SCHNELLECKE

Insights into the Schnellecke Group **2019.2**

TRIP TO ITALY
Visiting Schnellecke in Atessa and Bologna

START IN BREMEN
New site supplies Mercedes

DEDICATION TO E-MOBILITY

How Schnellecke in Glauchau is mastering the changeover

The Baghdad battery is a clay pot found in 1936 during the excavations of a Parthian settlement on the site of the Khujut Rabuah hill near Baghdad. Since it contains a copper cylinder and an iron rod, it is speculated that it could have served as a battery 2000 years ago, when electricity was still unknown according to current knowledge.

Compared to other batteries, lithium-ion batteries have the highest energy density. Almost all batteries used in electric vehicles use cobalt oxide as their cathode material. This type of battery is called a lithium polymer battery. Its cells are hermetically sealed, making it operational from minus 20° to plus 60° Celsius.

Dear Readers,

The start of production of Volkswagen's first high-volume fully electric vehicle, the ID.3, in November 2019 in Zwickau marked the start of a new era. Not only for Volkswagen and for car drivers, but also for logistics partners like Schnellecke. This is why we are particularly proud to have been part of it in Zwickau from the very beginning.

We have invested considerably in this. During the factory conversion at Volkswagen, we further qualified many of our employees through training programs. Thanks to this long-term personnel development, our well-prepared team was ready at the start of production to make our contribution to the success of electro-mobility. Find out more in this issue.

Long-term planning are also the keywords for another project: We have been working in Mexico for the newly opened BMW plant in San Luis Potosí since the summer of 2019. On the occasion of the official opening, Schnellecke started supporting an important local vocational school in order to provide young people in the region with a good vocational education. You can read more about this later in this issue.

The merger of Peugeot/Citroen (PSA) and Fiat Chrysler (FCA) will create the world's fourth-largest automotive group. However, only industry insiders know that both companies have been working together on the production of commercial vehicles for a long time, namely in a joint venture called Sevel. Schnellecke has been working for FCA for a year and supplies the Sevel production line in Atessa, Italy, with parts just in sequence. We will also be reporting on that in this issue, as well as on the Bologna site, where Schnellecke has been handling the entire plant logistics for Lamborghini for many years.

I hope you enjoy reading our magazine.

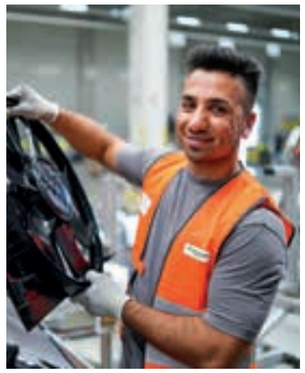
Best regards,

Nikolaus Külps
CEO Schnellecke Group

◀ *COVER STORY: ELECTROMOBILITY*

PAGE 6
COMMITMENT TO E-MOBILITY
How Schnellecke in Glauchau is mastering the changeover

◀ PAGE 12
BELLA ITALIA
Schnellecke works for Lamborghini and Fiat in Italy



◀ PAGE 38
A RADIATOR EVERY MINUTE
Schnellecke in Bremen

◀ PAGE 50
MOTIVATION, ENTHUSIASM AND TEAM SPIRIT
Schnellecke wins logistics contract for first BMW factory in Mexico

◀ PAGE 56
"NO EMPLOYEE ACTUALLY ENJOYS DOING THAT"
A pilot project with a compartment insertion robot is currently underway in Soltau

“WE WORKED TOGETHER ON A FUTURE-ORIENTED SOLUTION”

SCHNELLECKE IS INVOLVED IN THE LAUNCH OF THE ID.3 IN SAXONY – MAJOR CHALLENGES

Managing Director Ralph Hoyer (l.) and Chairwoman of the Works Council Elke Merkel in conversation with employees

It is a grey November morning as we drive onto the premises of Schnellecke Logistics Saxony in Glauchau. On first sight there is nothing to suggest that anything special is happening here – as it did nearby just a few days ago, because the first production version of the new ID.3 electric car rolled off the production line at Volkswagen's Zwickau plant on November 4, 2019. An event that had a major impact on SLS.

In November 2017, VW made the strategic decision to develop the VW plant in Zwickau into a multi-brand site for e-mobility. According to Group Planning, Zwickau is to become the competence center for e-mobility within the Group and the largest and most efficient e-mobility site in the Group's worldwide production network. From 2021, around 330,000 electric vehicles per year are to be produced in Zwickau.

