

issue 2020

proSewer

The customer magazine of MÜLLER



Now with
**EXTRA-
POSTER** in
the middle
section.

- 🌱 First sewer vehicle with natural gas drive!
- 🌱 For the environmentals sake: The MÜLLER environmentals management system
- 🌱 Recycling of a special kind
- 🌱 Our new training manager in the MÜLLER team

Dear readers and business associates!

Over the past few months, we have learned to come to terms with the pandemic. But this does not mean that we have become accustomed to this extraordinary and unprecedented emergency. How could we?

Those who create services and products also want to be able to present their own work. And we do this at conferences and exhibitions in direct contact with our customers and interested parties. The fact that this direct contact with colleagues, customers and friends is not possible hurts our industry. Financially it tears deep wounds for organizers, exhibition builders, hoteliers and restaurants. Numerous market companions got into severe existential distress. This is a real challenge for our entire industry as a community of solidarity.

Many areas of daily life have been affected by the restrictions of the new lockdown. Everything that people enjoy has become virtually impossible. In the long term, the consequences of the pandemic will probably affect many more sectors of the economy than we would like to imagine at this point in time.

What remains is to focus on the areas that are familiar to us. The cozy home, one's own family and also one's own workplace. You are grateful that you can go to work and that your wages are paid on time. You suddenly appreciate conversations with colleagues and business partners more than ever. Because it's these conversations that give you the feeling of being in the thick of life, despite the pandemic and the lockdown. People who have been working reduced hours at home for months, or who no longer have a job at all, can tell you a thing or two about how difficult it is, especially in these times, without the social environment at work.

We at **MÜLLER** would like to be able to offer our employees a secure, professional home in the future as well. We can only do this if we develop interesting and innovative products and also have qualified employees who do a good job for our customers. That's why we provide training. The quality of our training has proven itself over decades and we consider it an important investment in our own future. Read the article „New training manager at **MÜLLER**“ for news from our training department.

We also do not want to let up on the topic of innovation. Within the framework of the Paris climate agreement, all countries of the world have committed themselves in the fight against greenhouse gases. Together with our long-standing

customer Jansen Rioolreiniging from the Netherlands, we have developed a **VACUMASTER** that is mounted on a new natural gas-powered **Actros NGT from Mercedes-Benz**. This innovation from **MÜLLER** is the first sewer vehicle powered by natural gas ever to be built in Germany. Read in this issue how this can reduce the CO2 emissions of the vehicle fleet.

MÜLLER is also fully in line with the green trend when it comes to the „circular economy“ and „resource efficiency“. This is illustrated by a special recycling measure for vehicles, especially since nothing is wasted and as much as possible is reused. Starting on page 10, you will find out why the conversion of an old body to a new chassis can be economical and resource-saving.

When it comes to environmental protection, mere lip service is not enough - only action counts! This is why **MÜLLER** has introduced an environmental management system and had itself certified by TÜV Nord in accordance with DIN EN ISO 14001. In this issue, you can read the interview with **MÜLLER's** environmental management officer, who reports on why environmental protection is firmly anchored in **MÜLLER's** DNA.

I would like to thank you for your continued trust in our company and, as always, I hope you enjoy reading this issue. On behalf of all our shareholders and employees, I wish you a harmonious Christmas season and happiness, success and, above all, good health in the New Year - stay with us.

Yours sincerely
Dr. Volkwin Müller



Managing Partner
MÜLLER Umwelttechnik GmbH & Co. KG



Imprint:

Published by: MÜLLER Umwelttechnik GmbH & Co. KG
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Editorial office: Dr. V. Müller, W. G. Müller,
Photos: Dr. V. Müller, W.G. Müller, i-Stock (Xandra R. p. 4), Archive Jansen Rioolreiniging, M. Bläsing

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With natural gas through The Hague

MÜLLER builds the first German-made gas-powered sewer truck for our western neighbors.



The Hague is located in the west of the Netherlands and is the only major city with a beach along the North Sea coast. The city offers numerous monuments, chic hotels and is the center of politics. The seat of government of the Netherlands is arranged around the historic Binnenhof, and the 16th-century Noordeinde Palace is the seat of government of the Royal Family. The Hague is also home to the United Nations International Court of Justice, located in the Peace Palace (Vredespaleis), and the International Criminal Court.

