

EDITORIAL

Dear readers, dear customers and employees,

Let's look ahead!

For more than two years now the Corona pandemic has been demanding a great deal from all of us – and it seems as if the pandemic is not over yet.

As if that alone were not enough, we now have to deal with a war on our continent. Up to now we cannot foresee the full consequences of this war in the Ukraine combined with the sanctions for business and also for private lives. However, the effects have already been increasingly noticeable for all of us for weeks in the form of delivery bottlenecks, price increases for material etc.

All the more reason for us to look ahead together with you. We are focusing more on our core competencies and, of course, particularly on you, our customers. At the centre of our attention is our aim to be able to give you individual advice that is orientated on your requirements. Interesting topics such as funding opportunities for new installations, energy-saving technology, optimization of material handling etc., we would like to present to you in more detail.

As already mentioned in previous issues, we are consistently taking the step towards automation. Here, among other things our blast robot ReCo-Blaster® and the automated blast machines are important components. Apart from that, both in blasting as well as in paint spraying projects of our customers, we also integrate standard robots and cooperate with efficient partners.

Moreover, we have modernized and systematically expanded our after-sales service. A new software on tablets for our service technicians helps us to digitalize the processes and make the service jobs at your sites even more efficient. Please also refer to us if we can support you in converting your systems from heating with natural gas to an alternative heating material.

Best regards

Chr. Gaidies *M. Bahlinghorst*
Christian Gaidies Michael Bahlinghorst

F. Gaidies
Fritz Gaidies

Certified quality management for our business processes



Michael Bahlinghorst (Technical Director), Holger Winkler (QM) and Christian Gaidies (Commercial Director) and the whole staff are very happy about the certification.

It is our philosophy to ensure a secure future for the company and therefore also for our employees. We want to achieve this by sustainable management and appropriate growth.

One important part of our corporate philosophy is our **quality policy**. Our commitment to quality is based on know-how, experience and expertise and manifests itself in the quality of all processes, our

installations and in our service. We maintain our lead and our future through innovative and first-class products and services.

To ensure quality at all times, we set up a binding quality management system in the company and also prove our standard to our customers through our **certification according to DIN EN ISO 9001:2015**, issued in June 2022 by TÜV Rheinland (German Association for Technical Inspections).

Starting from system development, procurement and sales procedures to acceptance of the completed installations at the customer and the following after-sales service all process steps in our company are continuously analysed, checked, evaluated and improved. The **efficiency of our processes and procedures** ensures the consistently high quality of our systems and service.

We provide you with a copy of our certificate if required. Feel free to contact us if you are interested in additional information about our quality management.

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Investments in Emsdetten and Mühlau

At the beginning of 2022, we started building a **new storage building** at our headquarters in Emsdetten. The new building was completed in September and now enables us to optimize our warehousing on a spacious area of 1,260 m².

Until they are assembled at the customer's site, all system components are now temporarily stored in separate places according to order. Therefore, we are optimally prepared for a further increase in in-

coming orders and the processing of more extensive orders in the future.

The new hall, having the same building style and look, adjoins with 36 metres over the entire width of 35 metres to the previous hall area and thus optimally complements the existing architecture. We also continue to benefit from short distances in production and storage.

Moreover, we have taken a further step towards sustainability and have invested in a **photovoltaic system** at both compa-

