



# INSIGHTS

## One group, many brands

The RICO GROUP's new brand architecture

## Small-volume parts

RICO focuses on volume production using standard equipment

## 20 Years SIMTEC

Two Decades of Experience and Knowledge: Best in Class

## Silicone Excellence Inside

The RICO GROUP's new brand architecture

THE RICO GROUP MAGAZINE

2022 EDITION

# CONTENTS 2022 EDITION

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03	EDITORIAL <small>NEW BRAND ARCHITECTURE</small>
04-05	NEW BRAND ARCHITECTURE <small>MANY BRANDS ONE UNIT</small>
06-07	K`22 <small>K-FAIR 2022 19 - 26 OCTOBER 2022</small>
08-09	RICO GROUP INNOVATION MANAGEMENT
10	SILCOPLAST <small>NEW SPRAY HEAD NOZZLE WITH CAP</small>
11	SILCOPLAST <small>COMPLEX EXHAUST CHICANE</small>
12-13	RICO <small>1-COMPONENT TOOLS</small>
14	HTR: <small>NEW INDUCTIVE HARDENING PLANT B2B DIGITISATION</small>
15	HTR: <small>NEW MANAGING DIRECTOR</small>
16	SIMTEC: <small>HIGHLY INNOVATIVE BLADDER APPLICATION</small>
17	SIMTEC: <small>100% INLINE TECHNOLOGY</small>
18-19	SIMTEC: <small>20 YEARS SIMTEC</small>
20	ANNIVERSARIES: <small>RICO GROUP SAYS THANK YOU</small>
21	RICO GROUP: <small>OUR FAIRS AND CONFERENCES</small>
22-23	FLASHLIGHTS: <small>NEWS FROM THE RICO GROUP</small>

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# INSIGHTS EDITORIAL

## 2022 Continuous transformation and improvement – the only constants

### EDITORIAL Insights 2022

“At RICO, 2022 has been shaped by growth – in terms of personnel, structures and facilities – and our strategic realignment. In addition to a wide-ranging branding process, we’ve put a lot of time and energy into developing new innovations. And now we’re ready to take the next step towards a bright future – together with you!”

This year, the RICO GROUP has introduced a new brand strategy that lays the foundations for the new, shared corporate design for RICO Elastomere Projecting, SIMTEC, SILCOPLAST and HTR. Our aim is to work together even more closely and give the Group a stronger profile as a unified, cohesive brand. We will unveil the new brand architecture in this edition of Insights and at the K 2022 trade fair.

A flagship technology event, K remains a key element in the Group’s communications strategy. Alongside a stand featuring our new corporate design, we will be showcasing an in-house application and an exhibition product for the very first time this year. We’re looking forward to meeting lots of people and holding a host of fascinating discussions.

We’ve also been focusing on a range of other interesting issues over the last few months: the Group’s global innovation management set-up, expansion of our core technologies, and some exciting applications developed in collaboration with our customers.



Gerhard Kornfelder, Johannes Grabner and Alfred Griesbaum

#### The key takeaway from this edition of Insights

All of the developments outlined in this issue would not have been possible without our dedicated staff and our business partners. We’d like to take this opportunity to thank all of them. But that’s enough from us! We hope you enjoy reading our magazine and delving into the world of the **RICO GROUP**.

Handwritten signatures in blue ink. The signature on the left is 'Johannes Grabner' and the signature on the right is 'Alfred Griesbaum'.

One group, many brands

## New brand architecture



MEMBER OF RICO GROUP

RICO Elastomere Projecting



MEMBER OF RICO GROUP

SIMTEC Silicone Parts, LLC



MEMBER OF RICO GROUP

SILCOPLAST AG



MEMBER OF RICO GROUP

HTR



**The term 'corporate brand' is often used synonymously with 'company brand' and 'group brand'. And since the RICO GROUP continues to grow, it was particularly important for us to take a close look at our brand architecture this year, and make some adjustments so that we can present ourselves even more strongly and cohesively as a brand family.**

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**This in-depth focus on branding has brought about a number of changes. We take a look at some of them.**

The RICO GROUP sees itself as a forward-looking, premium full-service supplier for custom elastomer and plastics projects, and develops solutions for complex technical tasks, right through to volume production, in collaboration with its customers – through the worldwide alliance of highly specialized companies that make up our Group.

#### **Our pledge**

The RICO GROUP is synonymous with 'bundled silicone excellence inside'.

Our goal is to move forwards together, and we will achieve this through a combination of expert know-how, determination and dynamism.

#### **Our vision**

Transforming silicone business to global leadership  
In other words, brands have to remain agile and adjust their positioning in order to adapt rapidly to customer needs.

#### **Common denominators**

The Group companies are bound by values such as presenting a unified image, conveying a shared identity, and leveraging the brand's common core competence. Our subsidiaries benefit from being part of the Group, and from our excellent reputation, proven quality and strong brand. Customers have a clear picture of our brand and know what it stands for – which is a cornerstone of any successful business.

#### **The world as a new connecting element**

The new element that binds the companies is a globe that underlines our unity as a group. This new logo design forms the basis for a highly coherent and uniform brand structure. It also ensures high recognition values.

#### **Fine-tuning: subtly harmonizing our logos**

As part of a detailed redesign process, we have aligned all of our Group-related logos in order to create a cohesive overall impression, but without sacrificing the companies' unique identities. The new corporate design was developed in consultation with the owners and managing directors, because ultimately the brand and logos are an integral part of everyone's day-to-day work.

And we think it's been a great success!

Find out more by visiting us at K 2022- You'll also find details in the article about the K trade fair on the next page.

# K 2022 K-FAIR 2022 19 - 26 OCTOBER 2022



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## Hooray! K returns at last!