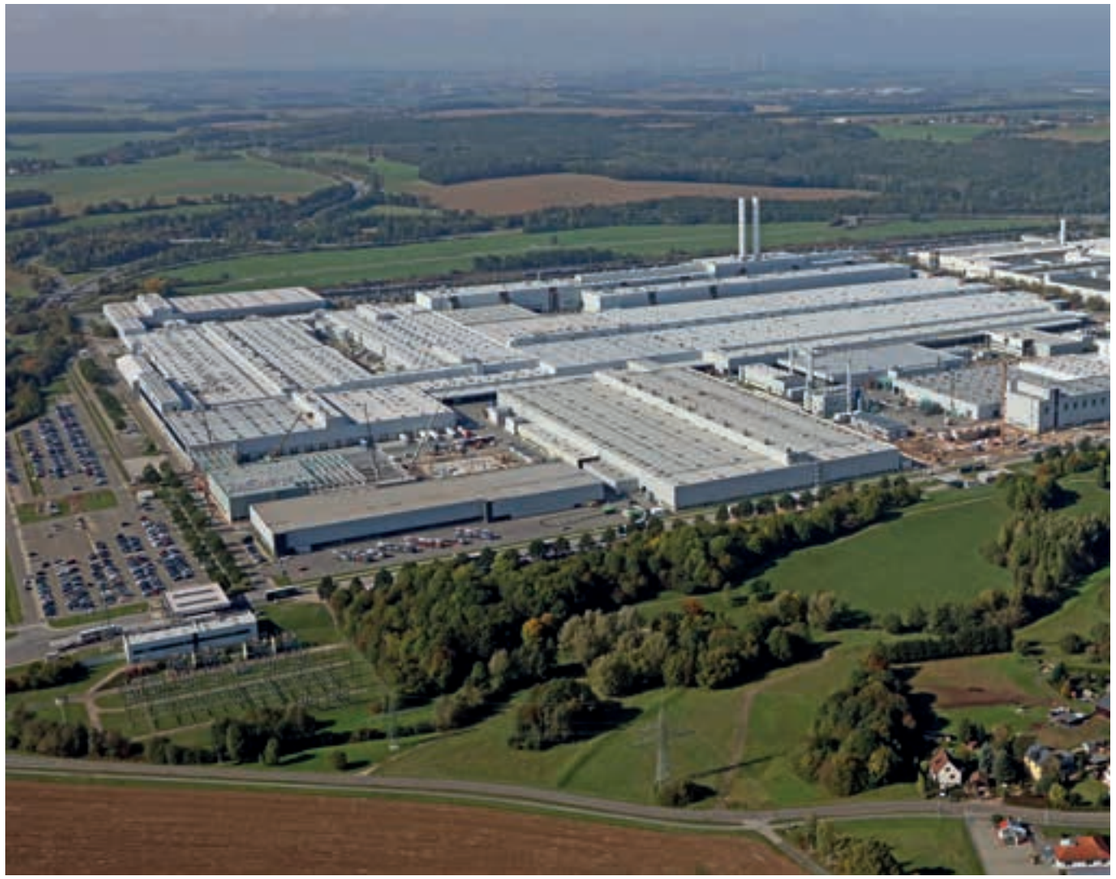
The conversion of production is taking place in two phases. The first production line for electric vehicles was converted in 2019. Vehicles with combustion engines will continue to be built on the second assembly line. From summer 2020, this line will also be converted.

This will have drastic implications for Schnellecke Logistics Saxony (SLS), which ensures the plant supply of VW with about 800 employees in Glauchau and Zwickau, for if fewer vehicles are produced, the number of necessary logistics services will also decrease. The order for axle assembly, which is currently still being carried out at Schnellecke, also ends with the end of combustion engine vehicle production. In future, axles and drive trains for the electric vehicles will be assembled by a VW company.

There is currently a lot of activity in the entire region, as SLS Managing Director Ralph Hoyer reports. "Like us, some service providers already have contracts for the production of electric vehicles. They are looking for new premises or qualified employees. And this in a market that has already been drained dry."

There is indeed virtually no unemployment in the region around Glauchau. "Jobseekers usually find a job here within a week," Hoyer says. And this is a problem for companies, because the Volkswagen plant will be running at full speed again in two years, and a lot of new workers will be needed. "Demographics also play a very important role here," Hoyer stresses. "The age structure of the workforce will continue to get older."

Volkswagen Plan Zwickau



The “SLS Future” program

So this was the perspective that Management and the SLS Works Council were facing in 2017. “Our first question was of course: What do we do with our employees who are not needed during the conversion phase?” Hoyer says.

The typical reaction in such a case would have been to let go of the employees whose jobs were no longer needed. However, Schnellecke went a different way. “Together we have initiated a process that is geared towards site development and job safeguarding in the company,” says Works Council Chairwoman Elke Merkel. The primary goals of the expansion of innovation competence and the maintaining of competitiveness, job security and socially responsible employment models, as well as the further development of the company as an attractive employer were laid down in a process agreement.

“SLS Future” is the name of the program signed by Management and Works Council in October 2017. It includes company agreements on site and job security, on innovation concepts, on holiday planning, and on the personnel concept. Immediately after the agreement was signed, negotiations were started with the Federal Employment Agency on the qualification opportunities available to employees when their old jobs ceased to exist. When Volkswagen shut down the first assembly line for the conversion in 2019, people in Glauchau were prepared.

One of the largest qualification packages in the region

“Of course, we had a surplus of personnel,” Hoyer remembers. “First of all, we no longer used any temporary workers. Then we compensated for some things with clever holiday planning. We temporarily ‘loaned’ employees to other sites and cooperated with other companies that temporarily needed employees to process peak orders. We suspended the employment contracts here and gave a re-employment guarantee. And finally, we took on additional orders from a company that was still looking for a building and worked on our premises in the meantime. That was all a lot of work and is only possible if you maintain networks.”

Nevertheless, we maintained our goal of retaining all employees if possible, including those with temporary contracts. “Instead of just three as before, Volkswagen will produce six models here in future,” explains Hoyer. “The variety of parts will therefore increase. In 2021, around 300,000 vehicles are to be produced at the plant again. For this we will need good and qualified employees.”

And they are currently being trained. “With a volume of over two million euros, our measure is one of the largest qualification packages of the Federal Employment Agency in Zwickau,” emphasizes Elke Merkel. “We were the first supplier here in the region to conclude a qualification agreement with the Federal Employment Agency. Other service providers initially sat it out, implemented temporary layoffs, and dismissed employees.”

Finding an educational institution with the appropriate capacities was not at all easy. After all, Volkswagen employees also had to be requalified for the production of electric vehicles. This meant that the VW training center was unavailable since it was fully booked. However, thanks to the timely planning, Schnellecke was able to find a partner for achieving its goals in the Fortbildungsakademie der Wirtschaft (FAW – Further Training Academy for Business).

The concept was presented to the employees at an employees meeting. They were offered a qualification concept in five modules. Anyone who has successfully completed all five modules can then take their examination to become a specialist warehouse clerk at the IHK.

New inspiration for employees

We meet Peter Leeb and Jonny Wagner, who are among the first sixty participants of the further training program. Leeb is 33 years old, started training as a production mechanic at SLS in 2003,

and stayed with us afterwards. Wagner, 49, is a machine and system fitter and has been with Schnellecke since 2001. Both have worked in axle assembly in recent years.

Wagner has now completed two modules, Leeb one. Both have obtained their forklift license, and Wagner has also expanded his knowledge of order picking. “I’ve been avoiding getting my forklift license for years,” he says. “I didn't need it in the assembly department, but now it was easy for me to make the decision.”

Each module consists of two months of coursework and one month of practical training. “It’s quite exhausting to be at school all day taking notes,” says Wagner. “That was very unusual at first.” As unusual as being back at school all day.

