the people and products behind the brand." He worked in close collaboration with Yalkın Yazıcı, Aluminium Specialist at Roto Frank Middle East, for around two years on the development of a new sliding system with Patio Inowa. At a very early stage, he realised that:

### "Patio Inowa is excellent hardware."

Large sliding systems are popular around the world and Kleidco Smart Slide wins over the vast majority of customers straight away with its tight sealing and intuitive operation. "Architects and investors who get to know this system in more detail, refer to it as a 'high performer', and I think they're spot on with this."

A tight seal against wind and rain, but also sound insulation and operating convenience, play an important role, especially in premium residential construction. This has become apparent over the last few years, which gave Kleidco the impetus to develop a new sliding system with top performance for these exact requirements. The contribution on the part of the Roto designers then finally turned the Smart Slide system from Kleidco into a success.

### Impressive right from the outset

As is customary during product development at Kleidco, the system underwent multiple complex in-house tests. "Outstanding results right from the start," recalls Şentürk, adding:

### "We have full confidence in this system and our customers can sense that."

In many countries, Kleidco has traditionally maintained incredibly close relationships with creatives and key decision-makers in the construction industry. Since being founded in 1980, the company has earned a good reputation as a producer of tailor-made facade and building element solutions. This is why Şentürk and his colleagues from planning and design were involved in the development process at a very early stage, he explains. Many customers are major investors who constantly come to Kleidco with new projects.

### Smart Slide a thousand times over

Şentürk gives a current example: "For instance, we were recently commissioned to produce 4000 Smart Slide sliding systems and 7000 Tilt&Turn windows with AL 540 and AL 300 for a development of 1600 luxurious villas." Since the market launch, there have been numerous major residential construction



projects, for which Kleidco produced and installed several thousand Smart Slide sliding systems.

The Düşler Vadisi Riva project aims to make a new lifestyle possible in view of the pandemic. The villas are surrounded by green space and are designed to offer an abundance of outdoor space and a beautiful view into the greenery from many rooms in the home. At the same time, various measures have been taken to improve the buildings' earthquake safety. Like for virtually all projects, Kleidco also tailored the series-produced products according to the clients' requirements for Düşler Vadisi Riva.

### "Customised solutions – that's what Kleidco is all about."

And it should stay that way in future.

### Sustainable growth

Although the aim is to achieve growth in many international markets, according to Şentürk, this is always on the basis of sustainable

business development. Murat Saraylı, founder and owner of the company Kleidco and of the system supplier Saray Aluminium, is an investor with vision, who has built up an economically healthy company. In times of a high number of coronavirus cases around the world in 2020 and 2021, the focus was on projects in the heart of Istanbul. "This is where the Istanbul International Finance Center (IUFM) was built, and Kleidco is pleased to have received numerous commissions from the investors active there."

The relationships between Kleidco and business partners such as suppliers should also be built up in the long term. This is part of the company's identity, continues Şentürk. The relationship with Roto is a good example of high-quality collaboration, just like you would want. "The team here in Turkey, as well as the experts at the German headquarters, have proven themselves to be trustworthy and competent over the years. By starting to develop a new product with Roto, we have had the feeling right from the start that we are relying on a strong team in the background." [www.kleidco.com](http://www.kleidco.com)



Happy to meet in person again in the Istanbul showroom after months of limited contact due to the coronavirus: Şafak Şentürk, Director of Sales and Marketing at Kleidco (left), Gökçe Şenkal Baycın, Managing Director of Roto Frank Middle East, and Yalkın Yazıcı, Specialist for Aluminium Solutions at Roto Frank Middle East. (The participants were already fully vaccinated against COVID-19 at the time of the interview.) Image: Kleidco



➤ For more information about the intelligent hardware with concealed technology for tightly sealed sliding doors

[www.roto-frank.com/en/roto-patio-inowa](http://www.roto-frank.com/en/roto-patio-inowa)



## Al Makassab Al Tayib Trading LLC, Oman

# Life made better with My Window



Fold&Slide systems with Patio Fold are among My Window's extremely successful products. Image: My Window



■ **PVC** In just 15 years, Al Makassab Al Tayib Trading in Oman has established a production facility for high-quality PVC building elements. It is now regarded as the country's best proof that German profile and hardware technology is impressive even in extremely hot temperatures outside and cold temperatures inside.