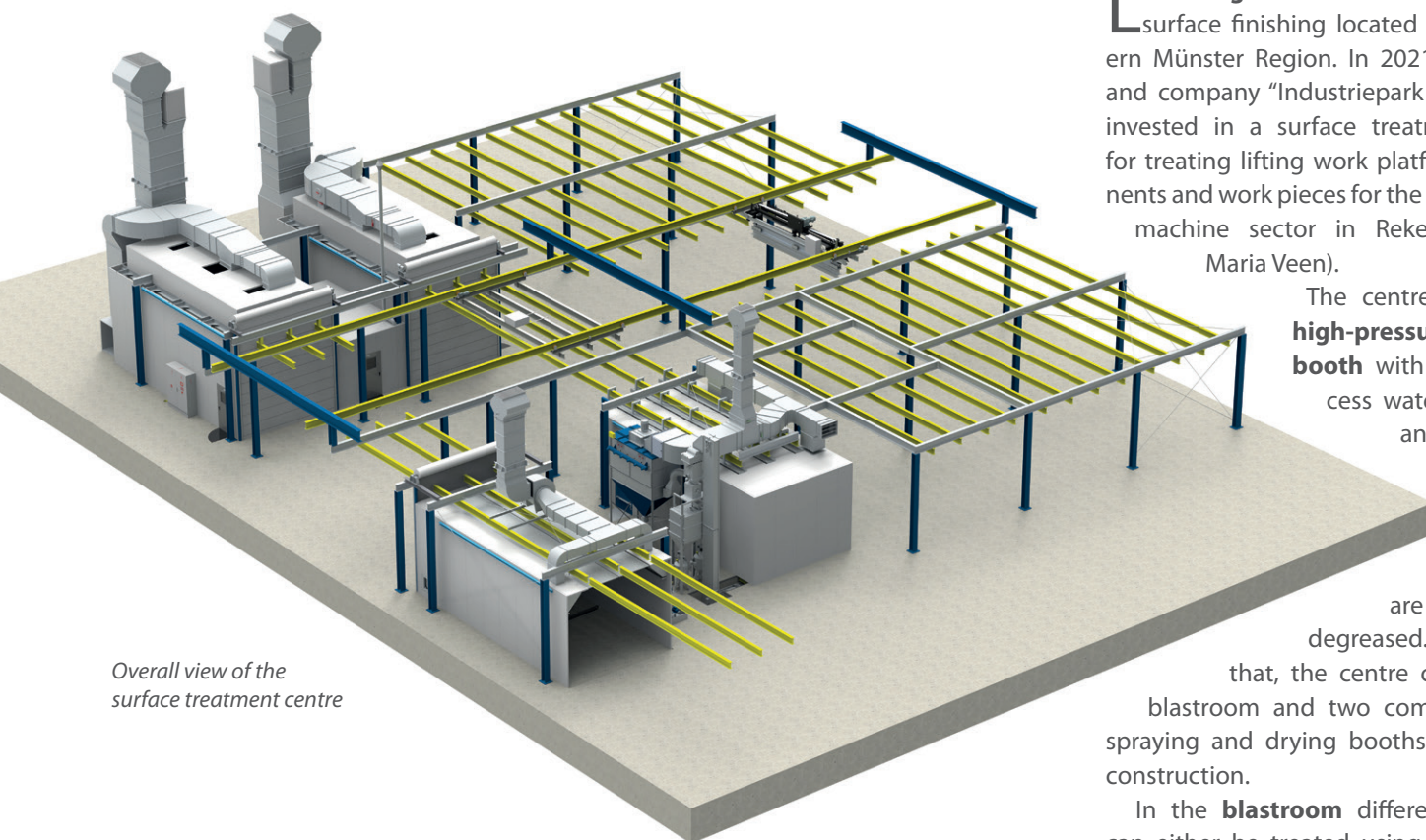
ny locations. The systems were installed on the roof of the company buildings and with their capacity of 100 kW in Emsdetten and 200 kW in Mühlau we will now be able to cover our power requirements at both locations with our own solar power.

In addition, we have erected **charging stations for electric vehicles** at both company locations, which are also supplied with the self-produced solar power. In Mühlau we will have two and in Emsdetten even four charging stations at our disposal.



The company building in Emsdetten with the expanded by 1,260 m² hall and new photovoltaic system.

Surface treatment centre for components of work platforms



Overall view of the surface treatment centre

LM Design is a service provider for surface finishing located in the Western Münster Region. In 2021 LM Design and company "Industriepark Maria Veen" invested in a surface treatment centre for treating lifting work platform components and work pieces for the construction machine sector in Reken (borough Maria Veen).

The centre includes a **high-pressure cleaning booth** with closed process water treatment and circulatory system, in which the components are first of all degreased. Apart from that, the centre consists of a blastroom and two combined paint spraying and drying booths of identical construction.

In the **blastroom** different materials can either be treated using a steel or a corundum blast medium. Between the

paint spraying and drying booths there is a spacious paint supply room. Both booths are equipped with a sectional ventilation system, which allows for energy-efficient operation due to automatic switch-off of the ventilation system in booth areas which are currently not used.

