

Roto Inside

Edition # 25

Partner and employee information of the Roto window and door technology division



■ **Research**
Hitoshi Takeda:
Production flow and
waste reduction

Page 5



■ **New at Roto**
Hungary:
Article master data for
Archimede software

Page 7



■ **Aluminium**
Germany:
AluVision Designo
with RAICO

Page 8



■ **PVC**
Russia:
BiMax with Teplovin
brand windows

Page 10

Classically modern

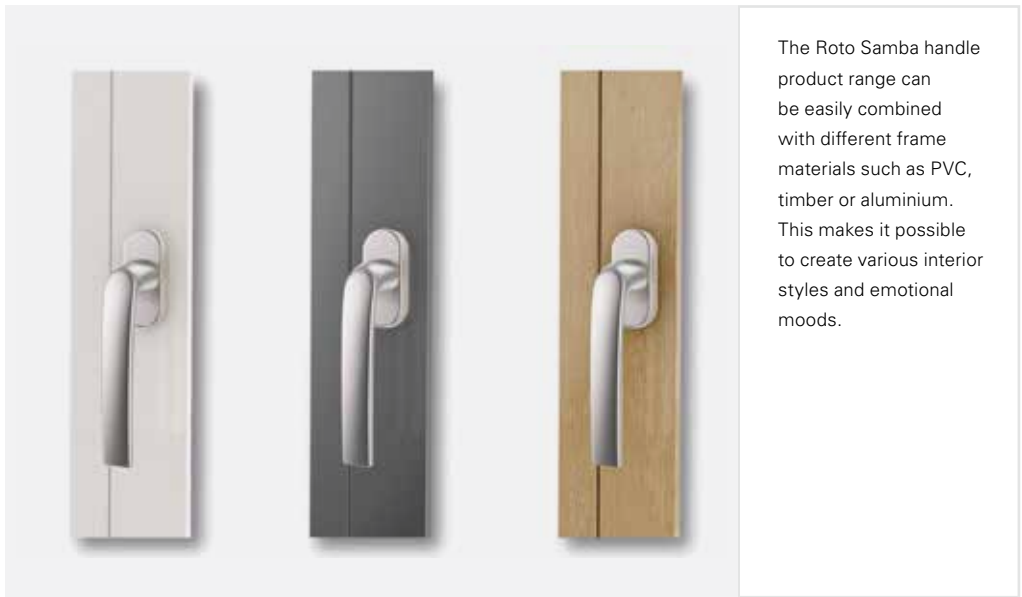
New handle product range Roto Samba

■ **New at Roto** With its new Samba handle product range for Tilt&Turn timber, PVC and aluminium windows and balcony doors, Roto now has a third design line to join the established Roto Swing and Roto Line handles. Product Manager Uwe Strohecker gave Roto Inside an overview of the variants now available, and also introduced a new online service. “The new Handle Configurator on the Roto homepage enables window manufacturers and their customers to find the ideal handle for their furnishing style quickly.”

In keeping with the “form follows function” design principle, the new Roto Samba handle, semi-circular at the rear and curved at the front, is perfectly shaped in ergonomic terms to support the thumb. A hollow for the index finger defines the grip position, while providing a comfortable place-holder for the hand. This means that the handle can be gripped well in any position and ensures ease of use. “The new Roto Samba product range is certainly something our customers should recommend wherever ergonomic and easy operation is required in combination with classically modern design. Samba Standard is perfect for windows without any special requirements in terms of function or security. Along with two lockable variants, which can be provided as child safety lock or anti-burglary accessories, our Roto Samba product range also comes with the Secustik® variant. A self-locking mechanism prevents any unauthorised displacement of the hardware from the outside, so providing an invisible improvement to security. This is also true for the Roto Samba fitted with a push-to-open button; the button enables the window to be opened easily by gently pressing the button on the handle, yet once closed, it is secure against any forced displacement of the hardware attempted from outside”, explained Uwe Strohecker.

Six colours – full product range

For windows and balcony doors, Roto also offers a special door handle set with escutcheon-cover version as well as with a flat handle for use on doors with exterior roller shutters. Roto Samba is also available as a TiltFirst solution. Thanks to the special TiltFirst horizontal Tilt&Turn striker and sash stay from the NT modular system, the window is tilted first whereupon it can then only be moved to the open position with a key. All Roto Samba handles are available in three spindle lengths (32, 37 and 43 mm) with screws included, and in the colours white (RAL 9016), grey-brown (RAL 8019), anodised silver, anodised matt brass, matt bronze and titanium.



The Roto Samba handle product range can be easily combined with different frame materials such as PVC, timber or aluminium. This makes it possible to create various interior styles and emotional moods.



➤ **For more information on the new handle product range Roto Samba visit our website**

www.roto-frank.com/en/roto-samba



➤ **The quickest way to the perfect handle for you window: the new Roto Handle Configurator**

www.ftt.roto-frank.com/en/griffeconfigurator/

Reinforcement for aluminium hardware product range

Surface-mounted hinge side for Roto AluVision T 540

■ **New at Roto** The multiple-purpose Roto AluVision T 540 hardware product range provides reliable load bearing for aluminium windows and balcony doors up to 300 kg. This range is now being extended with a new, QM 328 certified, surface-mounted hinge side for Euro-chamber profile systems, allowing for sashes up to a gross weight of 160 kg and floor-to-ceiling elements up to a sash height of 2,700 mm.

The new hinge side in the Roto AluVision T 540 product range will initially be available for Turn-Only, Tilt&Turn and TiltFirst, but Turn-On-ly and dummy mullion sash versions are

currently in the pipeline. Combined with the Roto AluVision T 540 central locking system, this provides efficient burglary protection up to RC 3 in accordance with DIN EN 1627–1630. Thanks to the optional accessories available, the new hinge side can help win even challenging tenders: the maintenance-free, damped turn-restrictor has an absorbent function, which provides an elegant, easy-to-use solution and takes the strain off the hinge side.

The sash stays used with stainless-steel rods in left and right hinge side versions come with a 190 mm tilt depth, creating good ventilation capacity for installation in profiles with large

installation depths. This can be a vital criterion – for example, in the case of certified aluminium window systems for passive (low-E) houses. The stay bearing with counter bearing

can be connected to an additional fixing connecting-link. Additional stability for the new hinge side is provided by a corner hinge with an additional screw and reinforcement.



A new reinforcement for the Roto AluVision T 540 multi-purpose hardware product range: a surface-mounted hinge side, which has been certified in accordance with QM 328 for Euro-chamber profile systems and sash weights up to 160 kg. The stay bearing with counter bearing can be connected to an additional fixing connecting-link.



➤ **Reinforcement for “load bearing” hardware: new hinge side AluVision T540 for aluminium windows and balcony doors**

www.roto-frank.com/en/roto-aluvision-t540

In the hot seat



An interview with the Chairman of the Roto Frank AG, Dr. Eckhard Keill

Roto Inside: Anyone visiting Roto sales and production companies based outside Germany will see many things in a different light. In Poland, for example a new trademark is now doing the rounds – “German made” is printed on all our brochures and business cards...

Dr. Keill: Yes, this year Poland is one of the countries where Roto is presenting itself in a campaign as customers see us – as an organisation with “typically German” characteristics. I spend a lot of time on the road and during discussions with customers outside Germany, they often express the feeling that Roto quite clearly comes across as a German company. So the systematic implementation of German values in terms of quality standards

and norms is something that generates trust amongst our partners and customers.

Roto Inside: How is it possible – in such a large company as the Roto Group – to ensure that the same values are actually implemented all over the world?

Dr. Keill: By motivating the people that work at Roto to become fully involved with and committed to the culture of the corporate group. And in fact, that’s not too difficult: after all, our employees are well aware that our values are part of an identity that has made Roto a service leader and nothing motivates like success.

Roto Inside: Which values does “German made” stand for?

Dr. Keill: The Roto system of values is based on three pillars: firstly, we have continuity, consistency and reliability; secondly, experience, ambition to succeed and vision, and thirdly, it’s about in-depth knowledge, skills and German engineering.

Roto Inside: The message behind “Made in Germany” dates back to the end of the 19th century, where it was devised by the British as a kind of seal of quality. So why not simply use this old, familiar phrase?

Dr. Keill: Well, because it doesn’t always apply in full to Roto. Our products are not all “Made in Germany” and that is a really good thing because Roto produces close to market – we are running no less than thirteen plants around the world. Having said that, these plants all operate according to quality specifications and a production system that was developed in Germany, where it has been successfully implemented, and now has been exported as it were. Our products and services are German to the core, but not necessarily made in Germany. This is well-known from the motor-vehicle industry: some AUDI cars are built in Belgium, some in Hungary, Slovakia, China or India, yet the car is never anything but an AUDI. This applies to many brands that are successful on the international stage.

Roto Inside: But there are some countries where excessive German national pride might come in for criticism, don’t you think?

Dr. Keill: Of course, but “German made” has nothing to do with national pride. The term really describes the specific characteristics associated with a company and its products. While “German made” certainly applies to Roto, being “close to the customer” still remains even more important. That is what we aim to demonstrate and put into practice each and every day.