In times without Corona, you can sit down at one of the many sidewalk cafes on the Plein or Grote Market and enjoy the many flavors of The Hague. With two Michelin-starred restaurants, freshly caught fish from Scheveningen, the Asian influences of China Town and the former colonies, there really is everything to discover there. The North Sea Jazz Festival is a Dutch jazz festival. It has been organized in The Hague since 1976 and in Rotterdam since 2006. Now it is one of the most famous and biggest jazz festivals in the world.

The Hague has two environmental zones („mili-

eu zone“): The Hague City and The Hague Center. The regulations for environmental zones in The Hague are very strict and prohibit all trucks with diesel engines from entering, as trucks are one of the biggest problems in the struggle for climate-friendly traffic. The Hague’s entry bans apply every day, around the clock. Other environmental zones exist in the Dutch cities of Breda, Delft, Eindhoven, Leiden, Maastricht, Rijswijk, ’s-Hertogenbosch, Tilburg and affect all trucks with diesel engines. From 2020, municipalities will be able to extend the regulations to diesel-powered passenger cars, planned for example in Maastricht.

MÜLLER’s long-standing customer Jansen Rioolreiniging from Sliedrecht is a specialist company that has been active in sewer cleaning in the Netherlands for over 40 years. Over the course of four decades, Jansen has developed into a team of experts in the fields of environmental friendliness, noise reduction and cost-effective transport. Having been awarded a contract by the city of The Hague, Jansen Rioolreiniging had to face the regulations of the city’s environmental zone and decided to look for a sewer truck with an alternative drive concept.



Finally, **MÜLLER** and Jansen decided to look into the subject of a natural gas drive.

The vehicle is a Vacumaster F 80 KH, which will be used exclusively in the inner city area of The Hague from January 2021. The Jansen company will use it to carry out the following cleaning work:

- Gullies
- Connecting pipes to the gullies
- gutters in pedestrian areas
- House connection pipes in the rain and sewage area

The relatively low-profile Vacumaster F 80 KH is a suction vehicle with an 8000 liter tank and a hydraulically driven, swiveling, lifting and telescoping pipe boom. The water ring vacuum pump on board is a CVS Vacustar WR 2500, the high-pressure pump is a Uraca P3-10 plunger pump.

The special feature of this vehicle is the Mercedes-Benz chassis. It is the new Actros NGT, which is equipped with a natural gas drive. In conjunction with the body from **MÜLLER**, this is

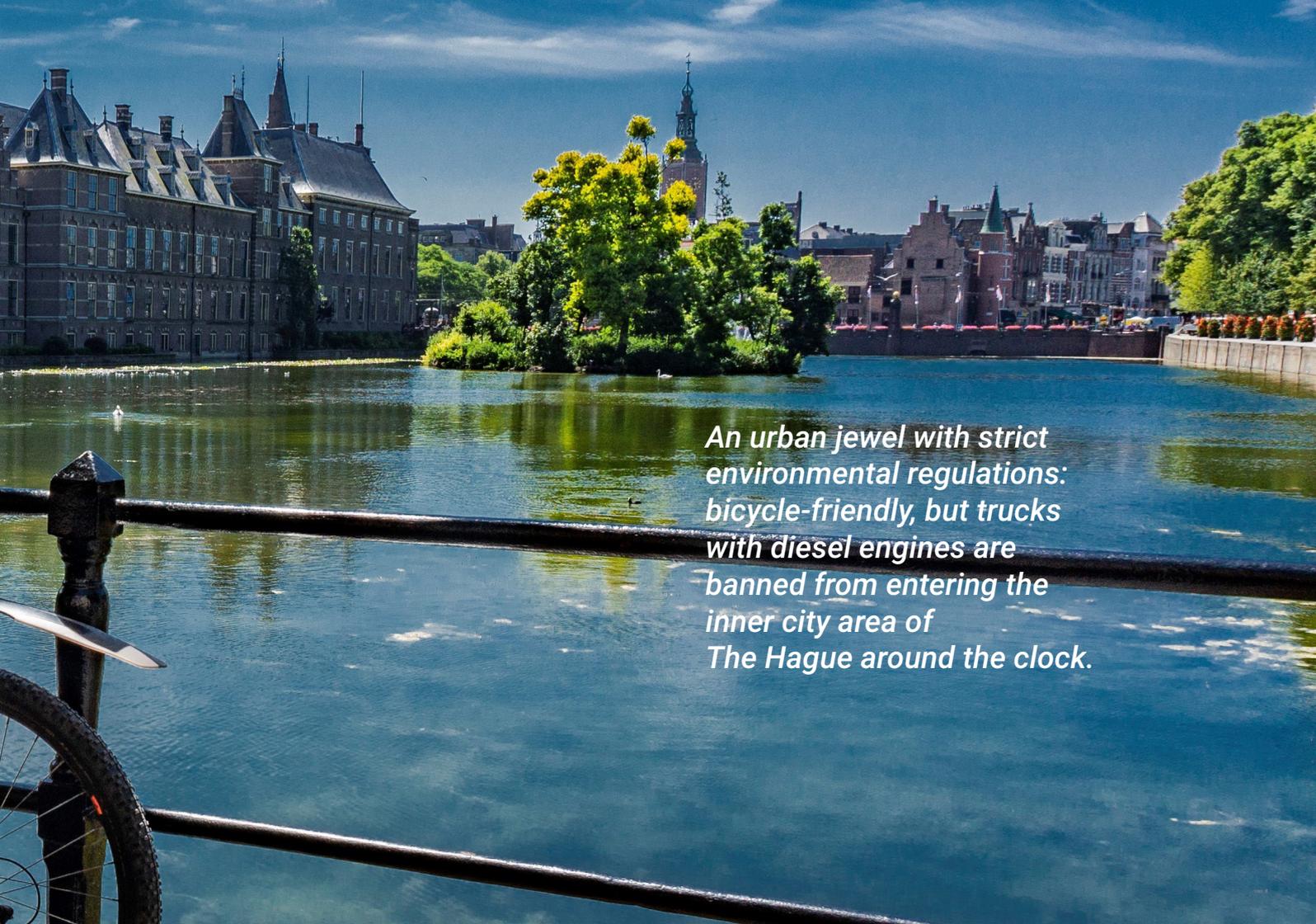
the first sewerage vehicle ever built in Germany to run on natural gas.