### It's back – and celebrating its 70th anniversary

Obviously, the RICO GROUP will be joining the celebrations, and presenting a new application that we're keeping under wraps for now. But more about that later... First we'd like to pay tribute to one of the best trade fairs in the industry.

What started as a small consumer fair in Düsseldorf, exhibiting everyday consumer products like nylon stockings, is now a **one of the world's leading get-togethers** for the entire plastics and rubber sector. And what a remarkable transformation it's been: from 270 exhibitors – all from Germany – and 14,000m<sup>2</sup> of exhibition space in 1952, today the fair attracts 3,000 exhibitors from 61 countries and takes up every inch of Düsseldorf's 178,000m<sup>2</sup> exhibition center. Over the past 70 years, K has not only been a place to find out everything there is to know about plastics, it has provided opportunities to meet a host of prominent personalities and discover new inventions that transform the industry time and again.

### RICO and K: growing and transforming hand in hand

You could say that the RICO GROUP's origins are similar to those many of the newcomers back in the day – they date back to the partner booths at trade fairs in the early 2000s. There were always some exciting applications on show, such as a 2K connector, a magnifying glass or a 2K watch. Back in 2013, our first 30m<sup>2</sup> stand was an important milestone for us. Nine years on, our booth will be three times as big, and it will be closely aligned with the new brand architecture presented on page 4. In fact, our new branding will feature very prominently at the exhibition and our stand.

What's more, RICO GROUP will be showcasing its core technological expertise with a new application developed in-house. It's still top secret, but we can reveal a few details:

- Developed over several months with the University of Art and Design Linz
- A multi-component product designed for everyday use
- Highly versatile – it goes without saying
- Manufactured using a combination of 1K and 2K technology

Want to find out more? Just what we were hoping! After all, from the initial idea through to production, developing the application took us a whole year.

We can't wait to share our secret with you at K 2022 – you'll find us at **stand 13A06** in **hall 13**. So: stay tuned, come in and find out.

You won't be disappointed!



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# Silicone Excellence Inside

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This year, for the first time at the K trade fair, we are showing our own application at the booth. Together with the Linz University of Art, Industrial Design Department, we designed a cult object with a clear look. The curtain is almost lifted and we wanted to photograph a part of this multifunctional item on this page to arouse your curiosity for the K. So double premiere at the K'22: First own application on the RICO-Group booth and 70 years of K-fair.

**Let's celebrate together in Düsseldorf at booth 13A06 in hall 13!**



# RICO GROUP INNOVATION MANAGEMENT

## When it comes to new technologies AND new employees, the RICO GROUP is always on the lookout for game changers

As a global player in the silicone industry, we believe that anticipating new technological possibilities and exploiting fresh sources of innovation are both a responsibility and an objective. The RICO GROUP's Corporate Innovation unit focuses primarily on identifying and interpreting step changes, technological trends and business model innovations in our business environment, and exploiting them for the benefit of the Group.

### New group-wide global innovation team

With this in mind, we are always on the lookout for trends, technologies and new business models that overlap – or could potentially overlap – with our various business lines.

In this context, raising awareness of new technologies and the question of how they could alter our operations is particularly important. To address these issues, we have set up a Group-wide, international innovation team which has been working on identifying and analyzing new trends, technologies and business models for some time now. "We have already established a very effective way of working and launched some initial innovation projects within the group. Our five-strong team covers both Europe and the US, which is creating synergies across our four production sites," comments RICO's Group Innovation Manager **Christoph Zipko**, who has been in the role since 2021.

### Collaboration at the Open Innovation Center

"Incremental improvements aren't really the priority in our innovation-related work, we're more focused on effective, game-changing technologies. For the RICO GROUP, this also means becoming closely involved in technology networks," Christoph Zipko adds. The RICO GROUP has already initiated a very successful partnership with Johannes Kepler University Linz. At the university's Open Innovation Center, a corporate co-working space, RICO has been exploring new technologies and opportunities in collaboration with other companies.



**Christoph Zipko is RICO's new Group Innovation Manager**

Christoph Zipko has been responsible for sustainability and innovation at the RICO GROUP since October 2021, a role that encompasses both Europe and the US. He is 40 years old and brings a wealth of innovation management expertise, with 10 years' experience in the corporate foresight department of a corporate group which has enjoyed outstanding international success. His last position there was Head of Global Innovation and Development in the aerospace business unit, a job that involved leading a team spread across three continents.

"Get me engineers who have still to learn what's not possible" is one of **Christoph's** favorite mottos. The quote originally came from Henry Ford.

We hope that Christoph has already met lots of engineers like that at RICO and wish him all the best for the future!







## **RICO places a strong emphasis on introducing new technologies aimed at making improvements across the entire value chain**

The RICO GROUP's growth trajectory is closely linked to the ambitions of our customers, as well as global developments. The specific technological expertise we have built up over recent decades has enabled us to improve both our performance and competitiveness. Maintaining this highly innovation-driven approach, the RICO GROUP is constantly looking to identify disruptive technologies and new business models. Two key areas in this context are sustainability-related improvements to create more resource-efficient molds and minimizing our environmental footprint.

Especially in times like these, it is vital that the RICO GROUP identifies and evaluates new ideas, technologies and trends – ideally using a structured, systematic approach. This is why we have introduced strategic innovation areas throughout the RICO GROUP. These facilitate Group-wide corporate foresight – in other words, analyzing the potential introduction of new technologies and their impact on each of our business areas, and then implementing these technologies where appropriate. Working at the vanguard of innovative advances, our five-strong innovation team identifies new opportunities and implements them at the Group in consultation with internal and external experts. The innovation process we have designed ensures a structured approach to pinpointing opportunities and extends all the way to implementation across the Group.