Congratulations to the winners

Roto photo competition has twelve winners

■ Event The finest architecture requires the best windows. This briefly sums up the results of this year’s “Shop Window” photo competition, held for the first time by Roto in the Central European sales area. On the 30th October 2013 the twelve winners – and the reference projects they submitted – were presented with their awards at an official ceremony held in Leinfelden. A panel of experts had picked the winners beforehand from numerous submissions from Germany, Austria and Switzerland.

The 3-man strong panel had anything but an easy task. Architect Martin Haas, Burkhard Fröhlich, architect and editor-in-chief of well-known architecture magazines in the Gütersloh-based construction publisher “Bauverlag”, and Roto Economic Regional Manager Volker Fitschen, met in Leinfelden to inspect the reference projects from numerous manufacturers. The quantity and quality, creativity and variety of the submissions ensured a wide range of topics for discussion.

However, Stefanie Kopp, Head of Marketing for Central Europe, was thoroughly pleased with the final decision taken by the panel of experts. “I certainly didn’t envy the three gentlemen their job. We intend to exhibit the projects in an architectural calendar for 2014 and all I can say is that it’s a pity there are only twelve months in the year, because we can only display the work of 12 winners. Actually, all of the entrants more than deserved the ‘finest in window manufacturing rating’,” she explained, adding: “As far as we were concerned the submissions demonstrated once again just how much greater appreciation the technical masterpieces produced by our industry deserve from the general public.”



“And the winners are ...” – On the 30th October 2013, the twelve window manufacturing companies were presented with their awards for their successful work by Volker Fitschen, Roto Central European Region Manager.



Expert panel at work: architect and editor-in-chief Burkhard Fröhlich, Roto Sales Area Manager Volker Fitschen and architect Martin Haas (left to right) chose twelve winners from the top-class entries in the “Shop Window” photo competition, held by the Roto Central European sales area.

Month	Reference Object	Fabricators
January	Alte Post Hamburg	Tischlerei Pötschke GmbH, Löbau (DE)
February	Hotel Ramada Innsbruck Tivoli	FARKALUX Fenster- und Elementbau GmbH, Kematen (AT)
March	Beach house “Auf der Freiheit”	Schmidt-Fenster GmbH, Visbek (DE)
April	Passive high-rise building	Kneer GmbH Fenster + Türen, Westerheim (DE)
May	Detached house/holiday home “Zillertal City Mansion”	Rieder GmbH & Co. KG, Ried im Zillertal (AT)
June	Stadtvilla	Achenbach Fensterbau GmbH, Zell (DE)
July	Art-nouveau style villa near Hamburg	rekord-fenster+türen GmbH & Co. KG, Dägeling (DE)
August	Elite School of Sports Klingenthal	Wertbau GmbH & Co. KG, Langenwetzendorf (DE)
September	Nature & Health Resort Tannerhof – Die Hüttentürme Metropolenhaus	Josef Vogl GmbH & Co. KG, Holzkirchen (DE)
October	Metropolenhaus	Mrowiec Fenster-Türen-Wintergärten GmbH, Fresenbrügge (DE)
November	University Children’s Hospital of the Basel area	Gerber-Vogt AG, Allschwil (CH)
December	Dresdner Zwinger – Mathematical-Physical Salon	Nickel Fenster GmbH & Co. KG, Weißwasser (DE)

Online hardware configurator with new features

Roto Con Orders

■ **New at Roto** With the Roto Con Orders on-line hardware configurator, tailored hardware parts lists can be created easily and quickly. This is why the number of window fabricators and dealers making intensive use of the programme is growing all over the world. The latest version went on-line in March of this year and Roto Inside has spoken to two people who have been users since day one.

Roto Con Orders is popular with users because it takes just a few mouse clicks and entries to generate a window-specific parts list, along with a technical illustration for all standard window shapes and opening types. "We've just released the latest version, but Roto Con Orders is still basically as user friendly as ever," explains Dirk Mertens, Head of Marketing Services at Roto in Leinfelden. "What we have done is integrated new features that allow our customers to adapt the user interface and how results are displayed more closely to their individual needs."

Simplifying processes

Thanks to a newly designed user interface with

customer and material master data management, Roto Con Orders is now a comprehensive system for quotation management. Quotations and orders can be created, parts lists exported, data records imported, and quotations individualised. "For example, customers can now add their own company address and logo to the header of an offer. They can create and manage customer-related projects, use their own materials master with customer-specific materials numbers, create hardware templates tailored to individual customers, and assign their discount rates by means of an integrated discount rate structure system. It is also possible to link the PDFs produced to a sales order PDF download as a front page or supporting document. The

results look really professional, yet using Roto Con Orders is as straightforward as ever. At the end of the day, what really counts is that complicated hardware technology should be communicated easily and intuitively. That's what Roto Con Orders is all about."

Always and everywhere

As a web-based solution, Roto Con Orders is available 24/7 around the world. Furthermore, market-specific solutions are continuously being added. Anyone wishing to work with the new hardware configurator just needs to register his or her email address once on www.roto-frank.com. Once a user has logged in with his or her personal access data, all functions on Roto Con Orders are fully available. Experts from Roto Sales will also provide on-site training for new users of the programme upon request.

Positive reactions

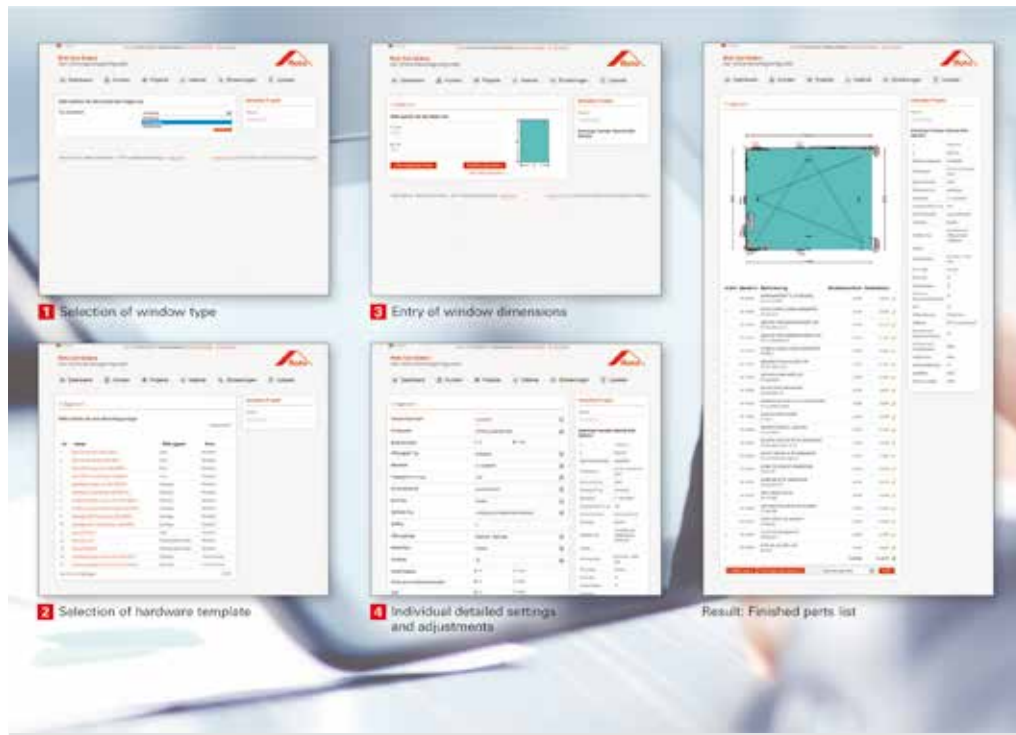
Johann Mittermaier, Head of the Export Division at Ammon Beschläge-Handels GmbH in Nuremberg, has already worked with the test version of the current Roto Con Orders.

"I had the opportunity of testing the new version during the development phase and give Roto some suggestions. I mainly use the programme to itemise hardware according to sash rebate dimensions provided by our customers. Roto Con Orders covers nearly all conventional hardware versions in the NT division, and now with this new programme version, I find it perfect for everyday use. I would however advise new users to take some time to familiarise themselves with all functions as described in the instructions. Do this and Roto Con Orders will save you a lot of time in everyday business and present your company as highly professional. I hope they continue to improve the programme by expanding the Patio product group – that's where I receive by far the most enquiries with

only rebate dimensions given."

Jonas Eriksson, Sales Manager at Roto's Swedish trading partner Göthes Svenssons AB, also appreciates the time savings, coupled with the professional results he achieves using Roto Con Orders. "I've been using Roto Con Orders for about 11 months now on an almost daily basis. In late summer, together with Roto, we started to introduce the programme to our customers. I think Roto Con Orders is an excellent tool, particularly for mid-size manufacturers, because they can use the technical illustrations from the programme for their own production and tailor their quotations to individual customers."

And what is next for Roto Con Orders? Dirk Mertens reveals the next development steps: "We are currently working on a responsive web design that will allow Roto Con Orders to be used on mobile devices. That will make Roto Con Orders the perfect 24/7 companion for sales staff and customer service staff when they are out and about."



The Roto Con Orders hardware configurator is easy to use and provides professional results. The new version released in March this year has numerous new features.