"We are very proud that our brand – My Window – nowadays represents windows with added value," states Yousif Al-Ismaili, owner and managing director of the company. Tilt&Turn and sliding elements produced at the facility near Muscat can be found in more than 3000 private villas. What does a window do for sound insulation, heat protection and burglary protection? How should the surface quality of profiles and hardware be assessed? Many builders have exacting demands and want to individually select the ideal window for each room.

### The window to the home

"For our customers, the windows for their homes are vitally important," explains Al-Ismaili. This is why they spend a lot of time choosing the perfect elements. Unusually wide sliding windows, narrow Turn-Only doors, large Fold&Slide systems – each element should ensure the utmost living comfort in any given room. "This is why we take the time to provide comprehensive support. It's also a joy for me personally to offer good support and help our customers build a truly beautiful, good house." My Window recently opened its own showroom in Muscat, which provides a laid-back and interesting atmosphere for advising customers.

### Equipped for any design

"We produce windows for traditional homes as well as for ultra-modern urban villas," highlights the businessman. Regardless of the stylistic preferences of the builders, one thing is clear:



In Oman like in Europe, there is a growing demand for modern windows in two colours: anthracite on the outside, white on the inside. Images: Al Makassab Al Tayib Trading

## "In Oman, buildings are of a high technical quality."

And this often involves young families, as around 50% of the country's population is below the age of 21. This has led My Window to enjoy great success with TiltFirst windows, for example, explains Al-Ismaili. They improve security for families with young children. A special lock in the handle blocks windows from being opened fully through turning. This is why the TiltFirst technology is also popular for high-rise buildings and large public buildings such as hospitals. Al-Ismaili is pleased that "by offering each customer a tailor-made package for their home, we achieve a very high customer satisfaction rate of 95%."

### Seizing the opportunity

In 2018, Al-Ismaili became familiar with the window industry while working at a company which supplied the PVC industry with oil, among other activities. "Even back then, I was already fascinated by the difference that good windows could make in a building. I constantly thought about how I could establish myself in the construction industry with a premium product. That's why, when the opportunity presented itself to acquire Al Makassab Al Tayib Trading and therefore to take over a professional team and functioning window production, I didn't hesitate."



Each year, around 14,000 building elements by the brand "My Window" are produced there now. But Al-Ismaili is setting the course for growth. The annual production is predicted to amount to 20,000 elements next year alone. Following this, all Tilt&Turn windows are to be equipped with Roto NX. The businessman's next major project is to convert the production process to the new Tilt&Turn hardware from Roto, which is shaping the market. "We want to reach for the stars – the sky's the limit for us," states Al-Ismaili, concluding that:

## "We need Roto NX for this."

The aim is for My Window to be one of the country's five leading brands for PVC windows by 2025. A crucial step on the path to achieving this aim is the introduction of the Patio Inowa hardware with the Rehau Synego Slide system. "We have already received initial orders for the tightly sealed sliding system and expect demand to increase dramatically," reports Al-Ismaili.

With a share of the overall market of more than 35%, Oman is already considered one of the most developed markets for PVC building elements in the Gulf region. Arash Tandorost, Roto key account manager and technical manager in the Middle East Region, still believes that further growth is possible: "I am certain

My Window also offers attractive windows and doors for buildings with a more traditional design.

Image: Al Makassab Al Tayib Trading

that the market share can be further increased if we operate with an extensive range and products of an impressive quality. My Window is proof of how successful you can be with this strategy, and I'm proud to have the opportunity to accompany Yousif Al-Ismaili on his journey."

### A strong team

The businessman himself explains that the around 60 members of staff are probably the most important pillar on which the rapid growth of My Window is based. Many of them have been working in production for over ten years, and Al-Ismaili values their experience. "A good working environment is very important to me. At the end of the day, our customers can sense how satisfied our employees are."

At the same time, another important factor for the planned growth is for production to prove its flexibility and for My Window to continue relying on suitable industry partners. "We are successful because we receive excellent support from our most important suppliers, including Roto. Especially from Roto, we receive first-class technical service and products which, in our opinion, lead the way in terms of quality and design." This is why it is a certainty for Al-Ismaili that he will continue to rely on Roto hardware in future when producing aluminium windows too.

## "We are expanding the collaboration. That's certain."

As soon as the businessman has found a suitable plot and a profile system that meets his requirements, a new factory for aluminium facades and elements is to be built as quickly as possible. Al-Ismaili explains his plans as follows: "I'm certain that, once this is complete, we will be able to further penetrate the market for commercial and public buildings. By extending our product range with the addition of aluminium elements which are of the same high quality as our PVC windows, we are starting a new chapter in our company history."



