

THERMAL SYSTEMS

review

Customer magazine, 1st issue, 2024

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for the highest demands in
medical technology

10 **Reduction of nitrogen consumption**
The patented mechatronic curtain for
convection soldering systems

12 **Technology Days at Rehm**
on 11 and 12 September 2024
#opentochange



#opentochange



#opentochange



Dear readers,

After supply chain bottlenecks and material shortages have dominated everyday life in electronics manufacturing over the past two years, other topics that have been driving the industry for several years are now coming to the fore again: transformation, digitalization, AI and change management are the big buzzwords, which conceal a wide range of tasks and challenges that will keep us increasingly busy in the future.

That's why this year's Technology Days on 11 and 12 September will be held under the motto "#opentochange". We invite you to discuss current topics in the industry with us and expand your

knowledge: what does the future of electronics manufacturing look like? How can you optimally integrate the ubiquitous AI tools into your production and how can we as a system manufacturer best accompany and support you in your transformation? Our high-calibre presentations and practical workshops will provide answers to these questions.

Let's explore new horizons and drive innovations – welcome to our Technology Days!

#opentochange – TOGETHER TOWARDS TOMORROW

A handwritten signature in blue ink that reads "Johannes Rehm". The signature is fluid and cursive, with a large initial 'J'.

Johannes Rehm
Managing Director

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Technology Days at Rehm – on 11 and 12 September 2024

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For better readability, the masculine form is used when referring to persons.

However, in the interest of equal treatment, these terms expressly apply to all genders.

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EXCELLENCE FOR LIFE WITH REHM PROTECTO

Precise dispensing for the highest medical technology requirements





The history of BIOTRONIK in Berlin is marked by significant milestones, including the development of the first German pacemaker in 1963. Today, the company is active in various areas of medical technology.

Looking to the future, BIOTRONIK attaches great importance to more automation, traceability and standardization in production and development. This is where Rehm Thermal Systems from Blaubeuren comes into play.

BIOTRONIK is a leading global medical technology company with a clear focus on patient well-being. For more than 60 years, BIOTRONIK has been developing innovative products and services that improve and save the lives of people with cardiovascular diseases and chronic pain, with the aim of perfectly adapting the technology to individual patient needs.

The product portfolio covers cardiac rhythm therapy, electrophysiology, vascular intervention and neuromodulation.

BIOTRONIK is headquartered in Berlin and has a presence in more than 100 countries. Research, development and production take place exclusively at high-tech sites in Germany, Singapore, Switzerland, and the USA. All critical components are manufactured in our own factories to fulfil the highest quality standards and guarantee absolute reliability and uncompromising safety.

"Excellence for life" – this is the guiding principle of the company, on which the corporate philosophy is based. The company attaches great importance to the highest QUALITY, SAFETY, unique SOLUTIONS and excellent SERVICE. BIOTRONIK's goal is to save LIVES and improve the quality of life of patients.





Insight into the production environment at BIOTRONIK in Berlin

More TRACEABILITY and AUTOMATION with Rehm ProtectoXP

BIOTRONIK products undergo the strictest quality and validation controls and are characterized by maximum safety and reliability. Particularly in view of the Medical Device Regulation (MDR), which applies to distributors of medical devices in the EU, the regulatory requirements for German manufacturers in the industry are high.

Automation, standardization, and traceability play a decisive role in BIOTRONIK's manufacturing processes. These aspects are of great importance for the manufacture of medical products, as they enable a high level of transparency and quality control, which is also viewed very favourably by external authorities. Dr Uwe Lehmann, Head of Process Development, comments: "The automation of our production processes goes hand in hand with the digital integration of these systems. In this way, we ensure a high level of transparency in our production flow to control and optimize our value stream as well as our continuous monitoring of our production processes."

By using systems such as the Rehm ProtectoXP, BIOTRONIK is able to automate the high-precision dosing of viscous materials such as adhesives, potting compounds, or coatings. This aspect is of great importance to BIOTRONIK not only in development but also in series production.

This makes production scalable and allows the company to better respond to increasing volumes and specific customer requirements. Even with large quantities, the high-quality standards for medical products are maintained.



High DOSAGE ACCURACY and SAFETY for demanding medical products

In BIOTRONIK's purchasing decision, the Rehm dispensing system ProtectoXP was particularly convincing due to its high dispensing accuracy. In particular, the sequential application and curing of viscous materials using light or heat sources within one system represents a significant advantage for BIOTRONIK: "The availability of UV and IR sources within the dispensing system eliminates the need for a separate drying oven. This means that our products can be safely processed directly," emphasizes Dr Lehmann.

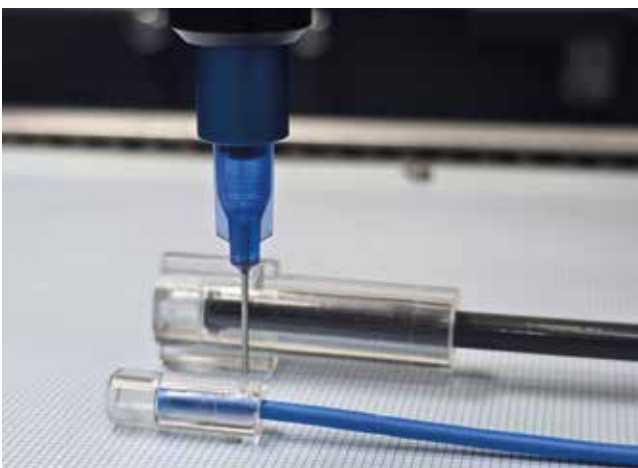
Simple and flexible off-the-shelf application

Diversity in dispensing is a decisive factor for BIOTRONIK. The company wants to keep its machines generic and utilize them for different applications through simple conversions. Uwe Lehmann underlines: "A wide range of applications is particularly important to us, which the ProtectoXP from Rehm offers, thanks to its flexibility." For example, the machine can be used with various applicators and selective application methods "on the fly" without converting. The intuitive operability and programmability of the Rehm dispensing systems are also important for BIOTRONIK. Dr Lehmann cites dispensing paths as an example, which can be easily drawn in using the ViCON software of the Protecto system.