➤ **Roto Con Orders: the quickest way to individual hardware parts lists**

www.roto-frank.com/en/roto-con-orders

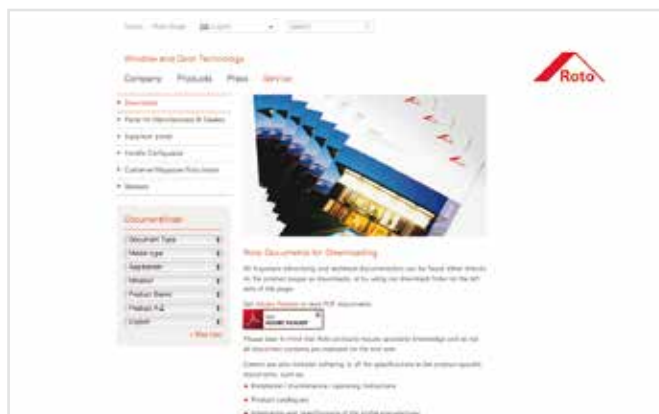
Global market-specific information

Roto homepages in more and more languages

■ **New at Roto** Product information, contacts, modern services such as the new Handle Configurator, the Roto Replacement Parts Shop, Roto Con as window and door configurator – the internationally-available Roto websites contain lots of practical tips and valuable information – all of which is available in an increasing number of languages.

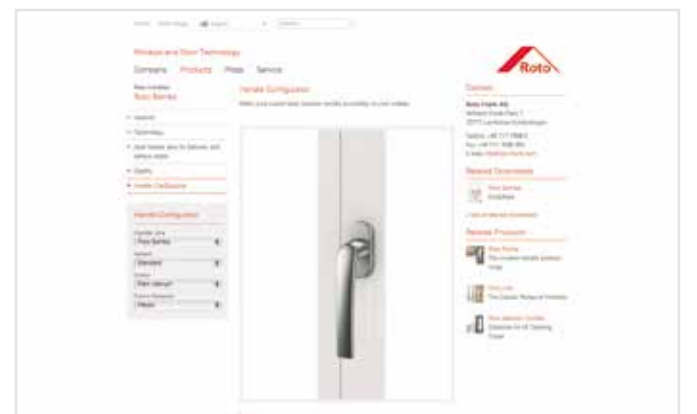
Today's Roto customers can access information on the Internet in English, German, Hungarian, French, Dutch, Spanish, Polish, Turkish, Romanian and Italian. For window fabricators from Mexico, Argentina or Chile, Roto provides separate webpages with information specifically for the South American market. This year, a webpage with country-specific information in the Portuguese language was created for the Brazilian market. From 2014 onwards, Russian-speaking customers and customers from North America will also be able to access country-specific offers in their own languages.

Access to each particular language version is gained by click on one of the 30 country flags on the www.roto-frank.com website. "This means that customers can locate the information relevant to their line of business in a language that they speak or that they understand well," Marketing Manager, Udo Pauly, explained.



Important documents in the Download Centre

What's more, you can download installation, maintenance or operating instructions, product catalogues, information and details on profile manufacturers or on applicable laws and directives from the websites of many international subsidiaries. For example: information in English is available at: <http://ftt.roto-frank.com/en/service/downloads/>.



The perfect handle for every window

How can I be sure of finding the right handle for each window design and furnishing style? By using the Handle Configurator on the Roto website. Window manufacturers and their customers can easily find the perfect handle for every window design and furnishing style. This new planning tool is currently available in English and German language versions. Versions in other languages will be available online soon.

Great Expectations – Small Tilt&Turn windows

T&T sash stay 390 for AluVision Designo

■ **New at Roto** Aluminium window manufacturers who want supply narrow Tilt&Turn windows should call the Roto Object Service Centre (OSC). Our experts will reliably determine just how narrow a window can be based on a special profile, so that – equipped with the new T&T sash stay 390 from the AluVision Designo product family – it can still meet the highest expectations.

“Generally speaking, window sashes ranging from a width of 390 mm and up to a height of 2400 mm and a weight of 80 kg are feasible,” explained Product Manager Julian Pöss to Roto Inside. “This means that extremely slim, long, high-quality aluminium windows can now be equipped with our AluVision Designo concealed hardware, something that fits in perfectly with current trends in architecture.”

The best solution for every project

Roto aims to provide the perfect solution for every aluminium window – and with the recent extension to the product range, we are now one step closer to achieving this aim. Julian Pöss is convinced of it. “Our service and individual object solutions, along with trend-oriented standard solutions from the Roto product range make us a valuable point-of-contact for innovative planners, window manufacturers and façade contractors. You could say that we are simply looking over their shoulder, so that we can add new products such as the T&T sash stay 390 to the AluVision Designo product range, making our entire aluminium window product range even more attractive.”

Unbeatable: the Designo product family

Many systems suppliers find that Roto AluVision Designo fulfils their highest expectations in terms of appearance, functionality and manufacturer-friendliness. Like the Roto NT, this product family has also been created in keeping with the tried-and-tested Roto modular design principle. In combination with the AL 540 central locking system, small, compact components comply with burglary protection classes up to RC 3 in accordance with DIN EN 1627–1630, and they can also be used in retrofits. The exclusive RotoSil Nano coating makes the fully-concealed hardware particularly durable.

The AluVision Designo installation slogan is “easy, fast and inexpensive”. This is based on non-positive and positive-fitting clamping of all the components in the sash and frame. Roto provides matching clamp strips whatever the profile geometry and no more than three tools are required to fit and adjust the Roto AluVision Designo.



New entrant: the T&T sash stay 390 AluVision Designo for particularly narrow windows with concealed hinges.

New door-technology module

Roto DoorLine Solid 150 P

■ **New at Roto** The DoorLine product family offers a comprehensive range of hinges for PVC and aluminium doors in a range of price categories and design lines. A further practical solution has just been added to the DoorLine portfolio.

The DoorLine Solid 150 P model is a budget-priced alternative for basic PVC main and back doors. It is available in four standard colours, with additional finishes available on request. This new product comes with a patented anti-jemmy device. For overlap areas of 14 to 23.5 mm, DoorLine Solid 150 P does not require any packers, thereby enabling 3D adjustment to be made using standard tools. It is CE certified in accordance with DIN EN 1935:2002. The harmonious design of the DoorLine Solid 150 P sash hinge cover also ensures that the product is appealing on a visual level.



With its DoorLine Solid 150 P model, Roto has expanded its door hinge range with a budget-priced alternative for basic PVC main and back doors. This new product comes with a patented anti-jemmy device.



➤ **A budget-priced alternative for basic PVC main and back doors: Roto DoorLine Solid 150 P**

www.roto-frank.com/en/tuerband-solid150

Door manufacturers praise the new Roto Door Showroom

Ideal training venue in Kalsdorf

■ **Event** Ever since the Roto Door Showroom in Kalsdorf has been extended and reorganised, it has developed into something of “Hot Spot” for door manufacturers. Almost every month, Roto Sales Area Manager for north-east Europe, Barbara Ahlers and Sales Manager Miroslaw Bogdalski accompany interested customers on a visit to Kalsdorf.

“February, March, April – early in spring, just after the reorganisation – demand from customers was so great that we were visiting the new Roto Door Centre based in Kalsdorf every month,” says Miroslaw Bogdalski. The sales managers here see for themselves quite regularly how a trip to Roto leads to long-lasting inspiration amongst the visitors. “The close proximity of the showroom to the

production site makes it possible to highlight clearly the relationships between development and production of door hardware and door driving mechanisms. For example, after a visit to Kalsdorf, our visitors return home with a much better understanding of why we felt obliged to ask them particular questions about changes to a new system. The exhibits in the showroom frequently provoked interesting discussions between the visitors, not only about the choice of hardware, but also about various issues about door production in general.” This was confirmed by Tadeusz Dziedzic from Roto’s Polish trading partner company Domex, who accompanied several door manufacturers on a visit to Kalsdorf. “Our customers’ requirements are undergoing significant change at the moment. Many of them are making inroads into export markets and market segments where high quality and added value are important. Electromechanical systems such as Roto DoorSafe Eneo A then become a vital expansion to their product range. Naturally, having products on display makes it much easier to understand and evaluate such systems. This is what makes the showroom in Kalsdorf so useful for our customers and for us.”



A group of Polish door manufacturers accompanied by Roto Sales Area Manager Barbara Ahlers and Sales Manager Miroslaw Bogdalski, enjoy exchanging ideas during their visit to the Roto plant in Kalsdorf.



Visit from Poland: the new Roto Door Showroom and Information Centre at the Roto plant in Kalsdorf is becoming a “Hot Spot” for the door industry.

Greater efficiency for better customer service

Lean production projects at Roto L  v   plant

■ **Research** In all Roto plants across the globe, management have implemented a culture of continuous improvement as part of a lean production philosophy. To present some successful improvements achieved through lean production principles, Ern   Kocsis General Manager of Roto El-zett Certa Kft., invited Roto Inside to visit the L  v   plant in Hungary.

“If we can succeed in freeing-up employees from work which they are over-qualified for, we can give them the opportunity to fulfil customers’ wishes better and much faster,” explained Ern   Kocsis on the tour. “If we can also make savings while doing so, such as when buying items used every day, we can reduce unit costs – something which has a knock-on effect on the prices paid by our customers. Each small step helps to free up resources to invest in things the customer will experience as the mark of supplier quality.”