The **Mercedes-Benz Actros 1830 NGT** (Natural Gas Technology) was developed to improve the quality of air and life. The 100% range is 650 km with up to 95% less CO2 emissions with biomethane.

The chassis engine has a significantly lower noise level than a conventional diesel engine and is equipped with an Allison automatic transmission, which enables smooth, continuous power transmission and requires little maintenance.

The M936 G engine is fueled with 100% CNG (Compressed Natural Gas). This is compressed natural gas, which is a fossil fuel obtained by compressing natural gas. It consists mainly of methane as well as other light hydrocarbons such as propane and butane. Compressed natural gas CNG can help reduce smog and the greenhouse effect.

The CNG tank on the left of the chassis in the direction of travel is made of composite material and weighs approx. 400 kg less than conventio-



An urban jewel with strict environmental regulations: bicycle-friendly, but trucks with diesel engines are banned from entering the inner city area of The Hague around the clock.



nal steel tanks for CNG. Refueling the 580 l tank is just as easy as with other traditional fuels. In addition, natural gas is lighter than air and therefore volatilizes in the event of a spill.

The engine is extremely economical due to the low cost of CNG throughout Europe and government subsidies in many countries, which means that operating costs are lower than for diesel engines.

Refueling is fast and the network of CNG filling stations is the densest in Europe. In addition,

CNG vehicles are often exempt from traffic restrictions, including the ban on driving in the environmental zone of the city of The Hague.

By using the **MÜLLER Vacumaster F 80 KH** in conjunction with the natural gas-powered **Mercedes-Benz Actros NGT**, the Dutch company Jansen impressively demonstrates that it is an environmentally conscious sewer cleaning company with a „green philosophy“ and thus operates innovatively, efficiently and sustainably.

The **MÜLLER** team is proud to be part of this success story by supplying the superstructure for this first sewer cleaning vehicle with natural gas drive supplied from Germany.

Introduction of an environmental management system at MÜLLER



Thorsten Mielchen
Team Leader Process and Quality Management
and Environmental Management Representative
in interview

MÜLLER was one of the first companies in the industry to introduce a quality management system as early as 1997 and to be certified according to DIN EN ISO 9001. Now, in August 2020, an environmental management system has been introduced and the company has been certified by TÜV Nord according to DIN EN ISO 14001. Thorsten Mielchen is team leader for process and quality management and also **MÜLLER's** environmental management officer. In the following interview, he reports on his experience with the introduction of ISO 14001 and on the benefits the company derives from it.

proSewer: **MÜLLER** had itself certified to ISO 14001 for the first time by TÜV Nord in August 2020. Why does **MÜLLER** need an environmental management system?