“This experience is also good for people,” emphasizes Merkel. “You get out of the three-shift grind for a while and are able to experience something completely different. That’s a new horizon for the employees. They get new inspiration. And they have earned it by showing great flexibility and loyalty to the company over many years.”

Excellent results

“Some older employees were initially skeptical about whether they could still manage it,” Leeb remembers. “But they were assured that if they couldn’t manage it, there wouldn’t be any disadvantages.”

However, so far everyone has succeeded. The first impressions have been extremely positive, according to Merkel. “Nobody has failed. We have had excellent results. The poorest grade was one “C”, and that was someone who had never sat in front of a computer before and whose study load was, of course, much bigger.”

However, production has to continue during this period, albeit at a reduced volume. To do this, employees had to switch from logistics to axle assembly in order to be able to implement the project at all. “The employees who maintain production cannot take part in the measures now. But we have decided to make this possible for them next year,” stresses Hoyer.

“Everything we have achieved here in 2019 and the challenges we will face in the coming years have required and will require a great deal of strength and commitment,” concludes Hoyer. “This will only work because we and the Works Council have a common goal: Safeguarding jobs, training for the future, and better chances for a follow-up order. We worked together to find the best solution. We have a sensible and reliable way of dealing with each other here. This was the only way we could make use of all possibilities to get something done together.”

BELLA *Italia*

SCHNELLECKE WORKS FOR LAMBORGHINI AND FIAT IN ITALY

Schnellecke has two sites in Italy: In Atessa, in the south of the country, and in Bologna. Two very different sites, as we discovered during our on-site visit.

“OUR EMPLOYEES ARE OUR STRENGTH”

SCHNELLECKE IN ATESSA

From Fiumicino airport in Rome it takes us about half an hour by car to reach Abruzzo. All around us the wild hills rise up, at whose tops here and there houses are slapped as if glued there by the hand of a giant. Deep gorges appear out of nowhere, shining white rock walls and hidden valleys.

After several hours, we reach the plain that stretches as far as the Adriatic Sea. Here, in the municipality of Atessa, Schnellecke has its newest site in Italy. Atessa itself is a small town whose houses crowd together on a roughly 400-meter-high hilltop. The industrial area in the Val di Sangro between Abruzzo and the Adriatic Sea also belongs to the municipality. We pass Honda's Italian motorcycle factory before reaching the Sevel factory.

Società Europea Veicoli Leggeri Sevel S.p.A. (European Light Vehicles Company), also known as Sevel, is a joint venture between Fiat Chrysler Automobiles (FCA) and PSA Peugeot Citroën S.A. for the production of light commercial vehicles. Around 6,400 employees work at the 1.2 square kilometer site in Atessa (as of 2019). The production output in 2018 was 296,000 vehicles; an increase to 303,000 vehicles is planned for 2019. This makes Sevel the largest plant for the production of light commercial vehicles in Europe. It is also one of the largest companies in Abruzzo.

This is where the famous Fiat Ducato, whose chassis also serves as the basis for Citroën and Peugeot vehicles, rolls off the assembly line. It is also popular as a basis for motorhomes, so it is no wonder that the production figures are on the rise. Numerous service providers and suppliers have settled around the plant, as of recently also including Schnellecke.

“We are a pilot project”

We are greeted in front of the building by Alfonso Tamasi, Business Unit Manager, Laura Gallerani, responsible for Lean Management in Atessa and Bologna, and Antonio Tranquillo, Operations Manager. The sun is still shining strongly on this late September day, but it is pleasantly cool in the building.

“Although we are one of the newest sites in Europe and not particularly large, we are strategically very important,” says Tamasi, since Atessa is the first business unit to work for FCA in Europe. “Previously, FCA organized the line supply in Sevel itself,” says

Laura Gallerani und Alfonso Tamasi

ATESSA – A GEM ON THE EDGE OF ABRUZZO.

The small town of Atessa is situated at the top of a hill about 400 meters above sea level. From there you can see the Adriatic Sea. Atessa boasts an almost tourist-free old town that stretches along the hilltop complete with narrow alleys, hidden stairs, and many picturesque corners. Some of the historic buildings were built as far back as the sixth and seventh centuries.

Its palaces, alleys and churches clearly show traces of Atessa's medieval past. The Palazzo Spaventa and the churches San Rocco, Santa Maria Addolorata, San Giovanni and San Nicola are all well worth seeing.

Tamasi. “Schnellecke is the first external company to be commissioned to do this. So we're a pilot project, so to speak.”

The contract was signed in June 2018, and production already started on 15 October. With an area of 3,700 square meters, the building is not particularly large, but it is initially only a fraction of the factory supply for Sevel – in total around 1,500 mostly smaller parts – that is handled here. Every day, 23 trucks are unloaded at the incoming goods department. The pallets are either placed in block storage or in the high-bay warehouse. The necessary deliveries are picked from there. Around 3,000 small load carriers (SLCs) leave the hall every day.

“We originally planned to deliver 2.5 SLCs for each vehicle to be built,” explains Tamasi. “In the meantime it has already become three.” That makes over 900,000 SLCs a year. The work is carried out by about 45 employees in three shifts. In addition, there are two additional shifts on Saturday and one extra shift on Sunday. “These were not originally planned,” says Tamasi. “That's why we had to change our entire organization during on-going operations.”

But this flexibility is a natural feature of the team in Atessa. It was already necessary at the start of production. Fiat operates a uniform warehouse management system at all its sites. Sevel was the last company in the group to introduce the software in January 2019. “We are pioneers,” smiles Gallerani. “We are the first logistics company here in Atessa to use this system.”

Despite a one-week training session by Fiat, some problems were quickly encountered during day-to-day operations. “Some of the software’s functions didn't match our processes,” recalls Gallerani. “We then adjusted the functions, and after two weeks everything worked perfectly.”