Knowing your objective helps you achieve it: every Roto production team can look at the daily and weekly production figures to check whether they have achieved the targets they have set themselves, and where there are any significant departures from the plan. “The philosophy behind lean production is that employees learn on the basis of transparency and self-monitoring, within a climate of shared values, so that they take personal responsibility for continually improving the processes they are involved in,” explained Ern   Kocsis.



Assembly line maintenance and repairs: tool repair and maintenance times for the pressing plant in L  v   have been greatly reduced by reorganising tool manufacturing according to lean production principles. Because the operational steps required in a typical maintenance process have been decoupled, a tool now moves across the work benches of five tool manufacturers, one after another. “At first glance this might appear to be somewhat cumbersome – but decoupling has actually led to major optimisation in terms of staff utilisation,” explained Ern   Kocsis. “Each operational step requires employees with different strengths and varying levels of experience. Now, the fully-experienced tool manufacturers can be deployed where they can best use their finely-honed knowledge to ensure that the department is producing outstanding tools. Making efficient use of skills – that’s what lean production is all about.”

Hitoshi Takeda talks to Roto Inside

Production flow and waste reduction

■ **Research** For many years now, Hitoshi Takeda from Japan has been helping Roto optimise their award-winning, Bad Mergentheim-based roof window production facility. An acknowledged specialist for lean production processes and systems, companies the world over have been turning to him for advice for several decades. Sixty-five-year-old Takeda spoke to Roto Inside about what it takes to make a company lean, and to transform it into the best possible partner for customers.

Roto Inside: Mr Takeda, many years ago engineers advising Roto hardware technology customers formed the Roto Lean Team. They chose this name because they felt the term “lean” best describes their aims when advising window and door manufacturers. What do you personally understand by the term “lean”?

Takeda: The term lean or lean management primarily refers to a way of thinking and an attitude adopted by all the people in a company. Of course, there are now many well-established production control methods relating to the term lean, and these are easy enough to explain: they are methods which reduce waste throughout the company and improve throughput times and quality. However, I believe that it is most important to emphasise over and over again that “lean management” is all about people and their attitude. Only the people working at a company can ensure that it is capable of efficiently developing those service features which customers consider useful and which are the key factors behind a purchase.

Roto Inside: In your opinion, what gives a company the best chance of implementing lean management successfully?

Takeda: Well, if the management is not convinced and willing to implement it, it simply won’t work. You can only implement lean management if the head of a company is directly involved and fully behind the philosophy. Lean is not a project that you simply want to get over and done with. Lean is a way of thinking that has to remain in place in the company on an ongoing basis, and which everyone has to be trained in. Each individual in the company possesses detailed knowledge of the various options for making improvements and it’s that knowledge which is needed.

Roto Inside: What kind of influence do employees have on whether a company will implement it successfully?

Takeda: A decisive influence: Toyota has been a pioneer in the world of lean production. Rather than just making cars, they focus on developing employees who want to build the best cars possible. Many companies try to improve their results and ensure success by boosting the productivity of their machines or just buying new ones. However, if you want to reduce unit costs, it is at least as important to promote the idea that employees need to be thinking along the same lines and taking personal responsibility. There’s not much point just having individual machines operating faster. Productivity is only markedly boosted when the entire production is flowing and time is not wasted anywhere. It’s the employees who know best where time is being unnecessarily lost. Most employees want to work productively and successfully and as management all you need to do is create the right conditions for that. That’s essentially the most important piece of knowledge I’ve gained from the many lean projects I’ve been involved in.

Roto Inside: Lean production is based on production flow. What do you mean by that?

Takeda: Production flow means that all parts and products are conveyed in a single stream without any interruption to the next manufacturing stage: in other words there is no intermediate storage. This removes the need to store and move parts, and avoids time being wasted on search and transport within the company. There will be points along the production system where standardised material buffers are required, but basically these should be avoided where possible. You can see how this works practice at the Roto roof window factory in Bad Mergentheim. From what I hear, more and more Roto customers are taking on board the recommendations made by engineers from the Roto Lean Team. This means that knowledge is being shared and I think it’s fantastic!

Roto Inside: In your experience, what would you say were the reasons why a production flow is not achieved?

Takeda: Quite often, there are too many breaks in the production sequence because somewhere along the line, material is produced more quickly in one stage of production than it can be handled in the next. Frequently, there is no clear separation between production and logistics activities. In other words, employees have to interrupt what they are doing in the production process to collect material and move it to the next stage. A major challenge, particularly in a very varied production system is organising and managing work content, so that continuous production flow can be made possible in the first place.

Roto Inside: The implementation of a production flow and additional lean production principles brings a great number of advantages with it. Why doesn’t every company do it?

Takeda: There are already lots of companies which have implemented lean principles and are highly profitable. However, there are still many in all kinds of industries worldwide which haven’t. There are several reasons for this. Perhaps, the principles have been understood, but ultimately implementation in the companies fails because the will to see it through simply isn’t there – particularly amongst the management. They have to adopt new management behaviour. They have to learn new roles as supporters and motivators for their workforces, not to see themselves as lone warriors in the battle against wasted time and material. Also, employees are frequently given too little time to develop and implement improvements in the production. The reason for this is a somewhat short-sighted outlook on the part of management and the lack of any vision with regard to just how great the potential savings and options for boosting productivity are in almost every company.

Roto Inside: Would you like to see a change of approach?

Takeda: In some companies, yes, without doubt. Because in some instances, it would be more worthwhile to appoint a competent employee and to assign them to work with the Roto Lean Manager to search for wastage and potential process improvements, than simply to go ahead and buy a new machine. But what I would really welcome is for the management to take a new look at the overall production process in their company, with a focus on customer benefit; and they need to do this over and over again – it virtually needs to be a kind of ritual. And the focus should not be on daily business, on purchasing and sales, rather, managers are there to establish a culture of permanent improvement processes. Don’t get me wrong! It goes without saying that the points I’ve covered need to be part of success-

ful company management, but as a general rule, profit can be increased and quality improved by paying attention to minute detail, coupled with a commitment to becoming better and more efficient on a daily basis.



Hitoshi Takeda was born in the Japanese prefecture Akita. After completing his mechanical engineering studies at the Meiji University in Tokyo, he joined a major auto supplier. There, Takeda was involved for many years in the Kaizen process (Japanese for “change for the best”) in production control, production engineering, supplier handling and in the Promotion Office, before becoming a self-employed consultant. Hitoshi Takeda has worked with leading companies from various industries in Japan, Korea and Europe, particularly in Germany.



Hitoshi Takeda has communicated the methods of synchronous production systems with a new clarity, and researched their overall impact on companies. His book “The Synchronised Production System” has been published in Germany by the mi-Wirtschaftsbuch publishing house.

Well tested is half sold

International Technology Centre

■ **Service** Modern window and door systems are subject to various requirements, be those structural or in terms of standards. On top of this, there are also customer needs for greater security or energy efficiency. Roto customers who wish to have the performance of their windows and door tested can call on the services of the Roto International Technology Centre (ITC) based in Leinfelden. Roto ITC experts know-how and a wide range of test rigs are available for a small fee. Roto Inside talked to the Head of Roto ITC, Martin Barck to discuss the range of services offered.

Roto ITC was founded back in 1996, when the testing capabilities available in the Leinfelden-based production-plant premises were all brought together in one large workshop. This made it possible to shorten pathways, pool know-how and create synergies, benefiting not only Roto but our customers too. "Today, a total of ten specialists work in a test area of approximately 1,400 square metres, packed with state-of-the-art technology," said Martin Barck. "A comprehensive range of mechanical-technological tests on façade elements, windows, doors and hardware are carried out, along with tests on metallic materials. Our customers have become increasingly aware of this service and are now actively requesting it."

On average, there are 700 prototype and development tests along with roughly 150 checks on customer systems carried out by Roto ITC employees every year. The windows are tested for their anti-burglary properties, impermeability to air and driving rain and their wind resistance. Endurance tests on window systems and corrosion and handle tests are also available. "We're able to conduct tests in accordance with the current German and international standards and directives. Customers who would like to take advantage of these services just have to do is get in touch with their contact person at Roto

Sales and let them know exactly what they require. This contact person will assist and advise the customer at every stage from the test request to the test report. The customer will receive the entire range of services available from Roto ITC from a single source. And individual innovative solutions remain the property of the customer at all times!" Individual test documents – for example for an anti-burglar system solution – can be combined to form an expert evaluation."

Officially accredited test rig

Roto ITC's efficiency is emphasised by the fact it has been officially accredited by the Deutsche Akkreditierungsstelle (DAkKS) (national accreditation body for the Federal Republic of Germany) based on the DIN EN ISO/IEC 17 025 standard. This represents the highest accolade for testing laboratories operating under private law. The accreditation serves to confirm that the tests have all been conducted in line with the standards, correctly and neutrally. "Regular testing by the DAkKS body guarantees that we continually analyse and question our processes and our testing methods, and – where necessary – we adapt them to suit changing standards. This enables us to constantly improve the quality of our services," explained Martin Barck. "Let's face it, at the end of the day, this



"Finally, our tests and the corresponding test documentation always refer explicitly to the customer's specific window or window system. This means that the customer can always use an individual test report to score points in an order acquisition process." Martin Barck asserts confidently, "this helps present a clear differentiation of systems made under licence."

is what it all comes down to: the Roto ITC have to be able to assist our customers in developing trend-setting windows and doors, now and in the future."