Cooperation between BIOTRONIK and REHM

BIOTRONIK's attention was drawn to Rehm Thermal Systems through its close cooperation with Micro Systems Engineering, Inc. (MSEI), USA, which is already a Rehm customer in the field of medical microelectronics manufacturing. When working with Rehm, BIOTRONIK particularly appreciates the personal contact and adaptability to specific medical technology requirements, which differ from classic PCB production and conformal coating.

Dr Lehmann emphasizes: "The Rehm team was able to think outside the box and worked with us to develop a suitable solution for the special applications. We were able to incorporate our ideas into the system development and worked with Rehm to identify technological enhancements for the dispensing systems." BIOTRONIK uses the highly accurate and volumetric auger filler in combination with the UV/IR pen. A 1.20-meter-long product carrier is used for the special medical products. The longer version of the Protecto system, which can process products up to 1.50 meters in length, is used for this purpose. BIOTRONIK expects reliability, adherence to deadlines, clear statements and a commitment to the products and services offered from a strong partner. Within the partnership, BIOTRONIK also values a high level of technical expertise and an understanding of its specific medical technology requirements. A long-term and committed cooperation with a strong partner is the company's goal. BIOTRONIK plans to use Rehm systems again in the future, as they are interested in long-term solutions and partnerships. This enables an efficient utilization of existing technologies and reduces costs, e.g. in approval processes. Development work at BIOTRONIK is also facilitated by the collaboration with Rehm, particularly due to the flexibility of the ProtectoXP with various applicators.



High-precision application of adhesive to a catheter system using the Rehm ProtectoXP



Micro Systems Engineering, Inc. (MSEI), Lake Oswego, USA

MSEI – leading medical microelectronics

MSEI is a leading company for the development and design, system integration and manufacture of medical microelectronics.



The BIOTRONIK success story

In 1963, physicist Max Schalldach and electrical engineer Otto Franke developed the first German pacemaker at the Technical University of Berlin and founded BIOTRONIK. In doing so, they laid the foundations for a success story that began with products for bradycardia therapy.

In the 1990s, the headquarters for Vascular Intervention (VI) were opened in Switzerland. Products for tachycardia therapy, cardiac resynchronization therapy (CRT) and electrophysiology (EP) were added to the portfolio. From the 2000s onward, further areas were added to the product portfolio, including the world's first MRI-compatible ICD and CRT systems, the world's first drug-eluting hybrid stent Orsiro and the world's first resorbable magnesium scaffold Magmaris. Products for the treatment of chronic pain through neurostimulation are the latest addition to the product portfolio.

IF THE THROUGHPUT HEIGHT FITS, THE NITROGEN CONSUMPTION FITS

Reducing nitrogen consumption in convection soldering with Rehm Thermal System's patented mechatronic curtain

In electronics manufacturing, the variety of component geometries presents a challenge: differences in assembly height require a variable throughput height in convection soldering systems. Current developments indicate a need for larger throughput heights due to the trend towards e-mobility, which in turn increases nitrogen consumption for process inertization. Rehm Thermal Systems responds to this issue with an innovative solution: the mechatronic curtain. This automatically adjusts to the height of the assemblies, reducing energy and nitrogen loss and allowing savings in EcoMode. The effectiveness of this technology is underscored by the significant reduction in nitrogen consumption.

State of the art

Due to the variety of electronic component geometries, the assembly height varies from 5 to 30 mm. These differences lead to the requirement that the throughput height in a convection soldering system be specified at 30 mm upwards and 20 mm downwards. Additionally, due to e-mobility, there is also a need for throughput heights of 50 to 100 mm upwards. This requirement results in an increasing open area at the entrance and exit of the convection soldering system, thereby drastically increasing the consumption of nitrogen necessary for process inertization. This effect is particularly noticeable when soldering assemblies with different heights at the lower and upper limits. The "chicken feed" on the top