The working areas are connected by a well-planned **manual overhead conveying system** with transfer bridge and spacious buffers. This ensures a smooth operating process.

Already during the planning phase of the large system and when applying for public funding for **particularly energy-efficient plants** we could support and advise our customer.

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New surface treatment centre provides for flexible procedures



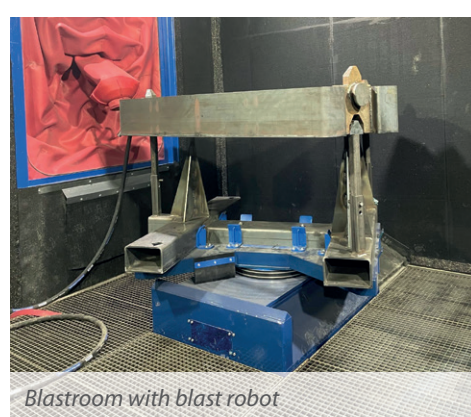
The extremely heavy counterweights before entering the paint spraying system

Mainly for treating counterweights for mobile cranes company **Kremer Stahltechnik GmbH** located in Metelen invested in a surface treatment centre which was completed at the beginning of 2022.

The company is now able to fully automatically blast clean and afterwards manually coat components weighing up to 10 tons. For this purpose, we installed a **blastroom** including a component positioning unit with turning station and a **blast robot**. After preparation painting is performed in several working steps. The **painting system** consist of a masking place, the paint spraying booth for manual application and a dryer with an upstream flash-off zone. A **partly automated conveying system** with skids, longitudinal and cross transport and a turntable ensures the transport between the process steps.

"The interaction of blasting and painting systems is optimally matched so that we can provide our customers with high-quality surfaces at all times", says Marek Tewes, head of production at Kremer.

Above all, the new surface treatment



Blastroom with blast robot

centre is characterized by its flexibility. Kremer is now able to spontaneously switch over to other products and therefore serve different customers at the same time.

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Industry trend towards automation

Michael Bahlinghorst, our Technical Managing Director, is certain: "For the blasting and painting industry **automation** will become an issue of increasing importance in the future. We have been noticing this development more and more among our customers for some years now, for the quality requirements to surface conditions are growing in many industry sectors."

We have already taken a big step towards automated blasting in 2012 when we developed the **8-axes blasting robot ReCo-Blaster®**. In the meantime, this in-house development from **SLF** is used at renowned companies in Germany and abroad.

"The ReCo-Blaster® shows its strength especially in the treatment of **large-scale and recurring components**, for example in the production of towers for wind energy plants. Usually, the ReCo-Blaster® is running continuously in three-shift operation at our customers', delivering consistent and reproducible blasting results and, in addition, works particularly economically," says Arnold Flothmann, Head of Sales Blasting Systems at **SLF**.

Due to the use of a **nozzle up to 28 mm in size**, this automated blasting process is many times faster than manual blasting. All blasting parameters can be monitored and controlled digitally.

Since the beginning of 2022, the first ReCo-Blaster® has also been in use in



The ReCo-Blaster® blasts aluminium railcar bodies at our Spanish customer.

Spain. At our customer, a manufacturer of rail vehicles, aluminium railcar bodies are automatically blasted from the outside and inside. Programming of the robot takes place offline using CAD data or via a hand-held operating panel.

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Sealing of OSB boards in two-minute intervals

When it comes to handling and sawing systems, the wood processing industry has been counting on **Kontra Anlagentechnik GmbH** for more than 30 years now. The Westphalian machinery and plant manufacturer from R  then produces different sawing systems for wooden boards as well as the appropriate stacking and conveying technique.

For the coating of system components manufactured at company Kontra we built an open-space paint spraying system with long-range nozzle technique and integrated saver circuit on an area of 20 x 6 x 9 m for the company's production plant in R  then already in 2015.

Last year, we had the opportunity to integrate a fully-automated **paint spraying booth with painting robot** in a production line at an end customer of Kontra. The production line for manufacturing oriented strand boards (OSB) has been working at the customer in Luxembourg since the beginning of 2022.

Due to their gluing OSB boards are generally water-proof but the cut edges only resist moisture for a short time. For this reason, the boards are stacked on pallets and transported into the SLF painting system where their cut edges are fully-automatically sealed with a protective varnish by the pallet. This prevents moisture from penetrating the boards. Painting is the last process step in manufacturing right before packing and dispatching the oriented strand boards.