T. Mielchen: **MÜLLER** has carried the term „environmental technology“ in its company name since it was renamed in 1985 and has been producing products for environmental protection for almost seven decades. Environmental protection is therefore firmly anchored in **MÜLLER's** DNA and is a central factor for successful long-term business. The requirements of our environmental management system ensure that we meet our own standards and the expectations of our interested public. Particularly in the case of a broadly defined cross-sectional issue such as environmental protection, a management system provides us with the necessary structure to define, effectively monitor and control the large number of environmentally related responsibilities, processes, indicators and measures. The continuous improvement process (CIP) approach is very important to us.

proSewer: How did you identify your relevant interest groups of people, which ones in particular and what needs do they have with regard to the environmental management system?

T. Mielchen: In various workshops with representatives of the individual company departments, we jointly identified the employees who are significantly affected in order to meet the standard requirement. One expectation that unites all departments is transparent communication about our significant environmental impacts and the environmental goals and measures we have formulated. We are expected to continuously improve our environmental performance.

proSewer: Among other things, ISO 14001 requires management to commit to protecting the environment as part of its environmental policy and explicitly mentions „preventing environmental pollution“ - how does **MÜLLER** implement this in its day-to-day business?

T. Mielchen: One of the many examples in which this commitment is reflected is the creation of our waste management concept, which we have structured and implemented throughout the entire company. This regulates aspects such as consistent waste separation in conjunction with profit-oriented recycling of reusable materials. When modernizing buildings, we invest in LED lighting, which we have already implemented in all production halls. We generate over 15% of our electricity requirements via our company-owned photovoltaic system. Furthermore, we ensure that we reduce our environmental impact through specialist



(Clockwise:) Thorsten Mielchen in technical discussion with Maik Kalous, Head of Facility Management at **MÜLLER Umwelttechnik**. Solar system on the **MÜLLER** production halls. Thorsten Mielchen and Maik Kalous with the DIN EN ISO 14001 certificate, issued by TÜV Nord. Maik Kalous during instruction on the implementation of the new environmental protection measures.

projects in the individual departments. We are intensively engaged in the avoidance of hazardous substances such as solvents in the vehicle paint shop. It is essential to draw up a solvent balance sheet in order to have transparency about the actual quantities consumed. In general, we are concerned with the reorganization of the handling of hazardous substances, e.g. in the context of occupational health and safety and especially in the area of storage.

proSewer: What was your experience with your colleagues in the company during the preparation for certification? Did everyone know right away what it was all about?

T. Mielchen: For our employees, the topic of environmental management was completely new territory, which is why intensive training was absolutely necessary. We then systematically discussed all the relevant key topics. I really have to say that all my colleagues were open and willing to learn, and they really got on with it. Otherwise, we wouldn't have been able to do it in such a short time.

proSewer: If we look again at your environmental management system - what are your plans and goals for the near future?

T. Mielchen: First of all, we have defined our environmental goals, i.e. a reduction in annual CO2 emissions from forklift trucks, a permanent reduction in the annual volume of solvents, a reduction in gas consumption, a further reduction in electricity consumption and a general reduction in waste. We want to further anchor these defined corporate goals in the company in a sustainable manner by implementing environmental management projects in the individual departments. Furthermore, as part of professional store floor management, we want to set up information boards at selected locations in the company where training can be provided and knowledge imparted. We also want to firmly anchor environmental awareness in the company's training program as part of the factory lessons. After all, today's trainees are our experts of tomorrow.

proSewer: Mr. Mielchen, thank you for the interview!

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There's still something going on!

Recycling of a special kind



When the old chassis is getting on in years and no longer does it, it is not uncommon for the body to still be in good condition. The question then arises as to whether to invest in a new vehicle or possibly have the old vehicle thoroughly refurbished. Whether this makes economic sense depends on various factors.

MÜLLER bodies retain their value and are worth their money during their service life. This is due to the excellent workmanship of the Schwalenberg vehicle builders and also to the fact that only high-quality materials and original parts are used in the construction of a new vehicle. As a result, the well-designed **MÜLLER** bodies have a relatively high resale value. This stability of value when selling a used **MÜLLER** justifies the relatively high original purchase price of a new vehicle at the end of its first life and service life.

Against this background, it can therefore be worthwhile to buy a used **MÜLLER** and - if necessary - to have it rebuilt in order to earn good money with it again for a long time. But also the modernization of an existing old **MÜLLER** vehicle in the existing fleet can also make sense. Whether it is economical in the end must be analyzed together with vehicle experts. At **MÜLLER**, this task is performed by the customer service team headed by Michael Bläsing.