➤ **Economical, safe, convenient, design-oriented: Roto NX at a glance**

<https://www.youtube.com/watch?v=uSoumAYVao0>



➤ **Roto Patio Fold – premium hardware for large-scale Fold&Slide systems**

[www.roto-frank.com/en/roto-patio-fold](http://www.roto-frank.com/en/roto-patio-fold)



Yousif Al-Ismaili, owner and managing director of Al Makassab Al Tayib Trading LLC. Image: Al Makassab Al Tayib Trading



Arash Tandorost, Roto key account manager and technical manager in the Middle East Region



## An experienced team

# Roto service for manufacturers from the Middle East

**Greece-born Dimitrios Stoikidis has been working at Roto for 25 years and in his current role as Sales Director for the Middle East manages the collaboration with building element manufacturers in this region. A region with considerable momentum, as he reports in an interview with Roto Inside.**

**Roto Inside: Mr Stoikidis, what is the current state of the construction industry, for example, in the United Arab Emirates?**

**Dimitrios Stoikidis:** Like in many parts of the world, the momentum in the construction industry and therefore the demand for building elements is currently very high in the Middle East. In the Arab world, there is generally huge investment in new buildings. Roto has some very successful customers here with impressive performance.

**Roto Inside: How do you organise logistics and service for manufacturers in the region?**

**Dimitrios Stoikidis:** In the Middle East, we collaborate with profile manufacturers, extruders, dealers and architects on the one hand, and directly with fabricators on the other. All of them are supplied directly from our German factories in Leinfelden and Velbert. There are fixed agreements in place regarding order volumes, which we calculate and set together with customers in advance. The result is long-term, stable customer relationships, which we build on with good service. In general, Roto "german made" quality is in very high demand in this region too.

**Roto Inside: Which systems are the most prevalent?**

**Dimitrios Stoikidis:** Aluminium systems are the most prevalent in the Middle East, which is of course linked to the large number of high-rise buildings used as homes and offices. Here, the statics alone require aluminium systems to be used. But there are also countries where villas, in other words bungalows or two-storey homes, are equipped with PVC

or timber windows. Here, structural requirements matter less than a builder's wish to express their own design preferences. Even if the aluminium sector is likely to grow more than timber and PVC, every member of staff in my team must be able to respond to customer requests from all system areas, in other words regardless of the frame material. This expertise is indeed a major benefit from the perspective of many customers.

**Roto Inside: Do your colleagues from Velbert assist you with your work?**

**Dimitrios Stoikidis:** We are supported by many dedicated colleagues from all business areas at many Roto sites. Whether it is designing special solutions, feasibility studies, test certificates or simply for advice. All customers praise the technical expertise and service quality that we offer together. My team is based in Velbert, where we provide digital or phone support to customers and prospectives from the United Arab Emirates, Bahrain, Kuwait, Oman, Saudi Arabia, Iraq, Jordan, Qatar

and Israel. Key account managers like Arash Tandorost also have meetings on site. However, due to the pandemic, they cannot take place in their usual form. We have nevertheless gone to great lengths to overcome this hurdle and are pleased that our customers are attesting to the excellent quality of the advice they receive from us.

Without any exaggeration, I can say that we are a very experienced team with a good performance that contributes to constant turnover growth. Fast and precise – that's what sets our working methods apart.



Dimitrios Stoikidis, Sales Director for the Middle East, Roto Frank Fenster- und Türtechnologie GmbH

## Tecnoplast S.r.l., Italy

# Getting through the crisis together

**■ PVC | Aluminium January will mark the 10th anniversary of the successful and close collaboration between two leading companies. In January 2012, Italian window manufacturer Tecnoplast and Roto began their cooperation, which proved its special quality during the coronavirus crisis.**

Enzo Cammillini, founder and sole managing director of Tecnoplast, sums up the past two years: "The coronavirus pandemic was a complicated and difficult situation, both personally and professionally, for many people and companies in Italy and around the world. Like always, Tecnoplast came together, even in these difficult times, with its proven partners." The pandemic has also changed the market dynamics.