Tough tests that go a step further.



➤ Find out more about available services: the International Technology Centre in Leinfelden

www.roto-frank.com/en/roto-itc



On average, there are 700 prototype and development tests along with roughly 150 checks on customer systems carried out by Roto's specialists at the Roto International Technology Centre (ITC) in Leinfelden every year.

Good teamwork makes a good case

The opportunity to differentiate themselves from the competition – this was the main reason why Menck Fenster GmbH allocated a range of test contracts to the ITC in Leinfelden. "The state-of-the-art facilities and the neutrality of the Leinfelden-based centre, as certified by the accreditation, are just as important to us as that we can work outstandingly well with Roto," explained Rolf Menck.

The project scope associated with Menck's testing order, in particular, with regard to the RC 2 system tests really was demanding. All single and double-sashed windows, the NT Designo concealed hinge side including load transfer, the timber E5, NT Power Hinge and NT Royal hinge sides, the MVS cable junction, the TB door threshold with roller shutter casing connection and the tilt fanlights were all subjected to an RC 2 system test. Various RC 3 individual tests with single and double-sashed Tilt&Turn windows were also tested. The static and dynamic tests actually revealed several minor weak points and risks for windows, which could then be rectified with modified hardware and additional components. At the end of the day, Menck windows were clearly able to say: we passed with flying colours.

Which tests can be conducted at Roto ITC?

- Checking of anti-burglar facade elements in accordance with DIN EN 1627-1630
- Leakage test on facade elements (permeability to air in accordance with DIN EN 1026 / 12 207, impermeability to driving rain in accordance with DIN EN 1027 / 12 208, wind resistance test in accordance with DIN EN 12 211 / 12 210)
- Checking of Turn-Only and Tilt&Turn hardware in accordance with DIN EN 13 126 / Section 8 or QM 328 or RAL-GZ 607/3
- Durability test on windows in accordance with DIN EN 1191
- Durability test on Slide, Lift&Slide, Tilt&Slide and Fold&Slide hardware in accordance with DIN EN 13 126 / Section 15, 16 and 17
- Durability test on rollers for Slide and Fold&Slide windows and balcony doors in accordance with DIN EN 13 126 / Section 15
- Durability test on window handles in accordance with RAL-GZ 607/9
- Corrosion tests with salt spray fog in accordance with EN ISO 9227
- Material tests for determining tensile strength in accordance with EN ISO 6892-1
- Hardness tests in accordance with DIN EN ISO 6506-1, EN ISO 6507-1 and EN ISO 6508-1
- Various component test rigs

Start-up programming for the Rábaablak Kft. company

Article master data for Archimede fenestration software

■ **New at Roto** Owners of a timber trade company and two joineries founded Rábaablak Kft. in the small west Hungarian town of Rábapaty. Since 2004, this company has focussed exclusively on making windows and doors. Roto Inside spoke to the company's three managers, who reported on the successful launch of their new CNC-controlled machining workshop.

"Even when the company was originally founded back in 1993, it was clear for all to see that the standards for timber windows would continue to rise rapidly. This meant that not every joinery in the area would be able to meet these standards," recalled Zoltán Berghoffer, one of the three general managers. A joint visit to a trade exhibition and insight into the machinery available for manufacturing timber windows led the company founders to decide that Rábaablak would specialise in premium-quality timber windows and doors. None of the partners have any regrets about making this decision: right from the start, capacity utilisation at the plant has grown at a smart clip.



General Manager, Gábor Kapui (right) is responsible at for technology at Rábaablak. When a new machining workshop was brought into service over the past few months, he was assisted by Roto engineer, Szabolcs Gosztola, who was also responsible for preparing and entering the master data for the Archimede fenestration software from Kosmosoft.

Most other joineries in the area have followed the lead of the two involved with founding Rábaablak and no longer make their own windows. "Our range of products grew extremely quickly, so much so that practically any builder could come to us and find the ideal doors and windows. At the same time, we very quickly started to provide much higher quality than was available from the average window manufacturer," recalled Tamás Berghoffer. We've always tried to go one better than the current standards in terms of energy efficiency, surface finish or burglary protection for windows and doors, without having to remove the more budget-priced models from the product range. That's how our unique and really comprehensive product range has evolved and it has enabled us to achieve excellent standing in the market, which is acknowledged even by our competitors."

Guaranteeing quality through proper investment at the right time

However, continued success of this strategy was dependent on the new machining workshop. The partners decided 2012 that they would invest in a new workshop and do it in such as way so it would be possible to carry out a change of model in product at any time and with short changeover times. General Manager, Gábor Kapui, studied the market for quite some time. "We looked at all the best machinery manufacturers and software providers, before we finally settled on a somewhat smaller, but highly versatile supplier. However, the success of the project was also thanks to Roto's promise to support us fully in programming the software and commissioning the plant."

The fact that the Rábaablak company only deploys Roto hardware technology in its window, door and window shutter production meant that Roto engineer, Szabolcs Gosztola, was able to prepare all the data for running the new machining centre; this involved fairly intensive involvement from his side for around six months. "We place a great deal of value in ensuring that all our customers have access to the matching article master data for their software and their machine. This is why we made sure that Szabolcs Gosztola had plenty of time to enter the master data into the Archimede software from Kosmosoft," said Lajos Kocsis, Roto Sales Manager in Hungary.



"Our range of products grew extremely quickly, so much so that practically any builder could come to us and find the ideal doors and windows. We've always tried to go one better than the current standards in terms of energy efficiency, surface finish or burglary protection for windows and doors, without having to remove the more budget-priced models from the product range," explained Tamás Berghoffer.



The right team to lead Rábaablak into a successful future: (left to right) Gábor Kapui is responsible for Technology, Zoltán Berghoffer is in charge of Sales and Marketing and Tamás Berghoffer is responsible for Finances and Corporate Accounting.

Flexibility thanks to great cooperation

The Rábaablak management's decision to opt for a machining workshop from the Italian manufacturer, Working Process, coupled with the Archimede software has proved to be the right one. "During the past few years, we have put a great deal of thought into reaching these kinds of decisions, but, at the end of the day, they often come down to gut instinct", explained a smiling Gábor Kapui. "The fact that this procedure always returned either good or outstanding results gave us the confidence to go ahead and do it our way when we were choosing suppliers for the workshop and software. In other words, we didn't feel obliged to simply go for the market leaders. We had a strong impression that these two partners were able and willing to offer us the most flexible and the most appropriate solution." The smooth cooperation between the machinery manufacturer, the software supplier and Roto is yet another reason for optimism. "These three partners have kept to everything they promised and all that we hoped for."

Solid growth despite the crisis

Rábaablak's growth also demonstrates neatly that the three general managers are right to trust their instincts. Despite the economic crisis and the building slump in Hungary, the company is still enjoying strong growth on a year-on-year basis. "Those customers who are interested in our high-quality windows were still able to invest despite the difficulties of the last few years, so we've not suffered as a result of the crisis," said Tamás Berghoffer.

To ensure that builders bear us in mind when planning projects, the Rábaablak company has always aimed to provide just that little bit extra. "As the sash thickness that we pushed for as far back as 2004 slowly became the standard thickness, we moved on to a 92 mm sash thickness. When everyone else started to work with two gasket levels as we had been doing, we moved on to include windows with three gasket levels in our product range. Growing demand for the latest and the best has proved us right time and again – in the meantime, most of the windows we sell are triple glazed."

Tamás Berghoffer, who joined the management team at Rábaablak just recently, summarised what the company is all about. "Every year Rábaablak makes roughly 6000 windows and main doors, 1000 window shutters and 3000 internal doors. We exhibit our products at the Construma in Budapest on an ambitious trade stand, which is given a new and unique design every year. When choosing our trading

partners, we make sure that they place a lot of value on the quality of consultation and installation. In the meantime, six large and several dozen smaller trading and installation partners sell products from the Rábaablak company, primarily in the west of Hungary and in Budapest. It is mainly word-of-mouth which brings builders and developers to us, not forgetting recommendations from architects. Our current topsellers are Tilt&Turn windows with 92 mm sashes, triple glazing and weather protection tracks made of aluminium. Rábaablak offers windows in every price category, but these are the ones most in demand."

Not just more windows – better windows

Gábor Kapui nods approvingly and emphasises, "the objective behind the new machining workshop is not to manufacture more windows and doors, but to make the best ones. Above all, we aim to achieve uniformly high quality coupled with a moderate increase in quantity, while at the same time maintaining our flexibility. As far as we can see, large companies are more susceptible in crises than small specialist companies such as ours. Once again, we hope that our intuition has pointed us in the right direction."



The new machining workshop for timber windows has been up and running at Rábaablak since August. Roto engineer, Szabolcs Gosztola, (left) checking the last tweaks to the software.

Working in tandem for a successful market launch

AluVision Designo with RAICO

■ **Aluminium** Since May of this year, window and facade manufacturers who buy their aluminium profiles from RAICO Bautechnik based in Pfaffenhausen, now have had the option of equipping their Tilt&Turn windows with Roto AluVision Designo concealed hardware. Stefan Sepp, Head of Technology and Development at RAICO, reported on the market launch.