The painting robot is installed at the booth's ceiling, fixed to the steel construction. It has **six movement axes**, allowing

for great flexibility and a range of up to three meters. Equipped with **four automatic guns** it seals the OSB panels in a three-shift operation, usually seven days a week, with a cycle time of only two minutes per pallet.

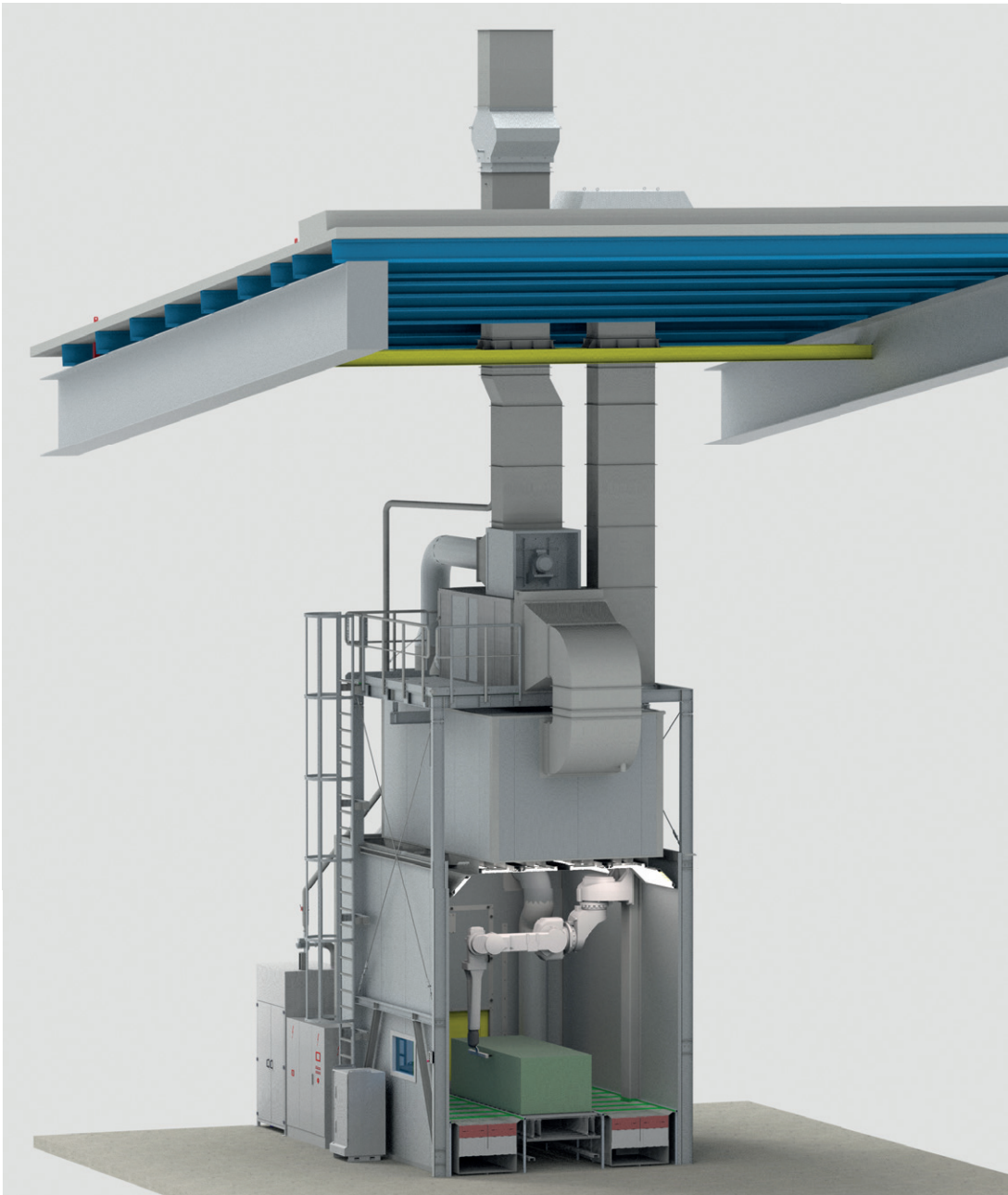
"This process could not be economically designed as a manual painting operation. Apart from that, it would also hardly be possible to find a respective large number of painting operatives on the current labour market", explains Jan den Hartog, Sales engineer for paint spraying systems at SLF. "Moreover, the entire upstream part of the manufacturing line is fully automated using **robot technique**."