Four routes – four colors

We notice that the rows of high racks are labeled by colors. Red, yellow, violet and green are written on large signs at the top of the racks. These categories can also be found in the outgoing goods department. “These are the four routes that exist in Sevel’s factory,” explains Tamasi. “We have aligned all our processes in

this way to avoid mistakes. There is one employee for each line who puts together the necessary deliveries. Around 20 of our employees also work at the Sevel plant. They receive the deliveries and take them to the appropriate production lines."
That sounds easier than it is. Not all routes are equal. Yellow and violet are particularly important, for example, because a missing or faulty delivery can lead to a production stop. Green and red, on the other hand, contain parts that can be used in different assembly stages. In addition, the routes are not always the same; they have to be flexibly adapted according to the production requirements in Sevel.

After a tour of the hall, Tamasi and Gallerani inform us about the personnel situation. "Schnellecke has a good reputation in the region," stresses Tamasi. "People come here and ask if they can work for us."

So it was relatively easy to get good employees – with an unusually low average age for the region of around 30. "At Sevel in particular, it is important that the employees there not only have specialist knowledge, but also good communication skills," Gallerani emphasizes. "They always work directly with the customer, and the chemistry has to be right."

1,200 vehicles per day

We can see that for ourselves now. Only a few minutes by car and we reach the factory. Here, 6,400 employees produce up to 1,200 vehicles a day on a total area of 1.2 million square meters. Together with the around 100 suppliers who have settled in the area, there are about 12,500 people who live off Sevel. This makes the company an important economic factor in the region. It essentially consists of body production, the paint shop, and final assembly.

You only occasionally see people walking through the park-like area between the buildings. Otherwise it seems at first surprisingly quiet. The entire freight traffic (around 500 trucks and a complete train per day) is handled at the rear of the premises. Up to eight trains and over 200 vehicle transporters per day take care of the shipping of the produced vehicles and chassis.

If they don't require protective clothing, for example when welding, all of the employees of Sevel wear white work clothes. Sevel is the largest car body plant in the entire Fiat Group: all assembly lines add up to a total length of about eight kilometers. However, the car bodies are only assembled here. The galvanized sheet metal parts and other components are delivered by suppliers.

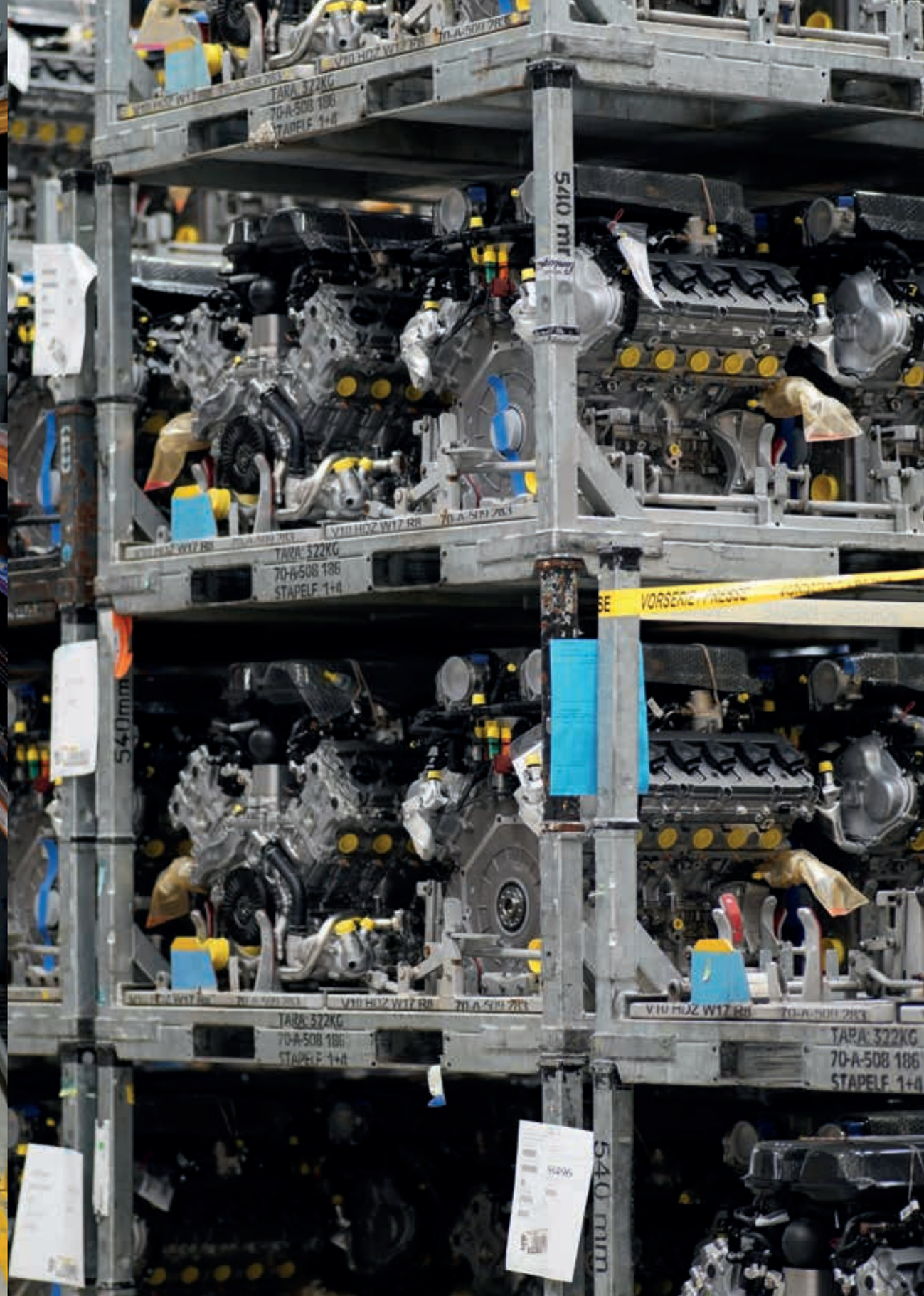
The heart of the plant is the final assembly line, which employs over 2,500 people. The Ducato can be ordered in over 13,000 configurations. This requires many different individual parts on the assembly line, and Schnellecke is also involved in their delivery. Once the required parts have been scanned and picked, the electric forklifts race off on their routes, which are up to two kilometers long. Here, as in the final assembly, people are still needed; on our way through the hall, however, we also encounter driverless transport systems that transport parts.