“Almost everyone who buys our FRAME+ aluminium window systems also purchases their hardware from us,” explained Stefan Sepp. “While 69% of the windows installed by our customers are still fitted with surface-mounted hardware such as the Roto AluVision T 540, 29% come with concealed hardware such as AluVision Designo - and the trend is growing for this type of hardware.” Because the new Designo is suitable for sashweights of up to 150 kg, more and more customers are choosing them.

The modern alternative

In Stefan Sepp’s view, AluVision Designo is not only attractive because of the option of being able to integrate a damped opening restric-

tor or use a coupleable rebate hinge to make extremely narrow, high Turn-Only windows with centre locks on the hinge side. “Naturally, we also offer AluVision Designo in combination with RAICO customised solutions such as an integrated anti-jemmy device. Individual solutions that are particularly important to us, such as the special RAICO striker or the reinforced corner hinge will always be available in our Roto hardware overview.”

The product documentation jointly developed by RAICO and Roto for AluVision Designo clearly describes the components and their installation for all opening mechanisms and window types. “Our customers really like the modified installation method for the pivot rest and the stay bearing; this is something that we are already sure about just a few months after the market launch,” Stefan Sepp told Roto Inside. The flexibility and the professionalism of Roto Service came in for particular praise.

Comprehensive information – on-the-spot advice

If a RAICO customer is confronted with a task that requires a project-specific customised

solution, including solutions for hardware, then RAICO can count on the expertise of the Project Service Center in Leinfelden. “The best foundation for success is when people can be on-the-spot and when they trust each other. Together with Roto, we are developing individual solutions for our customers’ projects. Roto is also able to provide support quickly and flexibly on the construction site itself if required.”

Martin Neuberger, responsible for cooperation at Roto with RAICO, is full of praise. AluVision Designo underwent systematic inspection every step of the way, starting with the specialists in purchasing, followed by technology and finally in RAICO’s product management. “It only took a few weeks in the company for a clear vision to develop of how we should position

AluVision Designo to the market. Cooperation doesn’t get any better than this.”

In Stefan Sepp’s opinion, focusing on one supplier has also paid off for RAICO: “After all the years of cooperation, we have now acquired a great deal of know-how about Roto solutions. This is why it is much easier for us to explain the special features in a Roto product range to our customers. At the same time, the technical proficiency at Roto coupled with extremely close cooperation boosts innovation, and that differentiates us from our competitors.”

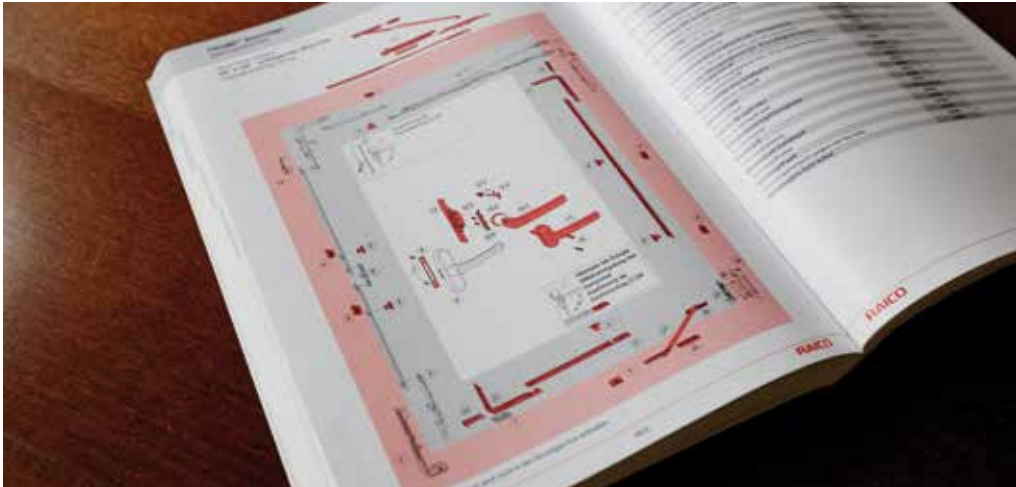


➤ **Roto AluVision Designo for aesthetic aluminium windows and balcony doors**

www.roto-frank.com/en/roto-aluvision-designo



Well-honed team Martin Neuberger (left), Area Sales Manager at Roto AluVision Solution Center North, Stefanie Salzgeber from RAICO Product Management, Andrea Miller from RAICO Technology, in charge of cooperation with Roto, and Stefan Sepp, Head of Technology and Development at RAICO.



The modern alternative: RAICO customers are informed comprehensively about the AluVision Designo components available and how they are installed. Martin Neuberger at Roto talks about the high levels of professionalism and the advantage of being on-the-spot. “It only took a few weeks at RAICO for a clear vision to develop on how we should position AluVision Designo in the market.”

RAICO Bautechnik GmbH
“Our profile on show.”

RAICO Bautechnik GmbH was founded in 1992 by Rainer Vögele and Albert Inninger. They are both still active in their role as managing partners at the company, where they are closely in touch with customers and suppliers.

They have jointly succeeded in steering the company safely through a period of high growth. In 2011, RAICO was one of the 500 companies in Europe which created the most new jobs in a single year. Very close cooperation with Roto started back in 2005. “Since then a relationship of trust has evolved, one which enables complicated processes such as the launch of a new hardware series to be implemented successfully, even within very tight deadlines,” Martin Neuberger, Area Sales Manager at Roto AluVision Solution Centre North enthused.



RAICO image and project database
New on-line service

A new image and project database enables planners and architects to search a collection of numerous RAICO reference projects, with construction-specific information on each building involved.

“Remarkable and inspirational architecture,” according to Dr. Stefan Lackner, Sales and Marketing Manager at RAICO Bautechnik, “and a valuable addition to our on-line services for architects and planners.” The database can be accessed via www.raico.de, using the “References” menu item, or directly at www.objektiv-online.de. When searching for projects, you can use a filter for construction-specific criteria and for individual features. Also available to download on the website are archive issues of the printed version of the RAICO customer magazine “Objektiv”.



Values for generations rekord-fenster+türen

■ Timber ■ PVC ■ Aluminium
Anyone looking for product information on the rekord-fenster+türen GmbH & Co. KG company's website can't fail to come across the north German company's prominently placed mission statement, headed "Generational values". Managing Partner Stephan Golde strives to demonstrate the sustainability standards for product quality and service laid down in this mission statement every single day.

Some 275 people are employed by this Schleswig-Holstein based company, which given that it was founded in 1919 looks back over a long, proud tradition. Nowadays of course, state-of-the-art production facilities produce windows and doors from timber, timber/aluminium and PVC. "We understand the word 'tradition' in the best possible way: for us, it means the art of craftsmanship which has evolved over the generations. Paired with today's modern development and production techniques, tradition in this sense offers unique opportunities for manufacturing doors and windows," Stephan Golde explains proudly. An industrial engineer, he joined rekord in 1992 – the company was his first employer after university. Two decades later, he embodies the positive sense of tradition at the company perfectly.

rekord's clients include carpenters, specialised dealers and building companies all over Germany. "While we also supply customers in the Netherlands, Great Britain and Denmark, Germany is definitely our main strategic focus."

rekord's clients appreciate personalised support from the manufacturer's large field and internal sales team, which helps specialist dealers with measuring dimensions and also offers regular training for their staff. Joint marketing campaigns and support with exhibition designs make rekord a valuable partner for the building element dealers.

Innovative strength and creative diversity
 Around 55,000 window units are manufactured every year at the company's headquarters in Dägeling, 50 km north-west of Hamburg. According to the director, rekord's unique selling points are his team's innovativeness and the creative diversity which rekord's product range affords planners and clients. "Innovations in the areas of security, insulation and design, ensure that the rekord brand has a head start on its competitors; we have set industry benchmarks time and time again. The combination of modern, automated production with traditional craftsmanship enables us to manufacture windows and main doors to suit customer's specific needs. The versatility of our range reflects this: you find Sylt-windows with their classic north German design alongside window solutions in styles drawn from across the centuries for historic renovation projects, and modern elements with a pitched rebate design in the style of Bauhaus", says Stephan Golde.

Timber production reorganisation
 The next major manufacturing project is the reorganisation of the timber and timber/aluminium window production, which should be

complete in early 2014. "Roto's engineering experts will provide us with support on site. By investing in new machines and system components, we will increase the degree of automation, where practical, to achieve yet another increase in productivity and quality." The fact that rekord is placing its trust in Roto's expertise for this restructuring is something Stephan Golde puts down to previous positive cooperation between the two companies. "The collaboration between Roto and rekord goes back 50 years and is a genuine partnership. Our current production process utilises all of Roto's Tilt&Turn and sliding door hardware, along with Roto Gluske-BKV's efficient glazing packers. All of our window handles are Roto products, made to special rekord specifications. The products from Leinfelden have played an important role in our major innovations over the last few years: our energy-efficient PVC window quadro blue, the energy-efficient timber window ligno blue and a new timber sliding door with Patio Life hardware."

Naturally, the window expert is already focussed on the next goals. "As soon as we have completed the modernisation of our timber manufacturing, we will launch a new timber main door range. I am convinced this will set yet another new benchmark for innovation in the industry."



"Innovations in security, insulation and design, ensure that the rekord brand has a head start on its competitors", explained Managing Partner Stephan Golde.