Another advantage of the automated painting process is a considerable **reduction of energy costs**. As no worker is in the paint spraying booth, the system can partly be operated with recirculating air so that only a partial flow of fresh air is required, which in turn substantially reduces the heating capacity.

To meet the high requirements for fire protection in a wood processing company, the paint spraying system also runs on an energy-efficient **electric heating register**, instead of the otherwise common natural gas heating.

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Sectional view of the **SLF** paint spraying booth with painting robot

Telescopic dryer offers maximum flexibility

The Austrian family-owned company **Lindner Recyclingtech** located in Spittal an der Drau is one of the world's leading manufacturers of machines and installations for the recycling industry. This year Lindner has relocated its headquarters to a modern newly built factory not far away from the old company location. The new factory also includes a **new coating centre**, where Lindner relied on our process equipment. We could accompany this new building project from the start and thus support our customer in conception, dealing with authorities and construction site supervision.

The result is a coating centre which is optimally designed for the entire working process of Lindner Recyclingtech, beginning with preparation of the work pieces before paint spraying and drying.

First of all, the components are pre-treated in the **high-pressure cleaning booth** with integrated crane slot and process water treatment system.

The core component of the new surface treatment area is the **open-space paint spraying system** with movable telescopic dryer. The open-space paint spraying system consists of three working areas, each measuring 10 x 6 m, and has a sectional ventilation for alternating use. Usually, one of the areas is used for painting, while on

the other areas work pieces are prepared or dried.

The **movable telescopic dryer** allows for this great flexibility and time saving in the working process. The components can be forced dried on one of the three areas with 30,000 m³/h circulating air capacity at up to 60°C as needed. In the telescopic dryer's parking position, a paint storage and supply room with the respective equipment has been built thus optimally using the space.

Telescopic dryers are normally used in combination with open-space paint spraying systems. They can be provided in almost all sizes and with a flexible number of telescopic segments. During paint spraying operation the telescopic dryer can move into a parking position so that the staff is fully flexible in handling the work pieces, as no booth walls limit the freedom of movement. Each telescopic dryer is adapted to the individual requirements of our customers.

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SLF Open-space paint spraying system with movable telescopic dryer.

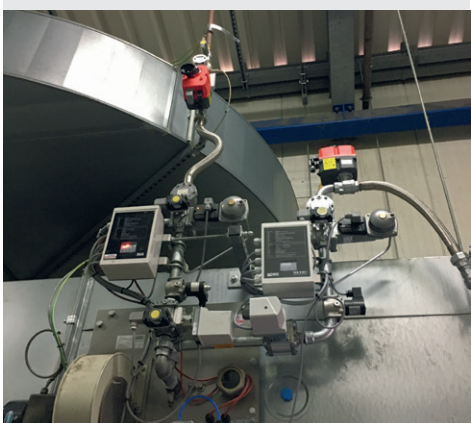


Successful trade show participation

After a long pause due to the pandemic, in 2022 we could at last again present our range of products at trade shows and meet customers, interested persons and business partners face to face among others at the **PaintExpo in Karlsruhe** and at the **WindEnergy in Hamburg**.

For the first time we also took part in the **Career choice fair in Emsdetten** and had the chance to talk to many interested young talents. Visit us and **AGTOS** at our shared booth No. 26-C20 at the **EuroBlech in Hannover from 25th to 28th October 2022!**

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Modification to usage of alternative energy sources

In the current situation, **process reliability** is a pressing issue for paint users in the face of threatening **energy shortages**. More than 90% of paint shops currently use natural gas as an energy source in their installations and ovens (Source: "Besser Lackieren", issue 12/2022). Usually, it is easy to modify the system, for example, from usage of natural gas to **liquid gas**. We would be **pleased to advise you** about your options.

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Our range of products:

- Blasting and pre-treatment systems
- Paint spraying systems
- Conveying technique
- Service and spare parts

For more information please visit our website www.slf.eu.