Laura Gallerani is often here at the factory to identify any potential for optimization. "You have to talk to people; you have to listen to them. You have to be with them when they do their work on the shop floor. Only then can you really understand how everything works and how things can be improved. The best suggestions for improvement come from the bottom up."

The figures prove her right: Last year, the Atessa site had the highest proportion of kaizen events implemented of the entire Group, measured by the number of employees. "Our employees are our strength," emphasizes Gallerani. And Tamasi adds: "People must have the feeling that they are involved in all processes. Then they also get on board with new ideas, and together we can achieve a lot."

A LOT OF PARTS FOR A FEW VEHICLES

SCHNELLECKE IN BOLOGNA



We drive on to Bologna, along the Adriatic coast from south to north, past places with such famous names as Ancona or Rimini, which were the main holiday destinations of Germans many decades ago. From Rimini we head inland. It is not far to the Italian Motor Valley, the region in which several manufacturers of sports and luxury vehicles have settled within a distance of a few dozen kilometers of each other: Ferrari, Maserati, Pagani and Lamborghini, as well as the motorcycle manufacturer Ducati.

Our destination is Sant'-Agata Bolognese, a small rural town about 25 kilometers from Bologna. Here, in 1963, Ferruccio Lamborghini founded the company "Automobili Ferruccio Lamborghini". His dream: to build super sports cars to compete with Ferrari. Many believed at the time that he had lost his mind, because until then he had only manufactured tractors under the name Lamborghini. The idea of building a super sports car was seen as an obsession that would only cost him money and make no profit whatsoever.

Just beyond Bologna it becomes rural, and Emilia-Romagna still looks like it did decades ago: narrow streets winding through endless fields, interrupted here and there by individual houses or farmsteads. And then, all of a sudden, a few white buildings appear in the distance: the Lamborghini factory.
The legendary vehicles are built here, mainly by hand, on an area of 160,000 square meters. Design rules here, as you can see at first glance. The white buildings are accentuated in black and in this way also show their architectural unity. Clear lines without frills, with solar collectors on the roofs and above the parking lots – all this looks timeless and modern.

Already from the outside we can see a row of variously painted Aventadors and Huracáns parked next to each other in front of a building. The car lover's heart immediately begins to beat faster. An Urus comes towards us from the factory gate for a test drive, completely masked to protect the paint.

From 40 to 250 Employees

We are welcomed by Massimiliano Agostini, Managing Director of Schnellecke Italia, and Jorge Duarte, Business Unit Manager. They take us to the logistics center right in the heart of the plant. From here, Schnellecke is responsible for the entire in-house logistics, not only for the three production lines, but also for other departments such as prototype construction, research and development, or body production.

In 2004, work for Lamborghini began with a warehouse in Anzola, about 15 kilometers from the plant site. "Since then we have moved five times," smiles Agostini. "In 2008, we moved to Lamborghini's premises, and then moved four more times here on the premises." The last move to the newly built logistics center was in August 2017, but here too, despite an area of 25,000 square meters under roof and 5,000 square meters of outdoor space, we are already reaching our limits. "Lamborghini has asked us to look for an additional warehouse for standard parts within a radius of 15 kilometers," says Agostini. "That's what we're looking for now."

The logistics center supplies the production lines for the two super sports cars Aventador and Huracán, as well as the Urus SUV. The Urus is at the top of the list, with over 4,000 units currently

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BOLOGNA – HISTORY AND THE MODERN AGE UNITED

Bologna, the oldest university city in Europe, is now an important economic and transport center, as well as a popular tourist destination. You can roam for hours in its historic city center with its magnificent buildings, discovering something new at every turn.

A typical feature of the city is its kilometer-long colonnades, under which you can stroll sheltered from the weather. No other city in the world has more of them. The Torri, the mysterious towers of the city, are also famous. The most famous are the Due Torri in the middle of the city. The almost 100 meter high Asinelli tower was built about 900 years ago. More than 100 towers were scattered all over the city during the middle ages. To this day nobody knows exactly what their purpose was.

being built each year. Slightly over 1,200 units of the Aventador are produced and around 2,800 of the Huracán.

15 years ago, Schnellecke Italia started work with 40 employees; today, more than 250 people work two shifts and one central shift to supply the Lamborghini production lines. The central shift runs from 8 a.m. to 5 p.m. and supplies the super sports cars; the Urus is produced in two shifts from 6 a.m. to 8 p.m. Work is carried out five days a week.

We enter the huge building, the largest part of which is occupied by a high-bay warehouse with 42 rows. Two trucks and a van are being unloaded in the incoming goods area, and the items are being stacked on the designated areas or taken directly to the block warehouse. Forklift trucks are dashing around everywhere. Several employees are checking the incoming goods for completeness and quality. “If we have something to complain about, the container is taken directly there,” explains Costanza Pasi, Operations Manager for Incoming Goods, pointing to an area at the end of the hall. “That’s where Lamborghini employees inspect it closely.”

The system works. “So far, September has been a month with zero errors,” says Jorge Duarte proudly. After all, there are only two days left until the end of the month.

Each vehicle unique

In view of the quantities of items stored here, one involuntarily thinks of the supply of a large production facility. But Lamborghini does not produce more than

forty vehicles a day. “That's because every single vehicle is unique,” laughs Duarte. “This ranges from the tires to the seams on the seats. So we don't store a few parts for many cars here, but many parts for a few vehicles.”

The turnover of goods in the logistics center is high. “On average, no item stays here with us for more than seven days,” Pasi explains. “Some products are already installed after two days. That's why up to 70 trucks and vans arrive every day to bring supplies. Because of the many unique parts used at Lamborghini, only about two thirds of the containers are standard containers.”

At the edge of the hall is the tire store, which can hold up to 1,000 wheels. Chemicals and epoxy resins required for the production of carbon fiber bodies are stored in a special area next to it. A new area for lithium batteries is also currently being created, as Lamborghini will soon be delivering its first hybrid models.