### **Collaborating with start-ups, customers and suppliers**

The RICO GROUP is committed to open innovation. In collaboration with start-ups, customers, suppliers and other stakeholders, we are devising new possibilities and improvements along the entire value chain. Our focus is on putting silicone technology on the best possible footing for the decade ahead.

An example of this is the deployment of artificial intelligence applications at our production facilities, which we are testing with a view to offering customers enhanced security.

### **Sustainable innovations – shrinking our environmental footprint**

We are also putting a lot of effort into responsible innovation in this context. In collaboration with the respected Fraunhofer Institute, we are working on new approaches involving cross-over between mold production, silicone materials and sustainability. The underlying objective is to develop more resource-efficient molds and products that contribute to continuous improvements in the carbon balance and our ecological footprint. The RICO GROUP is going green!

# SILCOPLAST NEW SPRAY HEAD NOZZLE WITH CAP

## A Silcoplast masterpiece: spray nozzle and cap

**From creative mold development to perfect handling**

**Silcoplast loves a challenge. And from start to finish, a project for a spray nozzle and cap for one of the company's medical industry customers certainly didn't disappoint when it came to problem solving.**

There were no 2D drawings or STEP files to work from at the outset, which was quickly solved drawings based on 3D scans of the parts. The lesson: if it's not available, just do it yourself. The molds for the project were essentially re-designed in consultation with the customer, based on the spray nozzle and caps that had already been manufactured.



### Special handling requirements for spray caps

The nozzles are drop parts that go into stock. But for the caps, Silcoplast had to make a special gripping head for removing them from the mold. The laser station for the caps was developed and adapted by one of Silcoplast's automation partners.

### Automated process

A handling system transports the caps to the next processing stage straight after molding. Deposited in rows of four, they then move along on a circular conveyor for lasering of the arrow on the caps.

### Project requirements:

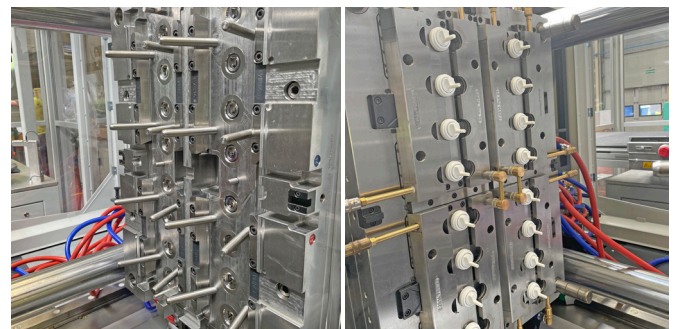
- Child-proof closing system
- No rotation during assembly
- Communication between external equipment and injection molding machine
- Independent operation of four-piece laser stations

Both parts – the nozzle and cap – have so far been assembled externally in a protected environment. The plan is to eventually assemble the parts together directly at the machine using automated assembly equipment and then pack them straight into shipping cartons.

### Efficient approach

"Parts for the medical industry often require very short cycle times – and that was the case for this project as well. Our customer is very satisfied with the straightforward and very efficient solution we came up with. We're delighted about this, but it certainly won't stop us looking for potential improvements and developments. It just spurs us on," says SILCOPLAST's CEO Philipp Gaus, commenting on the successful project.

### Product details:



**Nozzle material:** Bormed RF825MO + plastic additive (white)

**Cap material:** Bormed HG820MO + FK38416 laser additive

**Mold for nozzle:** 16-cavity hot runner with open nozzles; spring-mounted plate on nozzle side

**Mold for cap:** 16-cavity hot runner with open nozzles; 8 transverse runners on ejection side for undercut demolding

**Injection molding machine:** Sumitomo (SHI) Demag IntElect 2 180/560-560

Annual demand: between 2.5m and 5m parts





# SILCOPLAST COMPLEX EXHAUST CHICANE

## Simplifying complex parts

### New exhaust baffle

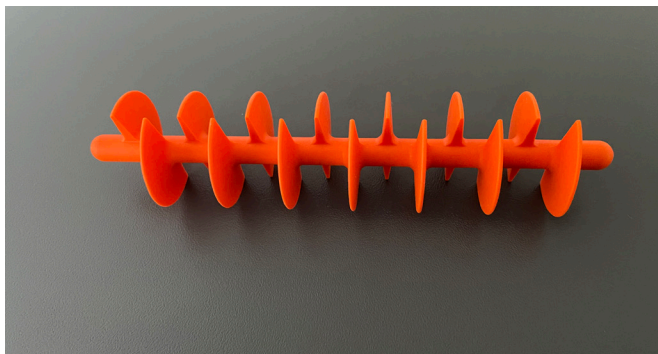
**“No risk, no fun!”** was SILCOPLAST's approach to a project devised in cooperation with one of its customers. An achievement that SILCOPLAST is extremely proud of. The task involved developing a mold and mold inserts for a highly sophisticated exhaust baffle – a project that many of our competitors had turned down.

The customer wanted us to develop a cost-effective insert assembly for a small number of parts (500-1,000 per year) using manual demolding.

The geometry of the baffle for an exhaust cooler was extremely complex with seven vanes on each side – another reason why this project was initially viewed as a purely experimental undertaking.

### The challenge: cost considerations and uniform filling

Our engineering team decided to make a design change to optimize the mold to the greatest possible extent for production. But the biggest challenge was ensuring that all the vanes would fill evenly and cleanly in the mold. After detailed discussions and weighing up the options, Silcoplast came up with a solution that would satisfy the design for manufacturing (DFM) requirements.