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Optimising painting processes

At its location in Krefeld **Siemens AG** manufactures the long-distance train ICE for Deutsche Bahn. For surface treatment Siemens uses several blasting and paint spraying installations, in which the railcars and coaches are driven via a rail system to be blast cleaned, masked or coated.

Siemens AG has been a long-standing partner of **SLF Oberflächentechnik**. Already in the year 2000, we designed and installed the first **scissor-type lifting platforms**, from which the railcar bodies are treated, for the Siemens factory in Krefeld. After more than 20 years of daily usage in a multi shift operation, the lifting platforms are now gradually replaced by new platforms with the **latest technology**. Here, Siemens once again relies on our expertise.

As especially the railcars with their shape becoming smaller in the head area are difficult to reach, we developed a special solution in cooperation with our partner. To ensure a comfortable position for the worker during paint spraying, we designed a **cushion support** on the front side of the platform cage, which can be

adjusted to different angles and folded out. In addition, a **platform cage that can be turned by 90°** makes work easier and improves reachability of the railcar bodies. Both solutions contribute to optimising ergonomics and make the work process easier.

Unsere Expertise

As the only company offering complete solutions in the area of blast cleaning and paint spraying technique including in-house designed and manufactured lifting work platforms, we know what is important for the usage of lifting platforms in surface treatment.

Like all **SLF** systems, our lifting platforms are also tailored, developed and built to the individual requirements of each customer.

Even market competitors rely on **SLF** lifting platforms as the optimal solution for their surface treatment installations. We will be happy to advise you!



Sonderlösung: Ausklappbare Auflagevorrichtung

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Complete solution thanks to the latest technique

WICHMANN GmbH is one of the leading manufacturers of cardan shafts, which can be found, for example, in construction machines, in machines in steel or paper factories or in cars.

At the end of 2020 the company relocated its headquarters to the city of Lotte and in the course of the new construction also invested in a **new surface treatment centre** and a separate paint spraying and drying booth. "The new paint spraying system is state of the art in terms of ergonomic design, which leads to optimised procedures in the whole production chain. In addition, with the new system we can quicker and more effective react to our customers' high demands. A substantial reason for the investment however is the reduction of operational costs through the **usage of the latest technical equipment**", explains Kristina Wichmann-Raschdorf, Managing Director at Wichmann. "One important criterion for our decision was that with SLF we had contact persons with whom we could plan and build the plant in a **tight schedule**. We were able to contribute our specifications and rely on SLF's expertise."

The surface treatment centre planned by SLF was completed in 2021. A **power and free conveyor** runs through the cen-

tre, comprising pre-treatment, blow-off station, painting booth, flash-off zone and paint dryer. Thus, the component transportation between the single treatment procedures is almost fully automated. Among others, a special challenge was the space provided. Adapted to this the power and free conveying system offered optimal prerequisites.

In the 3-zones chamber pre-treatment system the cardan shafts are degreased and cleaned while hanging on the transport units. Another task to solve was the following drying process of the components which can only be performed at low temperatures. As an alternative we developed a **blow-off station with oscillating air nozzles** for quick drying at low temperatures.

Among others, a heat recovery system, a saver circuit with automatic reduction of air capacity and usage of waste heat from the own block heating station contribute to a resource saving operation.

After the coating process the conveying system automatically moves the work pieces further through the flash-off zone and finally into the dryer.

This concept, which is perfectly adapted to the customer's needs, is completed



SLF in-house development: Blow-off station for a careful drying process

by a separate **paint spraying and drying booth with extraction wall** for the manual treatment of larger cardan shafts.

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New sales partner in Scandinavia

Since June 2022, we and our sister company **AGTOS** have been cooperating with **Begner Agenturer AB** in Scandinavia. From now on, Scandinavian customers and interested parties have a powerful local contact. Based in Falun, Sweden, Begner represents our product portfolio mainly in **Sweden, Norway and Finland**. In addition to consulting and sales, the team of 20 persons also provides **service** for our system technology.

After we were able to support the Begner team at their stand at a trade fair in Jönköping in May,

AGTOS and we then could welcome Managing Director Patrik Fredriksson with some of his employees from various departments to Emsdetten for **intensive training** in June.

We are looking forward to the cooperation!



Successful training at SLF