We pass the cleaning station for the empty transport containers and reach the outgoing goods area, where two tugger trains are currently being loaded. Alessandro Tugnolo, Operations Manager for this area, explains the organization to us.

On a column hangs a large overview of the departure times and destinations of the tugger trains for the respective day. After a train has left, it is checked off in the list – a simple but reliable system. “We always know where we stand,” says Alessandro. “For the Urus, we send a tugger train every twenty minutes and at slightly longer intervals for the other models.”

The space is divided into several areas: a kanban area, an area for the super sports cars, divided into Aventador and Huracán, and an area for the Urus. There is an area with body parts and seats, as well as another for pre-sequenced exhaust systems, engines, and windows. Another area contains items that have been pre-picked according to the pearl-chain principle.

While the tugger trains are being loaded, an employee already checks the next deliveries for completeness. Assembly kits are compiled at an upstream picking station. Each part has a special position so that the operator at Lamborghini does not have to search for it.

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An Urus after 23 stations

We leave the logistics center and make our way to the building where the Urus is produced. There is a lot of activity on the factory premises, and tugger trains are dashing around everywhere. A bright yellow Lamborghini Urus with a growling engine sits on a road between the two buildings. The driver takes notes and occasionally steps on the gas pedal. “That’s part of the quality checks,” Duarte says. “Every vehicle is put through its paces before it is delivered. There are test tracks that simulate different road conditions on the factory premises. If everything goes well there, then testing takes place outside the factory premises.”

Lamborghini has had one of the many roads, which sometimes stretch for miles straight through the picturesque agricultural landscape, newly asphalted especially for this. The section of road is closed when testing, meaning the vehicle can be properly driven before it enters the final check. There, highly qualified employees check the paint, seals and all details once again. Only then is the vehicle released.

There is a lot of activity in the entrance area of the Urus production building. The tugger trains from the logistics center are being received, partly by Lamborghini employees, and party by Schnellecke employees who work in the building.

The building itself is spotlessly clean, the floor gleams. Predominantly young men work at the 23 stations of the production line, all dressed uniformly in black T-shirts with the Lamborghini logo and black trousers. “Almost every Lamborghini employee receives one of these stylish black shirts with gold lettering on the back,” Duarte explains. After all, this is not just an automobile factory. The whole company is also a statement in style.

An autonomous conveyor vehicle glides silently past us, bringing a car body into the hall. At the first stations of the production line, windows, tailgates and other individual parts are fitted before it is coupled with the drive train at station 12. Further back on the line, another autonomous conveyor vehicle brings the wheels to the appropriate station before the vehicle finally reaches the end of the line.

“The Aventador and Huracán production lines have fewer stations, and the assembly takes longer,” Duarte informs us. “An Urus, on the other hand, only needs just over 40 minutes to pass through the 23 stations.”

Warehouse with 400 car bodies

At the end of our tour we visit the body warehouse. Here, row upon row of different car bodies are stacked on top up each other in high-bay warehouses on four levels. “Nearly 400 car bodies can be warehoused here,” explains Duarte. It is a real balancing act to use a forklift to take such a body from the top row of racks and take it to the transporter, which then takes it to the production hall, where it is coupled with the drive train.

What is the personnel situation like, we want to know. “Difficult,” replies Agostini. “Especially qualified employees are not easy to find. And that is not because of the money. Our collective agreement is the same as at Lamborghini because we have the same union. In other words, it is considered one of the best in Italy.”

The cooperation with the works council is very good, stresses Agostini. And this also applies to the cooperation with Lamborghini, of course. The contract with Schnellecke has just been extended to 2024, and the volume will continue to increase. “Everything goes well when people respect each other.”

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A RADIATOR EVERY MINUTE

AT SCHNELLECKE IN BREMEN, WE ENSURE THAT PARTS AND MODULES ARE INSTALLED AT THE RIGHT TIME ON THE ASSEMBLY LINE AT MERCEDES.

Sammy Jebili, operations manager;
Nina Fiedler, administrative unit manager;
Carla Osteroth, SMG administration manager;
Christian Löschen, site manager and
SMG managing director.

“Neue Vahr Süd” is the name of a bestseller by the author Sven Regener. It chronicles the 1980s in this district of Bremen and was highly praised by critics. In 2011, Regener wrote lovingly and ironically about his hometown: “One third of the working population works at Daimler Benz, and one third in animal feed production (Vitakraft). The rest are just returning the bottles.”

12,500

The Mercedes plant in Bremen, just a few kilometers as the crow flies from the Vahr apartment blocks, currently employs 12,500 people. We do not know whether this is one third of the Bremen working population. But what we do know is that Mercedes-Benz cars have been rolling off the assembly lines in Bremen for 40 years.

The plant in the Sebaldsbrück district of Bremen has produced a total of more than eight million vehicles since 1978, averaging more than 400,000 vehicles per year in recent years. Ten models are currently produced at the facility: The sedan, the T-model, the C-Class coupe and convertible, the E-Class coupe and convertible, the GLC SUV, the GLC coupe, and the SLC and SL roadsters. As the lead plant, the Bremen plant steers the worldwide production of the C-Class and the GLC. From here, all C-Class production facilities are steered, monitored and optimized.

By the end of the decade, vehicles "Made in Bremen" will cover the entire spectrum of intelligent powertrains – from classic combustion engines and plug-in hybrids, to fuel cell and electric vehicles. And the EQC is about to start production. It is Daimler’s first series-production electric vehicle, thus heralding in a new era in the Group.

In 2017, the plant received the Automotive Lean Production Award and the Industrial Excellence Award (Start-up category) for its series production and innovative approaches. A total of 1,000 suppliers supply the plant to ensure that everything runs smoothly. Their products are transported to the plant by 1,000 trucks every day – many of them take a short detour via the Schnellecke Bremen site.

42 different radiator variants

We are welcomed in Bremen by two old acquaintances: Christian Löschen, managing director of Schnellecke Modul GmbH (SMG), whom we previously got to know as the site manager in Soltau, and Carla Osteroth, who was head of administrative management in Soltau. She is now the administrative manager of SMG and Löschen’s right hand. Both have been in Bremen right from the very beginning and experienced the somewhat bumpy early months. “Even if you’ve done this a dozen times before, the startup of a new site always has its challenges,” Löschen says, looking back on the early days just after SOP (start of production).