### The new normal

"It's difficult to say whether things will go back to how they were before, or whether we will have to get used to this 'new normal'. Some changes will definitely be lasting. For example, speed will play an increasingly important role. The market will demand reliable responses, quickly. The importance of honest and trusting collaboration between business partners will therefore become more important." Another profound change relates to the behaviour of end customers. "It seems as though they are making more conscious purchases and are deliberating them more carefully. As a manufacturer, we need adequate responses and products for their individual requirements." Production innovation and service quality will therefore be crucial for the future development of the company.

**"Now what matters is: giving our best every day."**



Tecnoplast set up a modern conference and training centre in the company's new building for the professional development of its sales staff and customers.

Image: Tecnoplast

### Stable delivery performance

The close collaboration with Roto and the partner's consistently good delivery performance ensured stability throughout the entire pandemic. "I prefer to work with a small number of good suppliers who are committed to supporting us with professional solutions," acknowledges Cammillini. "Especially when designing aluminium elements for flexibly responding to architects' requirements, we need an adaptable and creative hardware manufacturer by our side."

And Roto has already proven its flexibility many times over, most recently with an important product development. When Tecnoplast wanted to develop a new Lift&Slide system based on the Rehau Synego system with Patio Lift hardware, it lacked a suitable, particularly low threshold. With the support of Roto Italy,



Tecnoplast commissioned its new factory in the Pesaro region at the start of 2021. Image: Tecnoplast

The partnership between Tecnoplast and Roto has benefited the market for ten years. Image: Tecnoplast

this was rapidly developed and has since then been added to the large number of Roto components that Tecnoplast uses on a regular basis as a customer-specific special solution. "We are always in contact with each other and at some point or another we come up with an idea for a special solution that achieves extraordinary things."

emphasises Gianluigi Balestreri, Country Manager at Roto Italy, when recalling these conversations. "This is because he is positive and full of energy. We are very grateful for the great trust he places in Roto. This is proving to be a good basis for the successful activities of an impressive entrepreneur."

www.tecnoplastinfissi.com

### Based on trust

Even in times when they had to avoid personal contact, the direct connection between Tecnoplast and Roto never broke down. The business partners were always on the phone or in video conferences discussing how turnover losses during the lockdown could be offset as quickly as possible. "I find collaborating closely with Enzo Cammillini very motivating,"



Enzo Cammillini, owner and sole managing director, Tecnoplast Image: Tecnoplast



➤ **Roto Patio Lift: hardware for versatile use in Lift&Slide systems**

<https://bit.ly/2JDVYh7>



## Minnkota Windows Inc., USA

# Quality is in demand

■ **PVC** “We buy as much as possible from Roto. We prefer to buy from one quality source, simply because we know we will receive and install quality.” Brad Bushaw, general manager at Minnkota Windows, is convinced that this allows the company to give customers exactly what they are looking for.

Minnkota Windows takes pride in manufacturing high performance, and affordable quality products ranging from casement windows to patio doors, with every style in between. The partnership between Minnkota Windows and Roto began more than twelve years ago, and great trust grew between the business partners during this time. “Whenever I call Roto, they help me as quickly as possible and offer a really good solution,” Bushaw concludes. “Whether I contact customer service or technical support, I experience respect, commitment, and expertise.” That’s good for day-to-day business, he says, but of course is not the only reason for the long-standing relationship. He was initially convinced above all by the quality of Roto products and the extraordinarily wide range of products.

### Well equipped for all variants

“We promise our customers that we can deliver windows in any desired format and with any type of opening. That’s why it’s so important to us that Roto has such a variety to offer.” More than 400 customers in 13 U.S. states regularly purchase building components from Minnkota Windows - the number of product variants in demand is correspondingly large. Minnkota is a consummate partner for Roto, as they purchase a mix of all of Roto’s window hardware. “We need a very eclectic mix of products including hung, casement, sliders, Euro tilts, and more”.



Minnkota Windows manufactures outward-opening windows with Roto North America’s X-Drive Casement and Awning locking systems.

Image: Minnkota

## “Variety and quality – that’s what we need Roto for.”

Bushaw states that Minnkota Windows deliberately entered the production of PVC windows more than 40 years ago, when building elements in the area were mainly made of wood, in order offer a unique product and distinguish themselves. The performance and longevity of vinyl compares favorably to those of other building materials, and vinyl often costs less to produce. As Minnkota’s customers’ demand for PVC windows grew and the more popular they became, the reason was clear: Their durability and ease of maintenance make them attractive both for private residential construction and for commercial and municipal construction.