### Requirements for the part

(Material: Wacker LSR Elastosil 3003/70; color: approximately RAL 2004F)

- U.S. Food and Drug Administration compliant
- USP Class VI approval (United States Pharmacopoeia for test reports and regulations for plastics/bio-compatibility)
- 0.2mm separation burr
- Compliance with ISO GPS measurement and tolerance principles consistent geometric dimensioning and tolerancing)



We couldn't wait to clamp and sample the mold for the first time to complete the test report for the initial sample and trial the planned production process. The initial sampling was done with a fully-electronic injection molding machine, which is particularly suited to clean room production.

### Success at the first attempt!

The initial sampling went well and we were able to send the first parts to the customer. Just a month later, we got the go-ahead and kicked off with volume production.

### The takeaways:

**We'd be more than happy to take on another project like this. For us, difficult doesn't mean impossible**

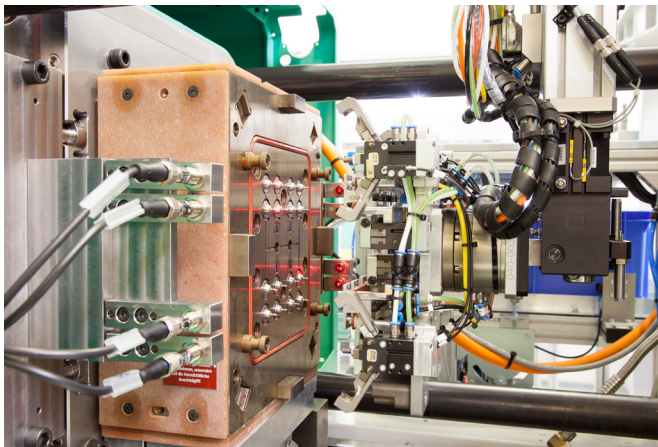


# RICO 1-component tools

## 1K molds from RICO

**! Proven technology for consistently high quality**

Established doesn't necessarily mean outdated. On the contrary, since RICO was set up in 1994, 1K technology has always been the basis for constant technological advances in injection molds for the production of liquid silicone (LSR) parts – and that's still the case today.



RICO prides itself on producing parts with minimal flash, zero waste and without the need for additional finishing. The use of specially designed cold runner technology means that the number of cavities is rarely a consideration nowadays. This is because with minimum spacing of about 15mm, valve gate nozzles can also be used for molds with a very high number of cavities. In a nutshell: from small to large injection molds, RICO's technology has proven itself time and again in volume production thanks to outstanding process reliability – ensuring consistent quantities as a result of high availability.



### Stand-out features of RICO's 1K molds

For the last decade or so, RICO has succeeded in steadily increasing the number of cavities in its molds. Even when it comes to small-volume parts, the focus remains on direct injection. It's also about avoiding sprues – which means eliminating burring as far as possible, minimizing material costs and, in turn, simplifying the process. What's more, RICO molds are designed to run on clamping force even when cold. Perfect thermal separation in the nozzle position, avoidance of complexity in both halves of the mold, and the ever-increasing functionality of automation systems also promote improved energy efficiency and process precision.

### There's steel and then there's steel, and the same goes for shrinkage

When it comes to selecting the right steel, RICO has the perfect partner in its sister company HTR. Over 25 years of empirical data on shrinkage allows us to define initial tolerances as accurately and precisely as possible. Shrinkage depends on a range of factors, such as part size, Shore hardness and membrane thickness to name just a few. It is even possible to feed 3D scan data back into the design, meaning that shrinkage in general can be better understood and addressed. These ideal conditions and capabilities in terms of materials and expertise – which are all interrelated – enable us to determine the optimum process window.

### RICO's in-house technical center: better safe than sorry

Optimizing processes means calculating the ideal process window. This is why we fine-tune the molds in our in-house technical center right up to the process freeze – ensuring that valuable machines for volume production are not taken out of action and avoiding the need for process tweaks. Production only starts when we can guarantee trouble-free operation of machinery and preventative maintenance cycles have been defined.





### Focus on needs-based automation

When it comes to automation, we place a particular emphasis on keeping the part in position and monitored for as long as possible. This is to ensure traceability and facilitate subsequent handling of the parts as well as fitting and pre-assembly further down the line. Our automation solutions also remove the need for additional assembly and packing steps. We can automate production every step of the way, from the injection molding process right through to inspected and packed finished parts.

### Just a few of the automation solutions we can provide:

- #Conveying, feeding and supplying parts
- #Pretreatment of inserts
- #Custom insert and removal systems
- #Automatic inline testing equipment
- #Part marking, e.g. laser marking and pad printing
- #Positioning and buffering systems, e.g. using individual nest separation
- #Automated packing solutions

### RICO's specialty:

(volume) production of small parts

Here, RICO uses micro injection-molding machines – small machines for small parts. And yes, they are also perfectly well suited to producing low quantities. Especially when molding thermoplastics, sub-runners come into play for a high material flow rate to avoid degradation of the material due to the dwell time in the feeder. Small feeders have proved to be very effective in practice for these applications.

Things are a bit different with liquid silicone. The dwell time in the feeder is a minor issue because LSR only thermally cures once it is in the heated mold, and the temperature-controlled feeder is kept at a suitably low temperature.

With 2K molds, there are yet another set of considerations: with low volumes of material, like LSR for instance, the flow dependency of the static mixer becomes more important. Conversely, larger volumes mean greater homogeneity – also in terms of the color admixture.

### Standard solutions at RICO: big benefits for small parts

At RICO, using standard equipment for the production of small parts is also the top priority. This is because a custom solution will always be precisely that. On the other hand, if standard solutions become established, follow-up orders are more likely, which in turn has a positive impact on ROI. The focus is on high quantities and minimizing waste of the valuable liquid silicone. "We try to avoid sub-runners, and pre-mix a larger volume of material, which is then portioned before injection," says **Roland Angerer**.