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When Löschen and Osteroth accompany us into the over 26,000 square meter halls, there isn't much evidence of it. The work runs like clockwork everywhere. Around 270 employees sequence and assemble in three shifts.

We stop at one of the stations where radiators are assembled. "In total, there are 42 different radiator variants," says Löschen. "At Mercedes, one vehicle leaves the assembly line every minute. For us, this means producing a suitable radiator every minute. Errors must not happen, because every vehicle is different and is fitted with its own individual radiator."

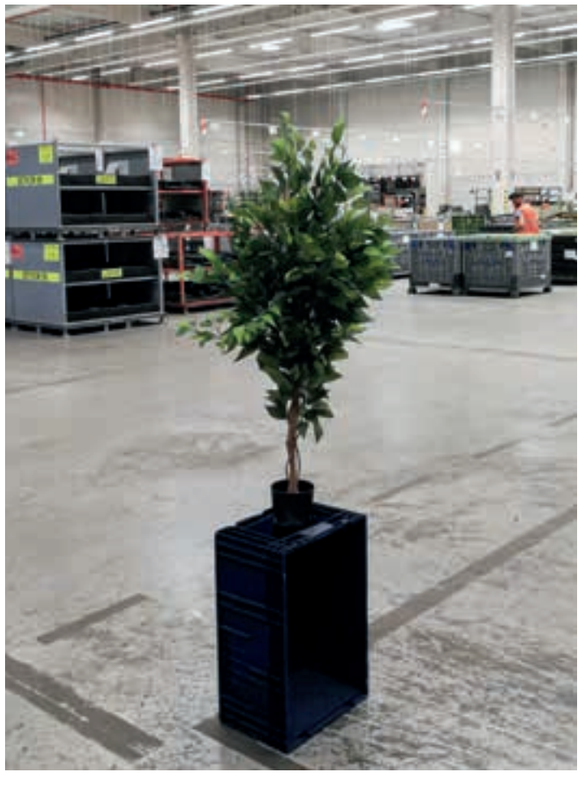
The parts required for assembly are pre-sequenced by Schnellecke. The next sequencing trolleys are already waiting behind the assembly station. We move on so as not to interrupt the high pace kept here.

Tatjana regulates traffic

In the next hall we meet Tatjana first. The forklifts flash by to the right and left, but Tatjana sits in the middle without batting an eye. She can't either, because she's a plant. Löschen points upwards: "The forklift truck drivers constantly hit the bar hanging from the ceiling with their loads. So we simply put a plant under it. Now everyone goes around it and the problem is solved."

Incoming goods is located at the end of the hall. Around thirty trucks bring about 1,500 handling units every day directly from the suppliers, from intermediate warehouses, or from an automated small parts warehouse. After unloading, the items are distributed: A portion goes directly to the line, another to the high-bay warehouse, and a third to the block warehouse.

Again and again we have to dodge the numerous forklift trucks at work here. "We have exhaust systems, batteries, gaskets, air conditioning units, radiator modules, equipment carrier plates, cover plates and more," explains Osteroth. "Some of them we sequence, others we pre-sequence and assemble into modules."



1,500 vehicles per day

Two Mercedes production halls in which a total of 1,500 vehicles are produced per day are supplied by Schnellecke. Everything has to run like clockwork, especially the replenishment. “We have a buffer for twelve hours of production,” says Osteroth. “Fortunately, the automated small parts warehouse and other warehouses are very close by; if things get tight, we can get the parts we need there in the shortest possible time.”

We hear the sound of the forklift trucks honking their horns through the hall as we walk past the numerous workstations in the direction of the outgoing goods area. To our right, batteries are being sequenced after they have been fitted with terminal caps. On our left, foam parts are being stacked in grid boxes. Behind them, equipment carrier plates are being fitted individually, each with different parts. At another station, five large laser printers hum along.

“Here we assemble car sets to form kitting bins,” explains Osteroth. “We recently took over this complex set. Each car set consists of small load carriers as sub-kitting bins. This is the most complex set I know. This is also because the parts in the bins must always be in a precisely defined position so that the worker does not lose time searching around on the conveyor.”

The task is correspondingly prone to errors. The correct composition is still checked by visual inspections and photo documentation. The plan is to automate the process. Then the sub-kitting bins will be pushed through camera-equipped gates, which will facilitate a quick check.

Extensive documentation

Each car set comes with extensive documentation, which can include up to eleven sheets. These documents, which are sorted by an employee for each set, are output by the printers. The printers themselves are managed by Mercedes.

The finished sets await collection in the outgoing goods area. Two loaders make sure that they are loaded correctly, because the trucks have an assembly side and a logistics side. The employees here know exactly how many sets have to leave the hall at which time. Everything is calculated exactly so that the assembly line at Mercedes does not stand still and the buffers at Mercedes do not overflow.

Schnellecke has been working for Mercedes not only in its own building since the end of 2019, but also with 150 employees directly in the Mercedes factory. Here, too, it is ensured that all the required parts arrive at the assembly line at the precise time.

So maybe Sven Regener is right in his statement. Many people from Bremen are now employed at Schnellecke – but ultimately they work for Mercedes.

MOTIVATION, ENTHUSIASM AND TEAM SPIRIT

SCHNELLECKE WINS LOGISTICS CONTRACT FOR FIRST BMW FACTORY IN MEXICO

A cathedral whose façade sometimes turns into a dazzling spectacle of bright reds, blues, greens and yellows at night, making it look like a backdrop from Disneyland. A city highway built on a former riverbed that turns back into a torrential river every time it rains heavily. Old prisons that have been transformed into museums of surreal art or masks. All this can be found in San Luis Potosí.

San Luis Potosí is a big city with about 750,000 inhabitants in north central Mexico and the capital of the state of the same name. The more than 400-year-old city is located about 440 kilometers northwest of Mexico City at an altitude of about 1,850 meters. The climate is dry and warm; the city's historic center was declared a World Heritage Site in 2010.