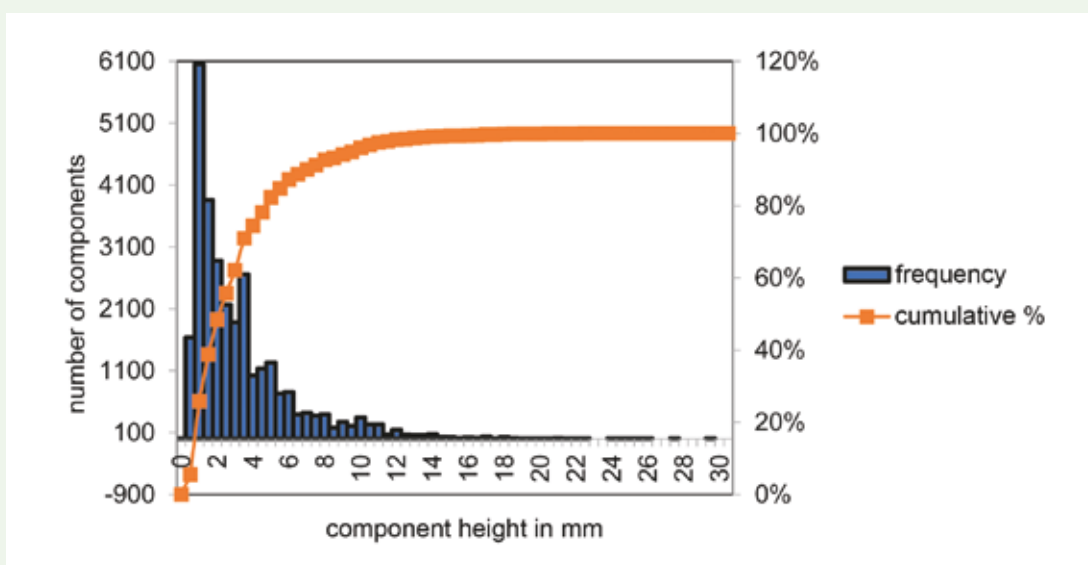


Figure 1: Distribution of component height from a product mix

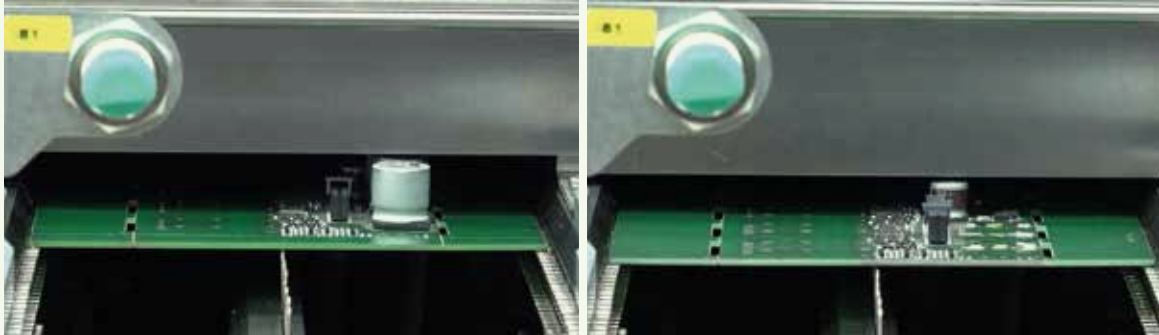


Figure 2: Automatic adjustment of the upper and lower curtain to different assembly heights

side serves as an example. The histogram in Figure 1 exemplarily shows the distribution of component height from a product mix at an SMT line.

The histogram illustrates that there are assemblies with a total height of up to 30 mm and the facility must offer the necessary flexibility, but their quantity is very small. 90% of the components are not higher than 7 mm. Thus, it becomes apparent that for this product group the upper and lower throughput heights are oversized, resulting in more nitrogen escaping from the system than would be the case if the curtains were optimized for this height.

Solution approach

To achieve both the maximum required throughput height and the always optimal nitrogen consumption for lower assemblies, Rehm Thermal Systems has patented, developed and mass-produced the mechatronic curtain. In the process, movable curtains are installed at the inlet and outlet of the oven, which guarantee the optimal distance to the assembly depending on its height.

Another advantage is that when production interruptions occur, the system is switched to EcoMode, in which the curtains completely close the inlet and outlet. As a result, less heat and nitrogen escape from the system, thus enhancing the savings of EcoMode.

Benefit

Figure 3 shows the savings achieved through these measures. It involves an assembly with a width of 244 mm, a length of 305 mm and a height of 7 mm. With this measure, about 27% of nitrogen is saved at 500 ppm residual oxygen and about 20% at 1000 ppm.

These study results show that the mechatronic curtain can meet both the flexibility of the systems and the increasingly stringent requirements for resource efficiency.

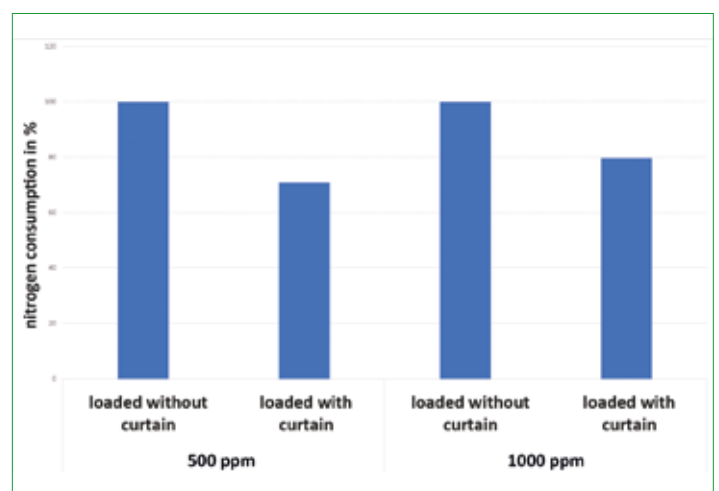


Figure 3: Comparison of N₂ consumption for 500 and 1000 ppm residual oxygen target values



OPEN TO CHANGE SAVE THE DATE

TOGETHER TOWARDS TOMORROW – the future of electronics manufacturing

“The only constant is change” – this is particularly true in electronics manufacturing. In an industry that is constantly evolving and changing, it is crucial to be open to change: we provide information on current topics in modern industry as well as interesting ideas on the path to transformation and would like to invite you today to our Technology Days on 11 and 12 September 2024.

On the first day, the presentations under the motto “#opentochange” will highlight the challenges and opportunities associated with automation, digitalization and the use of AI in production: the focus will be on the conversion of production processes from batch processes to continuous line production and the use of AI-supported systems in imaging processes. The keynote speech by Dr Dennis-Kenji Kipker shows that this is changing the significance of cyber security. On the second day, the presentations will deal with the question of how companies can master the change in the industry.

In her keynote speech, Dr Isabell Welpé will highlight the impact of changes in the manufacturing environment on the work of managers and employees. On both afternoons, four workshops will be offered with the thematic focuses of the presentations: gain an insight into the fuel production line, effective coating and dispensing lines, innovative soldering processes with and without vacuum, sustainable SMD production and Rehm’s portfolio. In the course of the accompanying exhibition, our partner companies will be presenting further innovative products for the electronics industry.

After the programme on the first day of the event, you can round off the evening at the Oldtimerfabrik Classic in Neu-Ulm and take the opportunity to make new contacts, strengthen existing ones or simply relax in an extraordinary atmosphere.

Networked and at risk

Cyber security in production

Professor Dr Dennis-Kenji Kipker

He researches topics at the intersection of law and technology in cybersecurity, data protection and digital resilience in the context of global crises. As a publicist and author, he regularly writes guest articles for various German and international media on the topics of security, digital resilience, geopolitical IT strategy and digital civil rights. He is also active as a moderator and keynote speaker at conferences, meetings and events.