Some 275 people are employed by this Schleswig-Holstein based company, which was founded in 1919. Nowadays, state-of-the-art production facilities produce windows and doors from timber, timber/aluminium and PVC.



In 1992, Stephan Golde went straight from university to a job with the rekord-fenster+türen GmbH & Co. KG company. Today he manages the fortunes of this long-established, Schleswig-Holstein based company, as Managing Partner.



Around 55,000 window units are manufactured every year at the rekord plant in Dägeling, 50 km to the north west of Hamburg.

Roto hardware technology for Slovenia in stock M Sora Norica celebrates new logistics centre

■ **Event** Every year, during the last week of August, the Slovenian trading company M Sora Norica throws a party for its customers. This year, they were not only celebrating excellent cooperation in general, but the new logistics centre which has opened in Žiri. In December 2012, employees and stock from two older warehouses were brought together. "This is where M Sora Norica has since stored most of its Roto products", explained Sales Area Manager, Martin Graé, before going on to explain why he and his team had every reason to celebrate on the 30th of August.

"M Sora started selling hardware in Slovenia in 1991," Martin Graé said. If you include all the subsidiaries, the workforce at M Sora Norica has grown since then to a total of 180 today. "A decision was made in 2011 to work together with Roto in the area of window and door hardware. Since then, M Sora has helped us to boost our sales success enormously in Slovenia, Albania and

Kosovo." Aleš Dolenc, CEO of M Sora Norica, emphasised that in just a short time, Roto has become one of the most important partners for his company. "Shortly after Roto decided to set up a technical sales operation in the region, we agreed to accept the role of trading company for Roto." This brought extremely good results for both sides, according to Martin Graé.

Well-trained team
 "Our joint sales in Kosovo, Albania and naturally in Slovenia too have grown briskly and that has a lot to do with the fact that the M Sora Norica company has systematically worked hard at ensuring that its people improve their know-how in all matters relating to architectural hardware technology", said Martin Graé. "Today, the M Sora Norica trading company is a supplier to all the best-known window and door manufacturers in its sales territory, as well as several specialists in the area of state-of-the-art fire-protection systems."



Making the most of the opportunity to celebrate a successful "lift off" to their cooperation: Aleš Dolenc, CEO of trading company M Sora Norica (right), and Roto Economic Region Manager, Martin Graé, on the 30th of August in Žiri, where M Sora Norica has been operating a state-of-the-art logistics centre since December 2012.

All wrapped up for the Russian winter

BiMax with Teplowin brand windows

■ **PVC** With almost 2,500 employees, locations in 14 different regions of Russia and a production capacity of up to 90,000 window units per month, the BiMax Group is one of the big players on the Russian window market. This year, with its newly-developed brand, Teplowin, the company is now offering high-quality thermal insulation windows. The market launch was accompanied by nationwide outdoor and Internet advertising, as well as sales promotion activities for trade for specialised dealers.



The new brand name: “Teplo” in Russian means warm and “Win” is used there as an abbreviation for the English word window. “So without a doubt, Teplowin is a great choice for a new brand name for thermal insulation windows in Russia: it so easy to understand,” explained Anton Volodkin, Head of Strategic Marketing at BiMax.

We are the first Russian manufacturer to supply windows which have been certified in accordance with the stringent criteria of the IFT Rosenheim certification body. This is what the brand Teplowin stands for. To draw attention to the premium quality of these new windows, we have conducted joint sales promotion campaigns with trading partners at more than 400 locations between Moscow and Siberia. The focus of these campaigns has been the convincing performance data for the windows and our cooperation with selected premium suppliers such as Roto. Builders and re-furbishers who decide to use Teplowin are choosing window systems made of high-quality, perfectly matched components, from a known brand,” says Anton Volodkin, Head of Strategic Marketing at BiMax.

Dealers who commit to selling Teplowin windows can advertise the brand in their showroom in many different ways. BiMax has had elements in the brand design specially prepared for trade. By the end of 2013, 25 per cent of all windows sold by BiMax should be the Teplowin brand. “We are convinced that with the launch of this premium brand, we will succeed in achieving above-market growth,” explained Anton Lipatov, responsible for company development in the Central Federal Region of Russia.



It would be hard not to warm to the friendly elephant advertising the new Teplowin thermal insulation windows from BiMax.

Windows for renovations – it has to be Roto

Windoor Sverige AB

■ **Timber** ■ **Aluminium** Founded in 1985 by a number of specialists from the glass and aluminium industry, Swedish company Windoor Sverige is now part of the internationally active WinGroup, and has around 300 employees. In 1990, civil engineer Magnus Rosgren joined Windoor Sverige in Malmö, southern Sweden, where since June 2001 he has been in charge of window sales. He told Roto Inside about the start of the cooperation with Roto in 2012 and their joint project development success story.

“Windoor supplies and installs windows throughout the whole of Sweden, although without doubt, most of our sales are in the south. We have separate sales and advisory teams for the window segment in the cities of Malmö, Tranås, Stockholm and Skellefteå,” explained Magnus Rosgren. He is convinced that this proximity to the company’s customers is what accounts for Windoor’s success. “Windoor customers appreciate high quality at reasonable prices, good design and above all, direct access to our product developers and sales representatives. Major real-estate companies and builders value our project management and over time their confidence in our ability to handle larger and more complex sales orders has grown and grown.”

Innovative solutions for renovation projects
A plan was drawn up at Windoor Sverige in 2012 to develop a new inward-opening window system with concealed hardware called “WinOne”. With this model, Windoor Sverige wanted to be the first manufacturer in Sweden to offer a Tilt&Turn window specifically for renovation projects: one that is easy to install, even where space is at a premium, and one with an energy efficiency performance equal to window systems in new buildings.

This plan was at the forefront of Magnus Rosgren’s mind when he first met Jonas Eriksson from Roto’s trading partner Göthes Svenssons at a trade fair in Stockholm. They hit it off right from the start and soon experts from Roto and Windoor were hard at work developing a suitable hardware solution for the WinOne design they were after. “As soon as we saw the first prototypes we knew that this system was special, and in no time at all we had our first ‘WinOne’ customer, who was completely satisfied with our product and service. At the end of the day, that’s the most important thing for us and for Roto.”

Magnus Rosgren feels certain that concealed hardware is particularly well-suited to meet the requirements and taste of Swedish builders. “I would describe the typical Swedish owner-occupied house owner as being rather conservative when it comes to windows. He prefers a clean design, high-quality wood window surfaces indoors and a durable and easy-to-use opening mechanism. Roto hardware for inward-opening Tilt&Turn solutions perfectly complements our portfolio.”



A plan was drawn up at Windoor Sverige in 2012 to develop a new inward-opening window system with concealed hardware called “WinOne”. With this model, Windoor Sverige wanted to be the first manufacturer in Sweden to offer a Tilt&Turn window specifically for renovation projects: one that is easy to install, even where space is at a premium.



In 1990, civil engineer Magnus Rosgren joined Windoor Sverige in Malmö, southern Sweden, where since June 2001 he has been in charge of window sales.

In the hot seat



Roto Inside: Mr. Stangier, you personally did the ground-work for the acquisition of Brazilian hardware manufacturer Fermax, and you are now supervising the integration of the company into Roto Group. What are you focussing on during the integration process as being of particular importance to Roto?

Stangier: First of all, I'd like to point out that Fermax is already extremely successful on the Brazilian market. Customers have faith in the product quality and the excellent delivery service. Against this backdrop, there are basically two main areas of focus. Looking outward, Fermax will primarily be interested in how it can enhance benefits to customers, so as to achieve even better results. Looking inward, the focus will be on helping our new colleagues, who naturally view a takeover as quite an

upheaval and a source of uncertainty, and show them that they have a bright future to look forward to at Roto.

Roto Inside: Let's take an inside-out approach. As the old saying goes, nothing is permanent except change. Integration is going to involve change, but the issue for people is how much change.

Stangier: That's quite true and suddenly, something which should actually be an everyday occurrence in all companies – change in terms of slight improvements to processes going on all the time – appears as a harbinger of dramatic changes when coupled with a new owner. Yet, there is no need for dramatic change whatsoever.

Roto Inside: What should our colleagues in Curitiba expect?

Stangier: That those who have been in charge at Fermax for a long time will still be on board making decisions. During our carefully-conducted integration process, we will be relying a great deal on the Fermax employees who have gathered a great deal of experience over many years at the company. This has been a guiding principle for other Roto acquisitions and has been very successful.

Roto Inside: To what extent will Roto know-how be part of the integration?

Stangier: Experts from the Roto Group will be providing support during projects for their Brazilian colleagues in production, the IT area or in product integration. We are convinced that the strengths of both companies will complement each other very well, and that Fermax will continue to enjoy excellent growth as part of the Roto Group.

Roto Inside: Will there be any noticeable changes for Fermax customers?

Stangier: Not in the short term, so customers can rely on continuity in the positive sense. Roto shall be relying on established processes and the Fermax product range, which has already been so successful on the market. Also, without doubt over the medium-term, Fermax will implement ideas as it continues to develop as a company – ideas which will provide valuable customer benefit elsewhere within the Group. This is bound to happen because we promote the exchange of ideas between the management teams in the various companies. However, which ideas are implemented where and when is something that the Fermax management will be in control of. After all, we have every confidence in this management and – what is even more important – this management has earned the full confidence of Brazilian window manufacturers. We have every intention of living up to this, by continuously increasing the benefits our companies generate for customers.