But not all of the foreign visitors who come here are tourists, because San Luis Potosí is booming. In recent years, numerous international companies have settled here, including BMW.

High-ranking officials of the Mexican government and of the BMW Group opened the company's new car plant on June 6th, 2019. It is an important pillar of BMW's global production strategy. San Luis Potosí will build BMW's most successful model range: the BMW 3-series sedan.

The company has invested more than a billion US dollars into the new production site. The factory, which currently employs 2,500 people, will have an annual capacity of up to 175,000 units after completion of the ramp-up phase.

The new plant in Mexico will already become the BMW Group's most resource-efficient plant in its first full year of production in 2020. The ultra-modern plant is particularly outstanding when it comes to using water, and will outperform all other plants in terms of water consumption per vehicle produced. The BMW Group's first paint shop to be completely free of process-waste water will make an important contribution to this. Power will be supplied entirely from renewable energy sources and in future will be one hundred percent CO2-free.

All apprentices will be trained in the BMW Group's latest production processes and technologies at an innovative new training center on the plant premises according to the dual vocational training model. The aim is not only to enhance the technical skills of the employees and apprentices, it is also about motivation, enthusiasm and team spirit.

Logistics supply for the assembly line

Motivation, enthusiasm and team spirit – this also applies to one of BMW's partners in San Luis Potosí: Schnellecke. The company received the "Assembly" package and therefore the logistics supply for the assembly. The services include incoming goods, storage, material transport, sequencing & line-feeding, as well as empties management and dispatch. BMW was responsible for the design and equipping of the warehouse, including the IT infrastructure. Schnellecke invested in the industrial trucks and the construction of its own training center. Schnellecke currently employs approx. 300

SCHNELLECKE 2019.2

people in a 1-shift model. The final expansion to 2-shift operation is planned for 2020. Schnellecke will then be on site with around 600 employees. The contract initially runs until 2024.

"We are proud that BMW has chosen us," says Andreas Wagner, COO of Schnellecke Logistics, who was invited to the opening ceremony of the plant, along with Cornelius Goertz, Vice President Operations Mexico, and Daniel Dávila Mendiola, Manager of the San Luis Potosí site. "Schnellecke has been present in Mexico for decades, and we know automotive logistics and local conditions better than anyone else."

Donation to vocational school

Schnellecke demonstrated social responsibility for the region a few days before the opening of the BMW factory, as Cornelius Goertz explains. A donation was made to the CONALEP (Colegio Nacional de Educación Profesional Técnica) in Villa de Reyes, which is similar to a German vocational school. "This donation is meant to help further improve the conditions and the learning opportunities at the site and therefore ensure the quality of the lessons," Goertz says.

There is another reason, as site manager Daniel Dávila explains: "We chose this school because we want to contribute to the development of the community in which we are located. At the same time, it is a thank you to the local people who opened their doors and welcomed us." Villa de Reyes is the district of San Luis Potosí where BMW and Schnellecke have settled.

CONALEP is one of the most important local educational institutions, from which many graduates enter the job market every year. "We see it as an important task to contribute to improving young people's education through both material and financial donations," says Dávila. "At the same time, this connection will offer the graduates job vacancies in order to promote their further development at Schnellecke Logistics."

SCHNELLECKE 2019.2

A PILOT PROJECT WITH A COMPARTMENT INSERTION ROBOT IS CURRENTLY UNDERWAY IN SOLTAU

“NO EMPLOYEE ACTUALLY ENJOYS DOING THAT”

An employee who works around the clock without complaining, who doesn’t need a break and doesn’t make mistakes, who takes on monotonous work from people and frees them up for other tasks. This is how many people imagine the future with robots. But will it really be that simple?

In Soltau, Schnellecke packs Audi vehicle parts in order to then export them. It is called CKD when vehicles are shipped overseas in individual parts in order to avoid high import duties. For this, the company does not only rely on people, but also on state-of-the-art technologies: New employees are trained using virtual reality applications, and the transport within the huge warehouse is partly handled by autonomous tugger trains. The parts are picked using data glasses and X-Band. Since recently, a robot has also been working in one section of the site.

“So-called compartments are often used for the safe transport of fragile individual parts,” explains Andreas Zitzer, head of the BU in Soltau. “These are protective covers made of cardboard combs that are inserted into each other to form transport cells in which the respective parts can be safely placed.”

The manual assembly of these compartments is often time-consuming and difficult. Zitzer knows: “No employee really enjoys putting the compartments together.” For this reason, Schnellecke started the pilot project “compartment insertion robot” with the aim of integrating a system into the operative day-to-day business in order to relieve the employees of this process.

In-house infrastructure required

“Now, it's not just a matter of putting a robot there and programming it a little,” smiles Waldemar Gross, who headed the project. “Such a robot needs a complete infrastructure, from the feeding of the compartment combs, to sensors and dispatch. We have to therefore integrate conveyor technology and visual recognition capabilities.”

The mechanical arm is at the core of the system. To start the work process, the compartment insertion robot needs the appropriate material, which it obtains from two magazines. They contain the respective combs – one for the longitudinal side, the other for the transverse side. The robot pulls the combs out of the magazine one by one and then puts the compartments together on an automatically adjustable insertion table to form a transport cell.

Despite its flexible adjustment options and the fact that the compartment insertion robot can insert virtually any form of protective cover at its insertion table, its operation is incredibly easy. The employee does not need any special training or specialist knowledge – a short introduction is sufficient.

Supplement, not a replacement

When the divider is finished, it is lifted out of the insertion table via a rail system and rolls towards the tray via a conveyor belt. At this point, the robot is already taking care of the next compartment, while the employee can continue working with the produced spacer.

But back to the question raised at the beginning: Is the robot really the perfect employee? “It is as long as everything works,” laughs Gross. “However, it specializes in a small sub-task; if someone is needed elsewhere, you can't just use it there. And if there’s a technical malfunction, people have to take over again. Such a robot is a supplement, not a replacement.”

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Cersten Hellmich (V.i.S.d.P.),
Gerd Ruebenstrunk

Copy:
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Contact:
insight@schnellecke.com

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