This means using standard equipment when selecting LSR machines and dispensing systems where larger volumes of LSR, including pigment, are mixed and then fed into the LIM process after portioning.

"This is a tried-and-tested approach at the RICO GROUP. Compact molds with a high number of cavities for micro-components are crucial here. In terms of the mold technology, we use valve gate nozzles with 0.2mm injection and low cavity spacing of 15-20mm in the cold runner," **Angerer** adds.



"We produce large quantities on standard machines using a stable process, and with specially adapted molds and cold runner systems. We also place an emphasis on automation and individual nest separation. As a result, the quality of a sample from selected cavities is much higher than that of a sample taken from all cavities." **Roland Angerer**, Chief Technical Officer at RICO

# HTR NEW INDUCTIVE HARDENING PLANT B2B DIGITISATION

## New induction hardening equipment and specialized inspection process

### ! Greater flexibility, shorter set-up times

**HTR has done it again – strengthening its newest department once more by installing additional equipment and new technologies. The key objective: differentiation where possible**

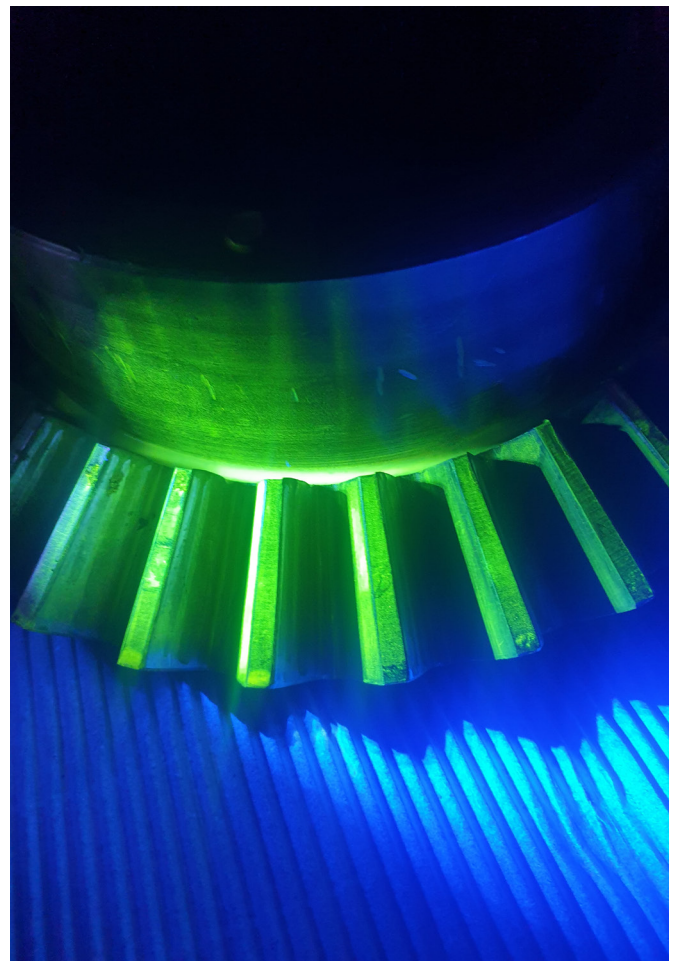
HTR has recently invested in a new (albeit second-hand) induction hardening system – and it's proved to be a roaring success. The equipment has the potential to significantly boost the company's attractiveness on the market when it comes to standard parts, which are typically compact components produced in high quantities. In operation since 2019, the existing system is extremely flexible, but requires relatively long set-up times. And that causes difficulties for the sales team when it comes to winning contracts for volume production. The new, more efficient induction hardening equipment was acquired from VW's research center and is due to be commissioned in mid-2022.

### New inspection process for induction-hardened parts

HTR has also invested in a new specialized inspection process which will be used for testing hardened components. Known as magnetic particle inspection, the test detects cracks on or close to the surface of ferromagnetic materials. HTR's existing equipment will be used to inspect part of up to 900mm in length. The technology has opened the door for business with customers who produce safety-critical components and have to carry out thorough testing after hardening, in some cases on every part. The inspection process is no walk in the park: staff are required to complete a one-week training course, including a comprehensive final test, before they are authorized to carry out the complex inspections.

### Additional service thanks to new straightening press

HTR was also able to expand its induction hardening service offering in late 2021 with the purchase of a hydraulic straightening press with a capacity of up to 100 tons. It can be used to bring round and flat materials back into tolerance after hardening by means of precise bending. The press can handle components with a maximum effective diameter of 150mm and a length of up to 3,500mm.



## New Managing Director of HTR GmbH



**Klaus Höggerl is the new Managing Director of HTR GmbH**

After 13 years of successful activity, the previous managing director Ing. Helmut Jan now hands over the scepter to his successor DI Klaus Höggerl as of September 1, 2022. Under the leadership of Helmut Jan, who started in 2009 with 20 employees, he was able to more than double the company in terms of employees, production facilities and floor space and to expand HTR as one of the market leaders in heat treatment for medium-sized companies. In the current times of special challenges regarding energy prices and shortage of skilled workers, Klaus Höggerl now takes over the leadership of HTR.

DI Klaus Höggerl is a graduate of the University of Leoben in the field of materials science. The 46-year-old native of Styria can look back on more than 20 years of industrial experience in Austria and abroad, during which he held various responsibilities, in a production-related environment. Among others, he worked 13 years for the Hilti Group, where he was intensively involved in heat treatment issues as well as joining processes.