LeAldership: changing leadership, work and collaboration

Professor Dr Isabell Welpke

The holder of the Chair of Strategy and Organization at the TU Munich is an expert on leadership, strategy and organization in the digital age. In her (keynote) speeches, she provides comprehensive insights into the latest trends and developments in the field of digital technologies and demonstrates how these will change the economy and society and what opportunities they offer for companies.



#opentochange

TECHNOLOGY DAYS
11 – 12 September

“AROUND THE GLOBE” REVIEW 2024

Networking opportunities and regular exchange of information, knowledge and experience with specialist colleagues: Rehm was present



Berlin Technology Forum

14th Berlin Technology Forum

On 24 February 2024, the 14th Berlin Technology Forum took place at the Conference Center Berlin of Siemens AG. This year’s programme included eight interesting presentations on the topics of sustainability and automation & digitalization in electronics production. In the area of sustainability, the question of whether circular value creation will be the new normal was explored. And it was discussed how the intelligent use of digitalization, new technologies and green electronics can lead to an efficient sustainability transformation. The thematic block digitalization & automation covered topics such as funding opportunities for innovative projects in business and science, the impact of AI on industry, society and our everyday lives as well as AI application scenarios in the operational environment of assembly production. The future of intelligent production was also discussed.



24. EE-Kolleg (European Electronics Technology College)

Positive feedback at the 24. EE-Kolleg

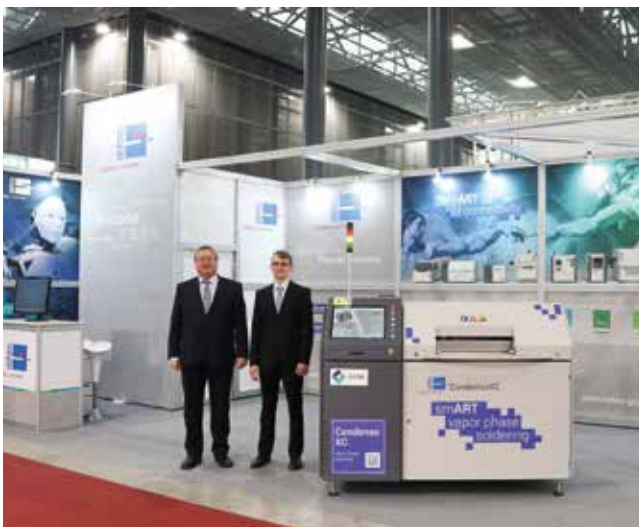
Experts and colleagues met for the 24th time in March in Colonia de Sant Jordi (Mallorca) for our event, which this year was entitled “How do pain points become game points? Solutions for the production of electronics”. In addition to discussion rounds and networking events, eleven high-calibre specialist presentations awaited them, which addressed current topics and forward-looking approaches in electronics production and dealt with the issues of the future: e.g. intelligent devices for error prevention, mechanical loads caused by heavy components on and in printed circuit boards, digital twin technologies in production and the challenges and opportunities of New Work in the electronics industry. Many participants, some of whom were attending for the first time, emphasized, that the uniqueness of this event lies in the valuable and enriching exchange with colleagues in a very special atmosphere.

Rehm at AMPER in Brno, Czech Republic

The AMPER trade fair is one of the leading European trade events in the field of electrical engineering and electronics – a must-attend event for Rehm Thermal Systems. This year, the focus was on the advantages of condensation soldering – also under vacuum – with the Condenso series: process stability, a more precise and varied reflow profiling thanks to the injection principle and the control of temperature and pressure as well as sustainability thanks to the closed-loop system and active Galden® filtering. AMPER also offered another valuable opportunity to exchange ideas with experts and colleagues from the electronics manufacturing industry.

Inhouse seminar temperature profiling

On 10 April 2024, interested process and line managers visited our headquarters in Blaubeuren to learn about further measurement methods and ways to achieve the optimum reflow soldering profile: building on the basics of reflow profiling, standards, measuring boards and thermocouples, the participants experienced the creation of a reflow envelope, the measuring board preparation, profiling on the VisionXP+ and the use of a thermal imaging camera at the Technology Centre, our high-tech application and demo centre. Our experts were happy to provide advice on solutions for their individual production environment. We are already looking forward to your next visit!



Amper



Apex

Lively interest at the IPC APEX EXPO in Anaheim, USA

At the IPC APEX EXPO in Anaheim, USA, Rehm Thermal Systems was on site with the ProtectoXP and the CondensoXC and was able to present a wide range of possibilities in the areas of reflow soldering, conformal coating and dispensing to a broad specialist audience: the ProtectoX series with line solutions and the new integrated 3D height sensor as well as sustainable condensation soldering (Condenso series) with the integrated closed-loop system for the injected Galden® medium. The trade visitors also gained an in-depth insight into the innovative machine-to-machine communication (M2M) for board flow management in SMT lines ("The Hermes Standard") and enjoyed exchanging ideas with the experts from Rehm Thermal Systems. "The US electronics market is characterized by a high level of innovation and a broad product range. Important trends are digitalization, the integration of AI, the expansion of the 5G infrastructure and the focus on sustainability. Electromobility and smart home applications are also becoming increasingly important. We are proud to be able to supply the corresponding equipment and expertise for our customers and interested parties", said Michael Hanke, General Sales Manager at Rehm Thermal Systems.