About ten years ago, Minnkota Windows realized it was time to differentiate itself again as more suppliers entered the market. European hardware technology, first and foremost the Tilt&Turn hardware from the market leader

Roto, entered the manufacturer’s portfolio. Since then the company has captured growing market share of tilt-turn windows.

### Clear view

“People are learning about different types of windows as they travel the world,” Bushaw believes. As Americans visit more European countries, they notice the Tilt&Turn window, in particular how this type of window offers the full view of an undivided glazing along with high performance ratings. With Tilt&Turn, you have the ability to do large venting units, and it’s gaining attraction because homeowners want less openings, but bigger units with more square footage of glass. Many homeowners in North America are eager to modernize, and new windows and doors are a key part of that process. At the same time, new construction is flourishing, therefore demand for building components is growing steadily. Bushaw expects demand for Tilt&Turn windows to also increase in proportion to market growth, because:



➤ **Roto hardware systems for Turn-Only, Tilt-Only and Tilt&Turn windows**

[www.roto-frank.com/en/tiltturn-systems](http://www.roto-frank.com/en/tiltturn-systems)

## “More people are moving towards the highest performing products.”

For him, therefore, working with the world market leader in Tilt&Turn technology is a kind of foresight for the future. “We can be sure that with the wide range of Roto hardware systems for North America and Europe, we can really meet every customer need.”

### High contact pressure for outward opening windows

For the production of outward-opening pivot windows, Minnkota Windows relies on Roto North America’s X-Drive Casement and Awning locking systems, whose high performance offers many competitive advantages. “The LB08 Impact locking gear, for example, provides consistent and high contact pressure all around with its multi-point locking system. This improves burglary protection, wind and water sealing. An effect that, given the harsh weather in the northern Midwest of the U.S., is of great importance to home comfort.”

Depending on the size of the window, Minnkota Windows can choose from a variety of configurations with the optimal number of locking points. In addition, after the windows are installed, the contact pressure in the windows can be fine-tuned and further improved by adjusting the mushroom head locking pins, if required. In addition to the LB08 lock bar, the company uses Roto’s OP06 operator and

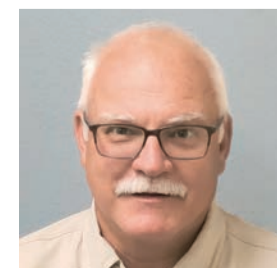
Demand for Minnkota Windows Tilt&Turn windows with Roto hardware from Europe continues to grow. Image: Minnkota

HG06 hinges. This system is for outward-opening windows, which operates by the crank on the bottom frame profile. “Minnkota Windows can offer windows with numerous variations of the X-Drive locking system,” Bushaw emphasizes.

### Strong in stable partnerships

Thanks in large part to strong industry partners that provide high quality products, Minnkota has many customers who would have never been won over with lower quality hardware. “Every decision we make about the product that goes into our windows boils down to what is the best option for the homeowner. Roto offers the highest quality. The highest quality is the best thing for homeowners, in Minnkota’s opinion, because it provides a better overall benefit to every homeowner. We need to produce what our customers ask for, deliver it in a timely manner, and then our products need zero problems with it in regard to the quality of components, which is what helps improve our competitive advantage.”

[www.minnkotawindows.com](http://www.minnkotawindows.com)



Brad Bushaw, General Manager Minnkota Windows Image: Minnkota



## Wigga Revestimentos e Esquadrias Em PVC Ltda., Brazil

# Roto for the market leader



In Brazil most windows and balcony doors are traditionally opened by sliding. The founders of Wigga use premium PVC building elements, modelled on those from Germany.

Images: Wigga



■ **PVC** "Of course we were aware of Roto," recalls Thiago Giacomelli Fagundes, "but mainly as a global market leader in Tilt&Turn hardware." He is Head of Technical Development at Brazil's largest manufacturer of PVC windows and is pleased that he is now able to work with Roto sliding hardware.

After all, in Brazil most windows and balcony doors are traditionally opened by sliding. The market share of sliding elements is around 65%. However, basic aluminium systems which often do not have a tight seal and are technically vulnerable have dominated the market for decades. "These sliding elements lacked corrosion protection and an acceptable level of durability on the whole," recalls Giacomelli Fagundes.