After that, he was production manager at an engine factory in Steyr. He has been on board at HTR for over two years as operations manager and was responsible for production, purchasing, maintenance and administration so far. Now he is taking on the next responsibility and, as the new managing director with a motivated team and wants to further push HTR's previous strengths and carry out a smooth transformation in order to respond with agility and innovation to current customer requirements as well as the challenges on the labor market.

"We already started last year with an intensive strategy process and thus set the course for the HTR future. With the great tailwind from the past years, the broad-based customer structure and the willingness to start a step-by-step change process, I see HTR in an excellent position for the future."



# SIMTEC HIGHLY INNOVATIVE BLADDER APPLICATION

## SIMTEC tailors a 2-component bladder application

### ! Value-Added Solution Resolves Customer's Challenges

When approached by a customer requesting our help with an existing product that was not meeting their productivity objectives SIMTEC responded to the challenge. The product included multiple components, numerous secondary operations, and was not delivering their required production capacity. Our goal was to provide a robust, fully automated solution that would increase production output, provide consistent high quality, consolidate operations, and offer an improved product.

The existing product included two seals, extruded tubing, rigid connector housing and two bladder membranes. The critical function requirement for the product was the bladders inflation. The bladders needed to bond to the polycarbonate (PC) housing, however not entirely. To permit the bladder to inflate and deflate as needed, a section of the housing surface required a debonding treatment.

Their current overseas supplier was utilizing a labor-intensive multi-step overmolding process, followed by a manual debonding application and secondary assembly operations. The numerous individual components and multi-tiered process added complexity causing avoidable delays and quality issues. But most importantly, if the components were incorrectly assembled it could adversely affect the important function of the device.

Working closely with our customer's design and sustaining team we were able to understand the functionality and design requirements needed to provide the best design solution. Since this was a second-generation product, it was imperative that the new design would be compatible with their existing product and offer improved functionality, manufacturability, and productivity.

SIMTEC provided a creative turnkey solution that included a redesign of the part upgrading to a two-shot molding solution with a 4 + 4 (PC + LSR) RICO mold, automation, and inline equipment.

The new, two-shot part design integrated the two LSR seals and two bladder halves into the polycarbonate housing. This consolidation reduced the number of manufacturing steps, provided consistent high quality, and yielded a stable high output. The integration of the seals also reduced the risk of seal misalignment and roll-over issues that can occur during assembly.

To improve the quality, accuracy and efficiency of the secondary processes, multiple inline value-added stations were developed for a fully integrated solution.



Before the parts are shipping to the customer, functional testing is required due to the critical nature of the product. Specialized testing is performed in SIMTEC's QA lab utilizing a CMM (Coordinate Measuring Machine) with customized fixtures and programming to confirm parts meet specific inflation value requirements.

SIMTEC was able to offer a customized solution that met our customers challenges and added value.



# SIMTEC 100% INLINE TECHNOLOGY

## Automated Inline Technology Improves Accuracy and Reliability

**It improves  
the accuracy  
and reliability**



Single-shot and two-shot valves are used by a wide range of industries in a variety of applications. Snowflake valves, dosing valves, and one-way valves are just a few that require post molding slitting. Traditionally the post-molding slitting operation has been performed as an independent secondary operation and often by a secondary supplier. The secondary operation is performed manually using an index fixture, or if automated the part is placed and slit using an actuating knife. Both processes can be expensive, labor-intensive and produce inconsistent results. Because the operation is performed independently, the molded valves are typically collected in bulk without specific orientation before slitting.

SIMTEC offers a better, value-added solution. For our customers with slit valve applications, we design a customized automated manufacturing cell to meet each customers' specific requirements. An automated slitting station is designed with customized fixtures for proper and consistent part orientation. The slitting station is located within the molding cell and an extension of the molding process. The same parts handling robotics used for removing the parts from the mold, transfer the parts to the slitting station immediately after molding, eliminating the need for secondary equipment. Once properly positioned in the special fixture, the valves are accurately and consistently slit utilizing an automated process and special blade for precision cutting. Upon completion, the slit parts are removed and placed into a bin for final inspection and packaging.

Accurate positioning and orientation are imperative for precision slitting, and critical for medical applications such as one-way valves or duck bill valves used for fluid transfer functions. Often it is required for the slit to be located on the narrow tip of the valve and must shut off completely as soon as the slit closes to prevent fluid backflow.

For medical applications requiring hygienic production, the automated demolding and slitting are within an environmentally controlled enclosure attached to our class 8 clean room. Upon completion of the slitting operation, the parts are conveyed within the enclosure into the clean room for inspection and packaging.

SIMTEC's automated inline solution combines the traditionally independent molding and secondary processes into one automated manufacturing process for concise alignment, precision accuracy, consistent quality and added value for our customers.





# SIMTEC 20 YEARS SIMTEC

## ! Two Decades of Experience and Knowledge: Best in Class



At center RICO Group Co-Owners Alfred Griesbaum and Gerhard Kornfelder join SIMTEC Managing Director Roland Keller and SIMTEC Team Members on board since Wisconsin

**SIMTEC is proud to celebrate our 20 years as a provider of extraordinary LSR solutions. In 2002 SIMTEC Silicone Parts LLC was founded in Madison, WI and began operations in a shared space before moving into a 5,000 square foot manufacturing facility.**

SIMTEC was one of only a few injection molders in the USA capable of producing precision injection molded LSR components. Liquid silicone rubbers were new and very different than plastics or rubber molding. SIMTEC formed an early relationship with RICO, and they supplied all of SIMTEC's molds then and now. From the very beginning SIMTEC focused exclusively on LSRs and became specialists and experts.