GALDEN® CARRYOVER IN THE VAPOR PHASE SOLDERING PROCESS

Galden® carryover in the vapor phase soldering process for plug connectors

part 2

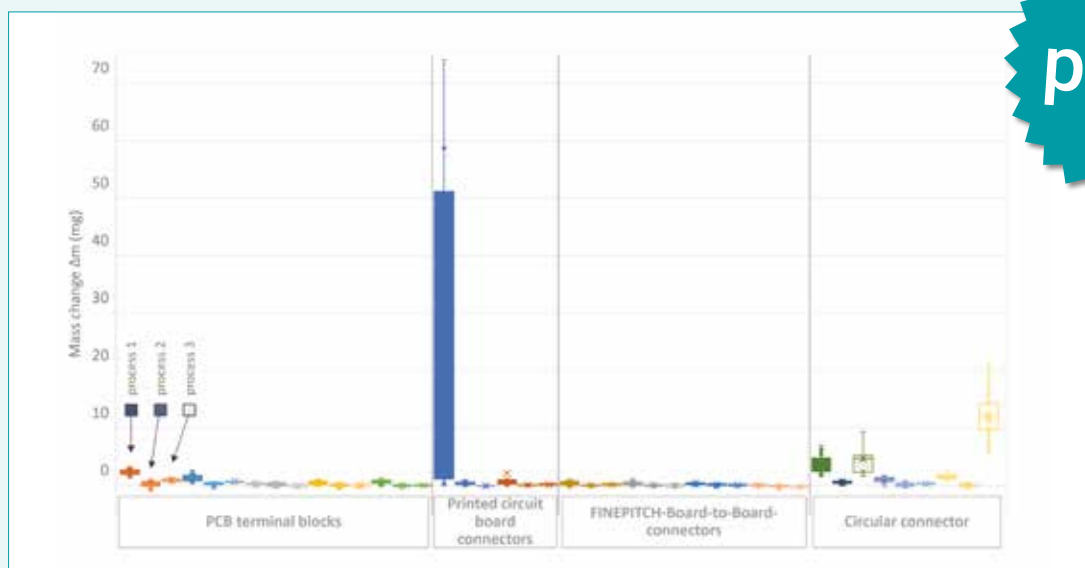


Figure 9: Summary of changes in mass for all items in processes 1, 2 and 3

3 Investigation results

3.1 Changes in mass during the three soldering processes

Figure 9 shows the changes in mass for all items in the three investigated vapor phase soldering processes, as defined in the previous section. The graph clearly shows that significant changes in mass were measured for items 6, 10 and 12 in at least one of the utilized processes. Figure 10 provides a more detailed view of the changes in mass which occurred for these items in each process. Whereas a significant change in mass occurs for item 6 in process 1 only, a significant increase in mass is observed for item 12 in process 3. No significant changes in mass are observed for any of the items in process 2.

3.2 Spring opener function test

Due to the fact that components are included inside the items which move during the coupling and decoupling processes, these moving components were tested for correct functionality after the various soldering processes.

Description of the test using item 1 as an example

First of all, the item is connected to the largest approved conductor. The spring opener is then pressed down with the tension-compression testing machine until the conductor can be removed. The resultant dimension corresponds to maximum deflection. The spring opener is then actuated ten times in succession.

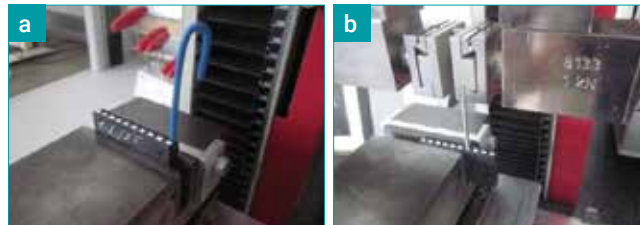


Figure 11a: Test setup with connected conductor

Figure 11b: Actuation of the spring opener

For all three soldering processes, no differences were detected with regard to actuation force between the soldered components and off-the-shelf products. This means that the vapor phase soldering processes executed using the various systems with and without vacuum have no effect on the actuating forces of the spring openers for the Phoenix Contact items under consideration.

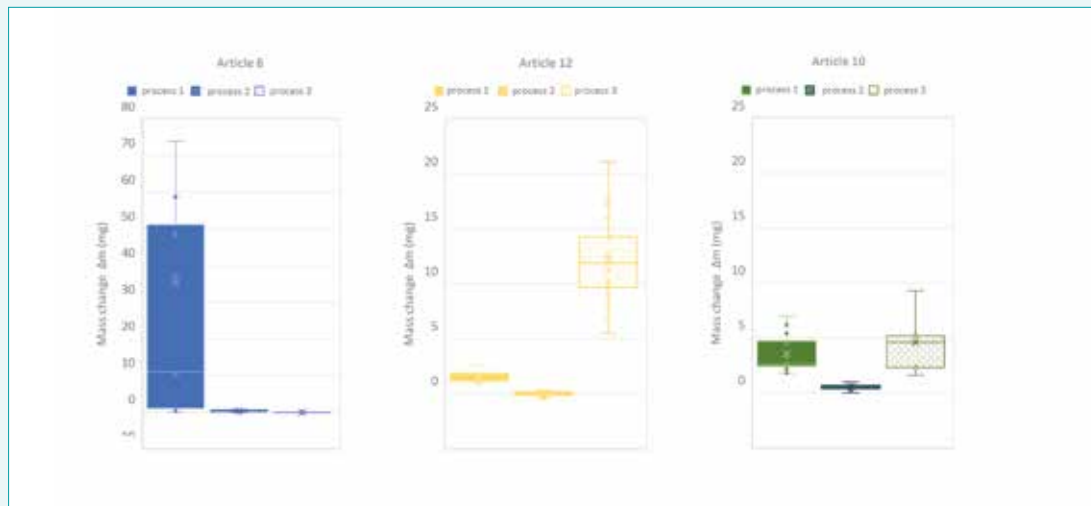


Figure 10: Detailed illustration of changes in mass for items 6, 12 and 10 in the respective processes

4 Discussion of the results

4.1 Galden® carryover with the lift-dip method

Galden® carryover was observed primarily for item 6 with the lift-dip method. No significant Galden® carryover was observed for the processes using injection methods in this case. The average amount of Galden® carried over in the lift-dip process is 35 mg or approximately 19 cubic millimeters per component, but figure 10 shows that the amount of carried-over Galden® demonstrates considerable deviation. In cases of large amounts of Galden®, carryover into the item's cups was also detected during visual inspection after processing. This indicates that the risk of Galden® carryover is increased in the case of cup-like components in the lift-dip process.