### German window technology for Brazil

The founders of Wigga therefore took on the challenge of establishing premium PVC building elements in the country, modelled on those from Germany. But "Brazil is a large country with different climate zones, which a good PVC window has to withstand." In the north and east, the climate is tropical. As you go further south, the overnight temperatures in July or August drop to ten degrees. The coast in the north east is battered by strong winds from the Atlantic. The system developers at Wigga therefore focused on wind-tightness, excellent insulation and robust surfaces.

In major cities, the desire for effective sound insulation also plays an important role, adds Giacomelli Fagundes. All over, builders are looking for low-maintenance windows that are completely resistant to corrosion or are only minimally affected by it.

**"The Roto Sil surface is important to our customers."**

### A byword for quality

Wigga – from the very start, this name was intended to be a byword for windows and doors with a quality far superior to the average PVC



➤ **Roto Inline: completely concealed sliding hardware with multipoint locking based on the modular principle**

[www.roto-frank.com/en/roto-inline](http://www.roto-frank.com/en/roto-inline)

windows that were produced in Brazil before then: tightly sealed against extreme heat, noise and wind, resistant and durable, even in direct sunlight and when exposed to air containing high levels of salt. This is why the company founders imported both extruder technology and hardware from Europe.

**"Roto hardware technology is a fundamental component of our success."**

Giacomelli Fagundes is convinced of this. The continuous, close collaboration between both companies has promoted important develop-

ments for Wigga. "We think that in the long term, we will succeed in making Tilt&Turn technology a more frequently used solution in Brazil. The premium quality of the relevant Roto hardware product ranges creates the basis for this."

### Like usual, only better

The number of buildings in Brazil that are equipped with PVC windows is, however, already increasing rapidly. "This development is very positive for us, and the fact that sliding hardware like Roto Inline corresponds to the habits of Brazilians is another factor in its favour." Ultimately even the oldest timber windows, as well as the steel and aluminium windows that came later on, were opened by sliding. "Our PVC systems are operated in the usual way but are of a far better quality than their predecessors."

Wigga customers rate Roto hardware particularly highly because of its operating convenience and its long-lasting functional safety. "As a manufacturer, we benefit from the ability to use many hardware components in multiple configurations and systems. This reduces our stock levels and improves the efficiency." Wigga can, for example, increase the added value of a sliding system entirely according to customer requirements with the Roto Inline modular hardware system.

### Durability in any climate

Wigga's sales area now extends far beyond Brazil's borders. It delivers to customers in many countries throughout Latin America. Giacomelli Fagundes explains the reasons for the success: "The conditions that windows have to withstand in Brazil are very similar to those in other countries of the Southern Hemisphere, as is the preference for sliding systems and intuitive functionalities."

### Roto Inline, even for heavy sashes

The trend towards larger sliding elements with heavy sashes is already becoming apparent in Brazil too. "We will cater to this trend together with Roto and further build on our leading position in this market." Giacomelli Fagundes is personally expecting, for example, that the tandem roller units of the Inline system, which support sashes weighing up to 200 kg, will in future be used at Wigga much more frequently than they were before.

### Continued growth with local installation

Next year, Wigga is planning to extend its production of PVC profiles and establish relationships with fabricators who produce windows and doors in the region as licensees. "We work with state-of-the-art extruders and machining centres from Europe, which enable us to achieve the intended growth without technical risks," explains Giacomelli Fagundes. He is convinced that a solid basis is in place for the planned expansion.

At the same time, Wigga is able to continuously increase the quantity of windows and doors it produces in-house. During the decade-long collaboration, Roto engineers have always been actively involving with optimising all hardware components for advancing automation in production. Increasing sales volumes can therefore be achieved without compromising on quality. "Together with Roto, we have an optimistic view of the future. Agility and an eye for what really matters have made Wigga into what it is today. Together with support from suppliers who, like Roto, have a very strong connection to us."

[www.wigga.com.br](http://www.wigga.com.br)



Wigga produces around 1500 elements each month. Around one third of the elements produced are sliding systems with Roto Inline.

Image: Wigga



Thiago Giacomelli Fagundes, Head of Technology, Wigga  
Image: Wigga



## Ponzo Polska Sp. z o.o., Poland

# Off to a promising start

■ **Aluminium** As Poland's first aluminium system supplier, Ponzio has developed a system for parallel retraction sliding systems based on Roto Patio Inowa. In 2020, the company began delivering the new SL1700TT system to customers. Maciej Borczuk, Director of the Technical department at Ponzio, draws a positive conclusion around two years after the market launch.