SIMTEC began with one Engel machine and one customer, Tyco Brazil. The first parts were LSR grommets molded in an oil-bleeding LSR. Tyco, now known as TE Connectivity, are an active customer 20 years later.

From 2002 to 2005, all parts being produced were single-shot LSR parts and SIMTEC became ISO 9001 certified.



### In 2006 ...

SIMTEC added LSR two-shot molding capabilities, expanding our services, and offering customers increased design flexibility and value. SIMTEC's first two-shot parts were for Honeywell were molded with a self-adhesive grade LSR with glass-filled PA 6/6.

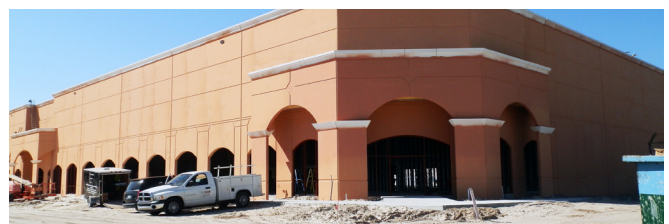
SIMTEC quickly gained customers and added machines and team members to meet growing demand. We had a well-balanced group of customers including large OEM companies, such as Tyco Electronics (Brazil and USA divisions) in Automotive, Philips Advent in the baby products market, Bose in consumer electronics, Honeywell in the industrial segment, and BD in medical.



### In 2013 ...

SIMTEC additional space was needed. SIMTEC was attracted to the advantages South Florida offered and made the decision to move operations to Miramar, Florida. A new manufacturing facility was built large enough to allow for significant growth, and designed to facilitate a robust, state-of-the-art, automated manufacturing.

At the time of the move, SIMTEC had 14 machines consisting of both LSR single shot and LSR two-shot automated machines, and a team of 35 employees. Approximately 20 employees made the move to SIMTEC's new Miramar, Florida location.



### In 2013 ...

In 2013, SIMTEC added to its quality certifications, adding IATF 97679 certification for automotive customers. In 2016 we became ISO 13485 and began building a ISO class 8 cleanroom to meet the growing needs of our medical customers

Choosing a hybrid design locating machines outside the cleanroom and enclosures to protect parts from machine related particles. Also using a modular design that allows for fast expansion, planned for 2023.



Two decades later and we remain technology-, automation-, and quality-driven, and continue to expand our portfolio of services. Partnering with our customers at the onset we offer early design and prototype support, material and part testing, and automated inline processes that allow us to offer added value to our customers.

SIMTEC looks forward to what the next 20 years will bring. One thing remains certain, quality, innovation, and customer-focused, will remain at the center of SIMTEC's extraordinary solutions.

## "The Christians"...Leaders at SIMTEC for 20 Years

Christian Roesslhumer, VP of Technology (at left) and Christian Wimmer, VP of Production have been at SIMTEC since the start and major contributors to SIMTEC's success. Both Austrian born, Christian Roesslhumer and Christian Wimmer grew up in the same town, have been friends since they were 10 years old and have worked together at SIMTEC for 20 years!

As is common in Europe, both began their careers as apprentices. Mr. Roesslhumer as a machinist, and Mr. Wimmer in injection molding.

While working in the tooling division of a large packaging company, Christian Roesslhumer met Johannes Grabner (Co-founder of RICO Elastomere and RICO Group Co-owner). Mr. Grabner was in a manufacturing leadership role and recognized Christian's talent. In 1995 Johannes Grabner recruited Mr. Roesslhumer to join him at a new tooling company he and two others (Alfred Griesbaum and Gerhard Kornfelder) had started – RICO Elastomere Projecting GmbH.

In April 2002 Christian Roesslhumer traveled to the United States and joined SIMTEC Silicone Parts in Madison Wisconsin as SIMTEC was starting up. As the VP of Production, he was responsible for Tooling and Production. A short time later, in September 2003 Christian Wimmer joined SIMTEC and became Production Manager. Together they provided strong leadership and valuable knowledge and experience, and have helped drive SIMTEC's innovation, technology, expanded capabilities.



Christian Roesslhumer, VP of Technology (left) and Christian Wimmer, VP of Production have been with SIMTEC from the beginning and have contributed significantly to our success



# ANNIVERSARIES RICO GROUP SAYS THANK YOU

**A special thank you from the  
RICO GROUP**



**to our loyal and  
long-serving employees**

**We know that finding skilled staff who will remain loyal to the company in the long term cannot be taken for granted nowadays.**

**This makes us even more appreciative of the hardworking employees who ensure valuable continuity over many years of service.**

This year, we will again be celebrating some special work anniversaries, as some colleagues complete their 20th or 25th year with the company. Such long service does not just speak for the dedication of the employees themselves, but also for the excellent working environment at the RICO GROUP companies. We always strive to be a good employer and pride ourselves on our working conditions, team spirit, dependability, culture of respect, and the training and development opportunities we offer.

**We are delighted to announce the following anniversaries**

**Thank you for 25 years of loyal service:** Othmar Wurm, Deputy Head of Mold Production, RICO Elastomere Projecting

**And thank you for 20 years of loyal service:**

#### **RICO Elastomere Projecting**

Rainer Wiesbauer, Goods Receipt/Dispatch, Mold Production;

Markus Stoiber: Application Engineering;

Martin Spitzer: Application Engineering;

Martin Schwarzelmüller: Deputy Head of Design and Development

#### **SIMTEC Silicone Parts**

Christian Rösslhumer: VP of Technology

Christian Wimmer: VP of Production



From left to right: Martin Schwarzelmüller, Martin Spitzer, Othmar Wurm, Markus Stoiber and Rainer Wiesbauer

**We're sure there will be – or perhaps have already been – plenty of opportunities to celebrate these anniversaries by raising a glass of something special. So here's to you all! Stay just the way you are and, most importantly, stay fit and healthy, and continue to be a role model for our younger staff! And here's to a successful future together!**

#### **40 years at SILCOPLAST – thank you Ursula Städler!**

SILCOPLAST marked a very special occasion at the end of last year: the well-earned retirement of Ursula Städler, a valued employee who had devoted 40 years to the company. "We wish Ursula all the best for the future and would like to say a very big thank you for her outstanding loyalty to the company and the huge contribution she has made over all these years," said SILCOPLAST's Managing Director, Philipp Gaus.