Item 6 is a PCB base strip which is closed off in the downward direction towards the PCB. The Galden® accumulates in the cup during the lift-dip process. The volume of the cup amounts to approximately 800 cubic millimeters. The cup is thus only about 2.5% full on the average.

A smaller but nevertheless significantly measurable carryover averaging 3.6 mg or 2 cubic millimeters of Galden® is observed for item 10. Similar amounts of Galden® carryover were observed for the injection process without a vacuum step. It can thus be logically concluded that a drying or drip-off step without vacuum results in only partial removal of the Galden® from the item's capillaries or cups, since in the case of process 2 (injection process with vacuum step) no Galden® carryover occurs in the component.

Item 10 presents the challenge of a cup-shaped mating area which, on the one hand, is closed off in the direction towards

the PCB, but also creates a cavity due to the optional pick & place pad which covers the plug-in area. Due to the fact that the pick & place pad doesn't form a complete seal, Galden® can fill the area and condense on the inside. Subsequent vaporization is in turn impeded as well due to the lack of sufficiently large openings.

For the components not considered in detail (items 1 through 5, 7 through 9, 8a + 9a, 11), average Galden® carryover in the lift-dip process is 0.9 mg.

Process control provides the option of reducing Galden® carryover by adjusting the soldering profile. In particular, slower cooling or plateauing at intermediate temperatures can help to completely remove the Galden® from the process before the components are discharged. For example in a cooling zone heated by means of infrared at a temperature of 100°C, small Galden® residues can evaporate quickly without affecting the quality of the solder joint. For larger quantities in cup-shaped cavities, correspondingly higher temperatures and longer dwell times must be used.

4.2 Galden® carryover in the injection process

In the investigated processes according to the injection method with vacuum, an average Galden® carryover of 0.1 mg was observed in the components which were not considered in detail (items 1 through 5, 7 through 9, 8a + 9a, 11). This can be readily explained by the vacuum step used in the peak zone. In this case, chamber pressure was held at 10 mbar for 10 seconds after the components had already reached a temperature of 240°C. This serves as a very effective drying

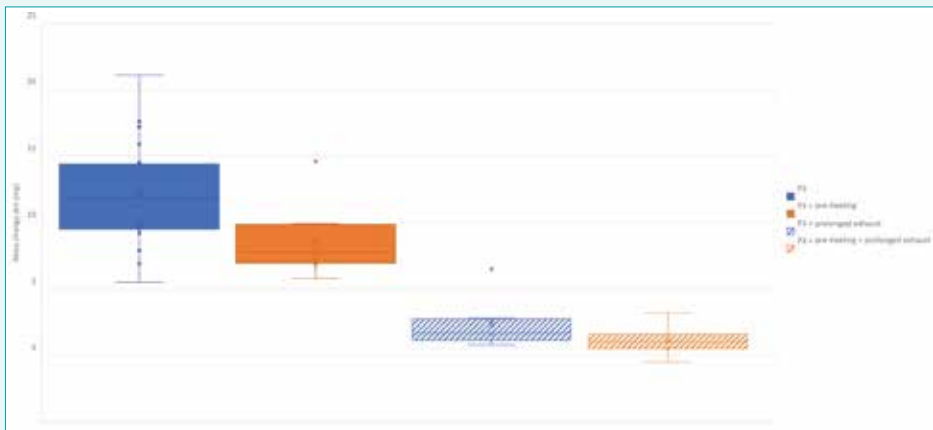


Figure 12: Results of process optimization for the reduction of Galden® carryover for item 12 using the injection process without vacuum

step. All Galden® is thus eliminated from the components and any other moisture which may have previously accumulated is removed as well.

However, if this vacuum step is omitted and replaced by an exhaust step with a slight partial vacuum of approximately 0.6 bar, average Galden® carryover amounting to 0.4 mg is observed for the components not considered in detail (items 1 through 5, 7 through 9, 8a + 9a, 11). Furthermore, significant Galden® carryover is observed for item 12 averaging 12.1 mg or 6.6 cubic millimeters and for item 10 averaging 4.6 mg or 2.5 cubic millimeters. For item 6, on the other hand, which demonstrated increased Galden® carryover in the lift-dip process, no Galden® carryover was observed in the injection process without vacuum. And thus for the different processes without vacuum, Galden® carryover is observed for various components. Accordingly, it stands to reason that the underlying mechanisms for Galden® carryover differ for the two different processes.

Item 12 combines deep cup-shaped plug-in areas with only small gaps between the contacts and the contact carrier, which are in turn closed off in the direction towards the PCB (as shown in figure 4). Circulation in the rear area is restricted in this case by a metal enclosure. However, Galden® accumulates predominantly in the long cup-shaped areas. The metal enclosure itself has enough openings to allow the Galden® to evaporate.

Based on the component geometry of item 12, capillary action in the plug connectors is possible. Especially in this area, Galden® residues were found during visual inspection after dismantling of the plugs. In the case of process 1 using the lift-dip method, no Galden® carryover was observed for this item. However, initial Galden® contact took place here after the component had been preheated by means of IR. The capillary may already have been closed due to preheating

when the Galden® condensed on the component. Preheating would therefore be a possible option for the prevention of Galden® carryover. An extended exhaust step would be a further option for the reduction of Galden® carryover. Both preheating and an extended exhaust step were tested for optimization and the results are presented in figure 12. Preheating the components to 80°C resulted in improvement by reducing the amount of carried-over Galden® from 12.1 to 8.6 mg or from 6.6 to 4.7 cubic millimeters on the average. This establishes an interdependence between the size of the capillary and the amount of carried-over Galden®. However, carryover is reduced to a much greater extent by prolonging the exhaust step. This makes it possible to reduce Galden® carryover to a negligible level. However, it must be noted that an extended exhaust step also entails longer overall processing time and thus reduced throughput. This option must therefore be considered from an economic standpoint on a case-by-case basis.

5 Conclusions

The investigation demonstrates that most of the examined component geometries do not cause significant Galden® carryover in vapor phase soldering processes using the lift-dip process or the injection process. Function tests performed on the components after the vapor phase process also demonstrated their suitability for vapor phase soldering.