"We are experiencing a continuous increase in demand," he explains. "Our customers confirm that even end users could immediately understand the difference made by the sash's unique closing movement perpendicular to the frame. It guarantees effective thermal and acoustic sealing." The simple and intuitive operation of the sliding sash is also impressive.

### Satisfied hotel guests

Only recently a satisfied customer told him how pleased the operators of a hotel in Trzęsacz were with the sliding systems he installed there.



The first elements produced by Profil Gryfice were installed in a hotel complex in Trzęsacz, a village on a Baltic Sea beach. Image: Ponzio

## "The function of our new sliding system impresses guests and hoteliers equally."

Straight after the market launch, Profil Gryfice began working with the Ponzio SL1700TT system. The first elements produced by the company were installed in a hotel complex in a village on a Baltic Sea beach. Grzegorz Choiński, technical expert at Profil Gryfice, speaks from valuable experience: "This system is produced and installed in a similar way to a conventional aluminium Tilt&Turn window. This makes the installation process simple and enjoyable for us."

"Customers' initial responses to the intuitive operation of the hardware have been overwhelmingly positive. The handle positions are the same as those on a Tilt&Turn window. Moreover, the sash is very easy to slide and is almost silent." Even on large, heavy elements, the sash is still easy to open and close.

### A great alternative

Borczuk is happy to hear that. He thinks that the Ponzio SL1700TT system is a great alternative to a classic Tilt&Slide door or a conventional Lift&Slide system. In the opinion of manufacturer Profil Gryfice, this makes it ideal for hotels and apartments that are used temporarily and by different people, for example.



Advertising motif with a message: storms and cold winter temperatures directly at the coast are no longer anything to fear if you want to enjoy the sea view through a tightly sealed sliding system. Image: Ponzio



➤ **Video: intelligent hardware with concealed technology for tightly sealed sliding doors**

[www.roto-frank.com/en/video/inowa](http://www.roto-frank.com/en/video/inowa)

## "Operating mistakes simply don't happen, as the system is intuitively operated correctly."

Thanks to its outstanding sealing, the Ponzio SL1700TT is also ideal for use on the Baltic Sea. Storms and cold winter temperatures directly at the coast are no longer anything to fear if you want to enjoy the sea view through a tightly sealed sliding system.

"I'm certain that the new sliding door in this segment will become established as a premium product," states Choiński. "The wide selection of sash dimensions make it versatile, whether as a sliding window behind a kitchen unit or a ceiling-height terrace door." On the ground floor, the increased burglary protection up to RC 2 obviously also plays an important role.

### Intuitive like no other

Borczuk explains the reason behind the decision to use the smart hardware from Roto: "When we decided to design a system based on Patio Inowa, this was the only intuitive solution of its kind on the market." He recalls how "we have gained a lot of experience with sliding systems. Unfortunately we witnessed on more than one occasion how users who had never come across a Tilt&Slide door before had caused damage in a hotel or apartment."

### SoftClose function for smooth closing

Ponzio's range now also includes components for making Patio Inowa even more convenient to use. "With the SoftOpen and SoftClose functions, we can impress our customers if they are dealing with very discerning buyers. The concealed drive gently brakes the sash before complete locking and secures it in a

position. This prevents sudden closing or impact. It also extends the service life and increases the reliability of the system."

### Tightly sealed and durable

Borczuk describes the implementation and the start of production: "After agreeing on the contract in 2018, we immediately began designing the profile based on the hardware drawings provided. We frequently met with Mariusz Rutkowski from Roto so that we could have the hardware and accessories available simultaneously wherever possible." Ponzio began pre-producing profiles, thermal separations and accessories at the start of 2019.

In the next step, prototype systems underwent a series of continuous operation, functional, water-tightness, air infiltration and wind resistance tests at Ponzio's test centre. "Alongside the tests, we made the last modifications during profile machining so that we could finish with tests for obtaining resistance class RC 2," recalls Borczuk.

Together with Roto, Ponzio also worked on making the system especially easy to install. "For our customers, it is important that the sliding system is economical to produce and does not result in any confusion for the staff in installation. We achieved this aim. That might also be another important component of the system's continued success."

[www.ponzio.pl](http://www.ponzio.pl)



Maciej Borczuk, Technical Director, Ponzio

With the Ponzio SL1700TT system, elements can be produced with a maximum width of 1500 mm and height of 2500 mm. The system enables glazing up to 60 mm thick. Image: Ponzio



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