Markus Reuteler, Ursula Städler and Philipp Gaus



Rüdiger Sponner and Gerald Holzner have been members of the HTR team for over 20 years



# RICO GROUP OUR FAIRS AND CONFERENCES

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The RICO GROUP is looking forward to meeting customers, partners and members of the public at the following trade fairs and events in 2022.

We look forward to seeing you there!

We can't wait to meet people in person at events again this year. Opportunities to talk face-to-face are always a pleasure for us – whether it's with long-term partners or prospective new customers. Visit us at one of the following events or contact us directly to arrange an appointment at one of our sites.

**12-14 April 2022**

**MD&M West, Anaheim/USA**

**10-11 May 2022**

**International Silicone Conference, Akron/USA**

**13-15 September 2022**

**LSR Conference, Irvine/USA**

**19-26 October 2022**

**K 2022, Düsseldorf/DE**

**14-17 November 2022**

**Compamed, Düsseldorf/DE**

## News from the RICO GROUP

# FLASHLIGHTS

There is always so much going on at the RICO GROUP outside our day-to-day operations. A selection of some of these exciting stories.



01

**HTR Rosenblattl tests exoskeleton aimed at improving workplace ergonomics**

Workplace health and safety is hugely important to us. Some HTR staff carry out lots of manual lifting, so the company has been testing out a back-support exoskeleton. The equipment provides support when lifting heavy items by reducing compression force in the lower back. The model shown in the picture (see left) can reduce this force by up to 25kg. A huge help at work and an vital health and safety measure.



02

**HTR Rosenblattl launches new apprenticeship program**

Jakob Stiglmayr is HTR's first operations and logistics apprentice. He is following a new apprenticeship program that offers a mix of manual and logistic duties that are ideally suited to work at HTR, combined with administrative tasks. This ensures plenty of variety and the new program has been very well received. And we see a lot of potential for expanding the program, too.



03

**JULIUS Award for RICO Elastomere Projecting**

RICO Elastomere Projecting was honored to receive a JULIUS Award from the Economic Association of Upper Austria (Wirtschaftsbund Oberösterreich) in March 2022. The award came in recognition of our commitment to promoting growth, employment and prosperity in Austria, and Upper Austria in particular, as well as our investments in the future. In other words, it recognizes our importance for job creation, training and strengthening Upper Austria's status as a business location thanks to the company's tax revenue contribution. We were delighted with the award, which will spurs us on to continue giving our all in future.



04

**Facilities, staff and revenues – RICO keeps growing**

RICO continues to invest in its Thalheim site, and is building an extensive new facility next to its headquarters at the Thalbach industrial park. Construction work for the new 11.000m<sup>2</sup> production facility on the 2.5-hectare plot began in the middle of June 2022. The investment will create at least 100 new jobs. RICO is also continuously making strides in terms of its financial performance. In 2021, the company posted a double-digit year-on-year increase in revenue, to EUR 50m.





05

**Fun for the kids –  
the RICO summer childcare**

Just as last year, RICO ran a 3-week childcare program for employees' children during the 2022 summer holidays. It's a service that is close to the management's heart. Open from 7am-5.45pm, employees could pop in to see their kids at any time, and pick them up whenever they wanted. The children had their meals in the staff canteen and they were also treated to a special tour of the company. The organization OÖ Familienbund provided the fully trained staff for the program. Once again, the program was extremely well received, and we all enjoyed seeing the kids' smiling faces at RICO once more.



05

**A slightly unusual Christmas party  
at SILCOPLAST**

In 2021, the coronavirus pandemic again caused the cancellation of SILCOPLAST's official Christmas dinner. But management didn't let this stop them from giving their valued employees a little treat on the last working day of the year, so they arranged for a food truck to visit the plant. The event went down very well and there were calls for a repeat visit – and maybe not just at Christmas.



07

**SIMTEC and RICO:  
All in the Family**

Knowledge-sharing and collaboration are the foundation of SIMTEC and the RICO Group's success! RICO continues to provide valuable training and support. The latest example, and for an extended period, RICO team members, Hong Ngo, Process Engineer and Alex Woerister, Tooling Maintenance Specialist have joined the SIMTEC Team sharing their knowledge and support.



08

**New Faces at SIMTEC**

To support and foster continued growth, SIMTEC has welcomed the following managers to the SIMTEC Team:

In July 2021 SIMTEC welcomed Ana Casanova, Supply Chain Manager and Andrew Vasconcellos, Controller, each with over 20 years of experience in their fields. In August 2021, Camilo Gomez joined SIMTEC as Human Resources Manager bringing many years of international experience. In March 2022, Umberto Carchia was added as Sales Manager, providing years of experience in LSRs, including LSR materials, molding machines, and molding. April 2022: Lifang Fu (Senior Buyer); she also has more than 15 years of experience in all purchasing matters - and very international through her employments in many different American and also Asian companies.



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Certifications: ISO 9001; ISO 14001

2022 edition

# INSIGHTS

THE RICO GROUP MAGAZINE

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Bundled silicone excellence inside