Process-specific Galden® carryover mechanisms were observed for two component geometries: significant Galden® carryover is observed for cup-shaped components in the lift-dip process as well as for components with capillaries in the injection process without a vacuum step. For processes based on the injection method with a vacuum step, no significant Galden® carryover was observed for any of the tested component geometries.

THE YEAR 2023 WE LOOK BACK



The 2023 Christmas party got us in the mood for the festive days

In keeping with tradition, Managing Director Johannes Rehm, Head of Human Resources Joachim Erhard and several department heads informed the employees of Rehm Thermal Systems and Rehm BlechTec about the activities and successes of the 2023 financial year and thanked especially some employees for the many years of cooperation. Afterwards, everyone met in the production hall for the traditional Christmas party.

Last year, Rehm Thermal Systems was once again present at well-known international trade fairs and national events with the latest equipment and system technology from the fields of reflow soldering with convection and condensation as

well as drying and coating in electronics production and in dialogue with experts and other electronics manufacturing companies. And there was plenty to celebrate – the 33rd anniversary of Rehm Thermal Systems with the Technology Days and the “Employer of the Future” award in the areas of digitalization, sustainability and innovation as well as the 20th anniversary of Rehm BlechTec.

The official information event was followed by the annual Christmas party in the decorated production hall with a communal meal, which put the employees in the perfect mood for the festive season.



In December, the employees of Rehm Thermal Systems and Rehm BlechTec came together for the traditional Christmas party – Merry Christmas

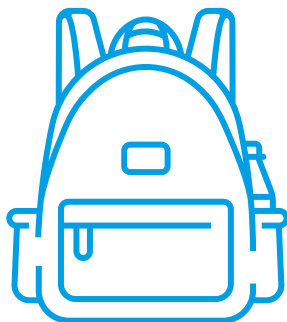


INTERVIEW

In conversation with Viktoria Neményi

**“Be the change you wish to see in the world.”
(Mahatma Gandhi)**

The world is colourful and so are we!
A wide variety of characters work at Rehm Thermal System’s locations around the world: Viktoria Neményi has been part of our team since November 2020. She started out in Dongguan, China, as an assistant to Ralf Wagenfuehr (Director of Operations). Today she works in project management and is responsible for the introduction of new software for our branches in Asia. From time to time, she talks about J.P. and Fedrise, her “kids” in Uganda. This made us curious, and we asked her about it:



Viktoria Neményi: After my studies and with a steady income, I wanted to support a child financially with his education. I chose the “Rockies Organization” and decided to support J.P. Before he was taken in by the organization, he was an orphan and lived for a long time with relatives in the village who didn’t look after him properly. As there wasn’t enough money for school, he spent all day looking after the animals. I still remember the first video calls with him: he was very shy and didn’t speak a word of English. In 2022, I also started supporting Fedrise: at 10 years old, she is the youngest, very bright, ambitious and has very good grades.

What challenges did you face at the beginning of your search for an organization to support a child financially?

V.N.: In the beginning, I researched the websites of the big organizations. Always, I was asked to choose a child. But which one, from which country, what age and gender? There were still so many options! Over time, this search took such a toll on me that I had to stop and take a different path. Therefore, I wrote to a university friend from Uganda and asked him if he knew of an organization that was committed to providing children with an education and medical care. He then referred me to Brian Ssozi’s “Rockies Organization”, which had taken in a distant cousin, J.P.



Can you tell us more about the “Rockies Organization” and its founder Brian Ssozi?

V.N.: Brian also comes from a modest background: growing up as the youngest of 18 children, his parents were unable to pay his school fees by the fourth year of primary school. However, his talent for music, dance and drama got him through to university through scholarships. Afterwards, he wanted to give something back to the community that supported him and taught him to appreciate talent and culture, so he decided to set up the “Rockies Organization”. They provide sponsorships to talented students from all regions of Uganda to fund their education and pay for the accommodation in boarding schools and their own facilities so that they can attend a day school in Kampala. In addition to their formal education, they learn dance, instrumental and vocal performances. They demonstrate their skills for a fee as the “Bantu Cultural Troupe” and can thus help to finance their education and earn some pocket money.

Have you had the opportunity to attend a performance by the “Bantu Cultural Troupe”?

V.N.: I started supporting J.P. at the height of the Covid-19 pandemic. So, I wasn’t able to visit him in the first few years. But last year it was finally possible to fly to Uganda for ten

days over Christmas: the first time in Africa, the first time meeting the “kids”. That was a unique experience! And this hospitality ... smiles ... J.P. and Fedrise picked me up at the airport – with flowers – and then we drove back to the “Rockies Organization” site by car. The others were already waiting for me in their traditional costumes and sang and danced for me. And they are really good! Brian has really put together a great project. I can understand why they have so many performances, including international ones.

Can you tell us more about the everyday life of the “kids” who live on the land of the “Rockies Organization”?

V.N.: During the week, they attend an all-day school in Kampala. After school and at weekends, they train for their performances. In the dormitory, the boys and girls sleep separately. They share a room in groups of three or four. And despite all their efforts, there is still a lot missing! Now, for example, there are still no wardrobes, curtains or lights in the bathrooms.

I brought backpacks for the “kids” when I visited last year. But I came up with this idea by chance. I would never have thought in my life that the “kids” would be so happy about it – some of them didn’t take their backpacks off for ten days. It is incredibly difficult from our point of view to assess what the “kids” might need.



And how did you come up with the idea of backpacks?

V.N.: I organized backpacks for sales and service. As a result, I regularly followed our supplier's adverts. At some point I saw a nice model for a very good price and decided to buy these backpacks as a gift for the "kids" in Uganda. The supplier of our machine logos made me "Bantu Cultural Troupe" stick-on logos, also for a very good price, which I then stuck onto the backpacks at home with a hairdryer.

You initially advanced the purchase price for the backpacks. But how did you at Rehm Thermal Systems in Dongguan, China, turn it into a joint campaign?