The Product Integration Project Team at work

Fermax Export

■ **New at Roto** As a new member of the Roto Group, Brazilian hardware manufacturer Fermax will not only benefit from its in-house specialists' ideas, but from opportunities available through Roto Group affiliates all around the world. For example, a team headed by Johanna Vogel in Leinfelden is currently analysing whether products from the Fermax product range – which are tremendously successful in Brazil – could also be popular in other countries around the globe.

"The Fermax product range is highly diversified, and –because it contains solutions for many applications –Brazilian window manufacturers

hold it in high regard. We're now working to find out which manufacturers in which markets could also be interested in Fermax," explained Johanna Vogel, before going into greater detail. "Our Spanish colleague, Carlos Lorenzo, has been in Brazil to see the product range for himself. Now, here in Leinfelden, we are analysing which Fermax product groups could be popular in other countries, for example with manufacturers of in-line sliding and outward opening windows."

Product testing at the Roto ITC International Technology Center

Samples of top-hung and sliding windows have now arrived at Leinfelden, where they will be put through some intensive testing. "It goes without saying that all Fermax products comply fully with the Brazilian standards," emphasised Johanna Vogel. "However, we are making full

use of the facilities at the International Technology Center to perform tests for compliance with directives in other countries. Then we can sound out the potential for Fermax in new markets."

Know your strengths for healthy growth

"We will soon be able to tell our colleagues in the Roto Group sales companies around the world, exactly which Fermax products match which common profiles in which countries. Then they can conduct a targeted analysis of which window manufacturers might be interested in Fermax hardware," said Johanna Vogel adding, "Fermax is already a very successful company on its domestic market and if there are any interesting growth opportunities in the export segment for Fermax, then we will pinpoint them."



Fermax hardware solution samples are currently being tested at the ITC in Leinfelden to find out which profiles from around the world they would suit. Shown here are three members of the project team: (from left to right) Johanna Vogel, Claus Peuker and Olga Enns.

New General Manager visits Germany

Fermax Management

■ **New at Roto** Roto Inside met up with Pier Vincenzo Marozzi, who has been appointed General Manager of Fermax, during his on-the-job training. He went to Brazil more than 15 years ago and his first job was as a mechanical engineer in a plant run by his former German employer. He fell in love with the country and its people, so he decided to stay and start a family; now he is 43.

"The German and the Brazilian cultures complement each other very well; after more than 15 years working in Brazilian plants for a German company, I'm absolutely convinced of that," said Pier Vincenzo Marozzi right at the start of the discussion. "I would even go so far as to claim that this specific combination of German organisational talent and process orientation with Brazilian creativity can lead to great business success." This is why he feels sure that Fermax can look forward to continued growth as part of the Roto Group.

Learning from experience

So why did his on-the-job training take place in Germany and not in Brazil? "If you take all

the plants and teams into account, Roto has an enormous amount of production competence, something that I naturally want to make the most of when working together with colleagues from Colombo-Curitiba on expanding the Fermax production operation. This is why I am so pleased that I can have a look around the European Roto plants first. I have already taken the opportunity to discuss some specific ideas I have for Fermax with technicians at the other plants. After all, the plant in Curitiba can benefit from the know-how of the colleagues at the other Roto factories, to become even more successful than it already is."



Exporting Roto Group know-how to Brazil: Pier Vincenzo Marozzi has been appointed General Manager of Fermax. Born in Italy, he grew up in Germany. More than 15 years ago, following his mechanical engineering studies, the German company he was working for sent him to Brazil, where he has lived ever since.



Part of the Roto Group since April 2013: the Brazilian hardware manufacturer, Fermax



Pier Vincenzo Marozzi, along with the Fermax management team, wants to equip production processes in Colombo-Curitiba for steady growth.

Greater efficiency with Roto Lean experts

Bajcar invests in efficiency

■ **PVC** In 1994, Bronisław Bajcar founded a small window factory in the northern Polish town of Slupsk, just a few kilometres from the Baltic coast. Some 20 years on, the company which still bears his name has become one of the major PVC window and door-element manufacturers in Poland. Production capacities and skills grew during this period alongside export turnover. “Nowadays, the majority of our production – 70% – is destined for export”, General Manager Gracjan Zwolak told Roto Inside.

Gracjan entered the window and door industry as a newcomer when he joined Bajcar in 2011; even after two years, the sheer speed of the company’s growth still leaves him in awe. “Even if you look at the figures on their own, it is patently obvious that the company has undergone rapid growth ever since it was founded. Despite the speed, this growth was never attained to the detriment of substance or product quality. In fact, it’s quite the opposite: the products and systems have become subject to increasingly high standards, which has opened up new markets and new groups of customers.” Today, windows and doors from Slupsk meet the most stringent EU standards and in terms of aesthetics, functionality and safety, they meet the taste and expectations of customers all over Europe. “Scandinavia, Germany, Holland, Denmark and the United Kingdom are now core markets for us, just as much as Poland is,” said Gracjan Zwolak. “What’s more, we are currently developing new systems specifically for the French and Italian markets.”

Just 100 employees working in at Bajcar are responsible for a smooth-running production process which turns out an average of 150,000 windows and door units annually. Among the company’s best sellers are windows with 5-chamber profiles and triple glazing. “Although actually, we have recently seen a significant



In 1994, Bronisław Bajcar founded a small window factory in the northern Polish town of Slupsk, just a few kilometres from the Baltic coast. Some 20 years on, the company which still bears his name has become one of the major PVC window and door-element manufacturers in Poland.

increase in demand for our new 6-chamber profile systems,” said Gracjan Zwolak. Other popular products are the Tilt&Slide and Lift&Slide elements for terrace doors and main entrance doors, mainly for the export market.

A bastion of innovation

Currently Bajcar operates two production lines: one for their normal production runs and another for making up customised designs. Glazing can be carried out on two lines. “We plan to complete our new production and warehouse complex by the end of 2014; it will be equipped with state-of-the-art production lines that will enable us to achieve an even higher degree of automation,” reported Gracjan Zwolak.

However, continuous improvement processes have been in place in all parts of the company from the beginning. Regular cooperation with the Roto Lean experts is nothing but a logical consequence of this.

“The first specific project that we implemented together with Roto was simplifying the strikerplate,” recalled Gracjan Zwolak. Prior to this change, we had frequent bottlenecks and hold-ups in the workflow, particularly when assembling accessories such as arrestable brake stays and arrestable ventilation-stays. Together we found a solution: the strikerplate is now fitted to the frame profiles and the centre posts on the loose profile-piece. This alone enabled us to



Just 100 employees working in at Bajcar are responsible for a smooth-running production process which turns out an average of 150,000 windows and door units annually.

Imprint

Editor

Roto Frank AG
Wilhelm-Frank-Platz 1
70771 Leinfelden-Echterdingen, Germany

Editorial board

Monique Gnuschke,
Udo Pauly

Editorial staff

Comm’n Sense GmbH
Lensbachstraße 10
52159 Roetgen, Germany
Telephone: +49 (0)211 1730-114
Telefax: +49 (0)211 1730-123
roto.inside@commn-sense.de

Design and production

avency GmbH
Kiebitzpohl 77
48291 Telgte, Germany
Telephone: +49 (0)2504 888-0
Telefax: +49 (0)2504 888-199
info@avency.de

Printing house

Griebsch & Rochol Druck
GmbH & Co. KG
Gabelsbergerstraße 1
59069 Hamm, Germany
Telephone: +49 (0)2385 931-0
info@grd.de

Circulation

12,500 copies

Roto Lean Modul F:
Flow production

Consultancy
services for efficient
window production

Bajcar is one of a growing number of window and door manufacturers the world over who benefit from the services of the Roto Lean Team. This means that Bajcar uses the know-how of Roto advisers on a range of topics covering “flow production”, in other words, optimisation of operational procedures in production. Rafał Koźlik and Tomasz Hejduk from the Roto Lean Team helped with their experience and recommendations to ensure an optimum integration of the frame striker assembly operation into the production flow.

The Roto Lean Team consulting process kicked off at the Roto plant in Lubartów, with a presentation of best-practice solutions, before monitoring the following steps at Bajcar:

- analysis of work content in the production
- integration of frame striker assembly before the welding process
- concept proposal for optimisation of sash hardware mounting

Benefits for the customer:

- improvement in process interlinking
- rationalisation of one assembly work station
- increased output

A next step should be to integrate ordering of espagnolettes and stay arms for the sash hardware mounting.

achieve a reduction in cycle times of roughly 20 per cent. Plus we were able to divert the capacities freed up by this to other areas of production straight away.” Naturally, given such startling success at the beginning, cooperation continued. “Together with Roto, we have developed a strikerplate standard for certified security windows in the RC 2 class. Glazing packers from Roto now play a central role. Working together to develop new products and efficient processes – this is how I personally envisage the ideal relationship to a supplier.”



“The first specific project that we implemented together with Roto was simplifying the strikerplate,” recalled Gracjan Zwolak. Prior to this change, we had frequent bottlenecks and hold-ups in the workflow, particularly when assembling accessories such as arrestable brake stays and arrestable ventilation-stays.”