V.N.: At the beginning, I didn't even think about having the backpacks financed by third parties. But when I was back in China, the idea came to me. So, I asked in a post who would be interested in supporting a child with a backpack for €12.

And I was really happy and touched that so many people got in touch. Once again, a big thank you to my colleagues Joey Shi (Assistant to Director of Operations), Alan Xu (IT Supervisor), Wesley Xiao (Testing Engineer), Liu En (Production Manager), Ralf Wagenfuehr (Director of Operations), Frank Liu (Application Engineer), Jenny Li (Safety Engineer), Sophia Zhong (Cost Controlling), Linda Chen (Finance Manager), Monica Shi (Academy Leader), Ryan Wang (IT Engineer) and especially to our supplier Larry Gao who supported us with a total of ten backpacks. And a very warm thank you to Ernst Lamparter who also enthusiastically sponsored a backpack.

If you are interested or have any further questions, please visit the official website of the "Rockies Organization" at <https://rockiesug.org>. Or write Viktoria directly!

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SAVE THE DATE

SHOWS & EVENTS 2024

Rehm is present at the most important venues in the electronics industry with interesting trade shows and events

Whether it's a trade fair, technology event, seminar, training or workshop – take advantage of the opportunity to get to know our system technology and receive advice from Rehm experts. If you are interested, you can find more information about the events at www.rehm-group.com.

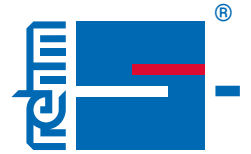
DATE	EVENT
04. – 06.09.2024	SEMICON Taiwan , Taipei, Taiwan
11. – 12.09.2024	Rehm Technology Days , Blaubeuren, Germany
17.09.2024	Conformal Coating Day Hilpert , Baden-Dättwil, Swiss
08. – 11.10.2024	Bondexpo , Stuttgart, Germany
08. – 09.10.2024	hy-fcell , Stuttgart, Germany
06. – 08.11.2024	NEPCON ASIA , Shenzhen, China



Dates

Here you will find the current dates for trade fairs and events.

We look forward to welcoming you at one of our next events!

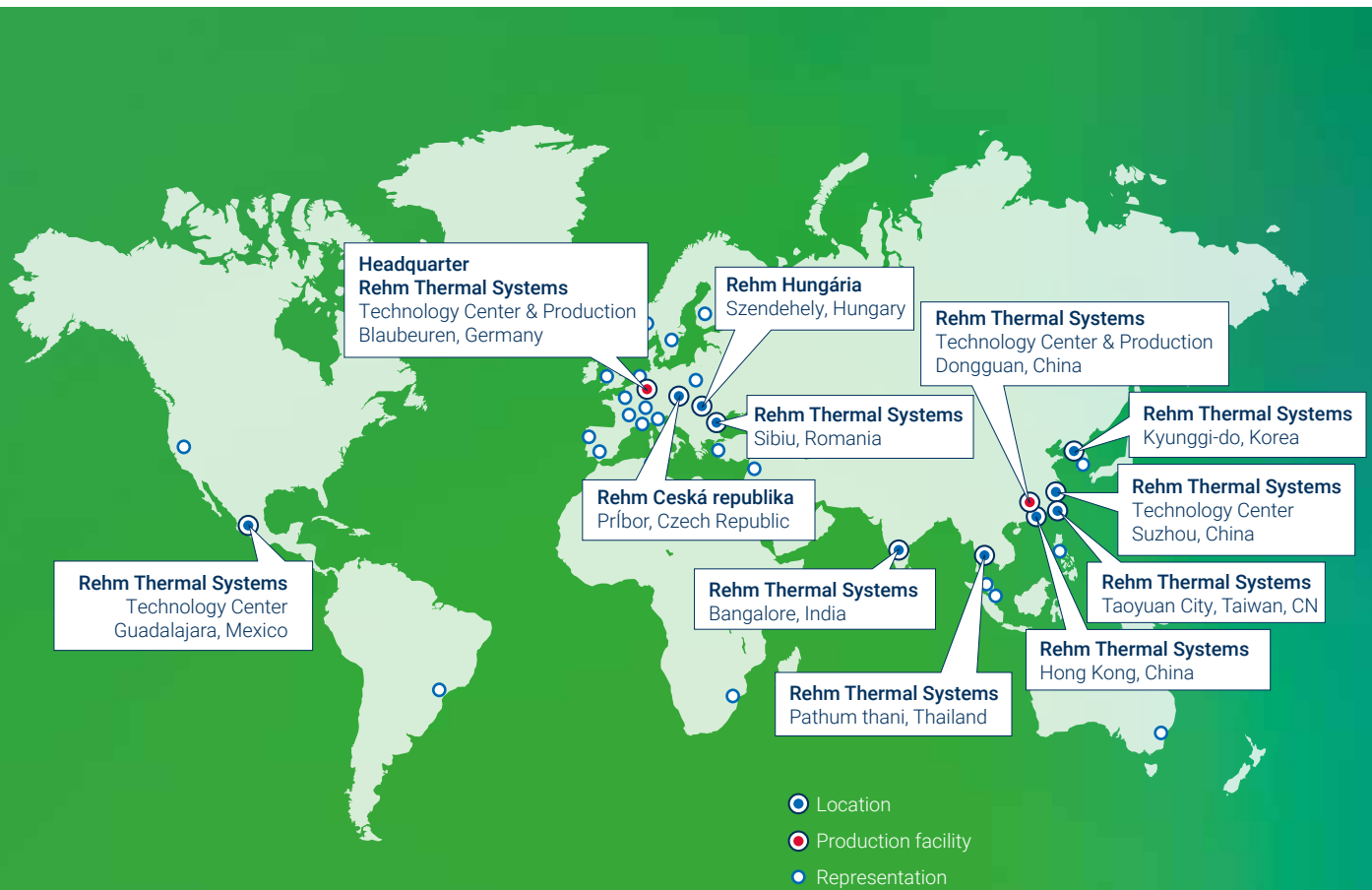


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