Mr. Bläsing and his team at the **MÜLLER** ServiceCenter have already carried out numerous complex conversions. Between three and five complex, complete vehicle renovations and replacements are carried out each year.



„Every repair and every conversion of a used vehicle must be individually checked for feasibility and cost-effectiveness.“



Almost like new! The CANALMASTER after its general overhaul.

A basic discussion of whether a conversion is economical takes place at **MÜLLER** in a preliminary meeting, in which the ideas of the respective customer are discussed and the existing vehicle with all add-on parts is thoroughly examined and inspected. Among other things, rust is checked and the pumps are examined for their condition and functionality. Of course, the tank wall thickness is also measured.

Furthermore, it is checked whether the electrics, pneumatics, hydraulics, various existing aggregates, couplings, etc. should be overhauled or brought up to the latest technical standard. We also discuss with the customer whether, from his point of view, further adaptations or modifications should be made to the vehicle, e.g. different body lighting, additional reels, a different boom, etc..

In order to avoid possible surprises right from the start, the customer is advised of this during the initial consultation and the **MÜLLER** team recommends that sensitive components such as electrical components (terminals, boxes, etc.) be replaced right away.

The **MÜLLER** team then checks what can be done to the vehicle and makes recommendations from the manufacturer's point of view so that an individual offer can then be submitted.

Of course, the economic efficiency is also checked in the interests of the customer and it is discussed whether a complex vehicle overhaul makes sense or whether a new purchase would be more economical in the end.

*„Only when a detailed conversion plan has been drawn up does the **MÜLLER** team get to work. The duration of the work is comparable to that of a new building.*

Every step has to be well thought out“

Once the customer has decided on a vehicle conversion and placed the order with **MÜLLER**, the first step is to arrange an appointment. Often, used vehicles are still in use before the conversion. Due to the need for thorough preparation of the conversion, it cannot simply start right away, even if the customer puts the used vehicle in **MÜLLER's** yard. Rather, as with a new vehicle, an exact schedule must be drawn up. The time factor for a conversion is calculated from the offer and the agreed scope of services. As a rule, one speaks of a period similar to that for a new vehicle plus the dismantling and partial inspection of the old parts of approx. 4-5 months.



A case for M- Bläsing and his specialists.....

As soon as a detailed conversion plan has been drawn up, the complete disassembly of the body and all add-on parts into individual parts can begin. Thorough documentation and archiving of the old parts is urgently required here in order not to lose the overview.

After the body has been dismantled, all individual parts are inspected and put through their paces. This also includes an examination to determine whether there may be any damage to old parts and assemblies that was not yet visible when the bid was submitted. Any significant previously unknown damage is then promptly discussed with the customer and further measures are determined.

If the used vehicle is to be fitted with a new chassis, this will be checked by **MÜLLER's** technical office with regard to its suitability for the existing body. A complete conversion of a used vehicle is carried out in a similar way to a new construction. This means that first the subframe and all pump consoles are renewed. Then all water-carrying parts are overhauled or renewed (HP system, HP pump, ball valves, rotary unions, vacuum system, cassette hose, etc.). Subsequently, all reconditioned old parts are assembled like the required new parts until, after approx. 8-10 weeks, a shell inspection is carried out together with the customer, during which all previous and still required activities are discussed.

„We have the same requirements for conversions in terms of quality and reliability as we do for our new buildings.“

After acceptance of the body shell, the team in the ServiceCenter then dismantles the body shell and paints the individual parts, followed by final assembly. During final assembly, it is also checked whether the hydraulic and pneumatic systems are still state of the art or need to be replaced. It is not unusual for the operator station to be completely renewed and the body control system to be completely overhauled.

After completion of the body, subsequent tests are carried out, the vehicle is presented to the TÜV and the completely overhauled vehicle is delivered to the customer at the **MÜLLER** ServiceCenter. Prior to this, the overhauled vehicle is assigned a new body number and a corresponding vehicle file is created. The vehicle file is transferred to the archive of the **MÜLLER** service team and remains there for the entire service life of the new „old“ vehicle. The achievable vehicle age of rebuilt vehicles in their „second life“ varies between 10 and 25 years. Thus, the service life of a refurbished **MÜLLER** vehicle is in no way inferior to that of a new vehicle. Since **MÜLLER** trusts the quality of its own vehicle conversions, maintenance contracts with all-round carefree support are also offered for used and converted **MÜLLER** vehicles.

In this respect, **MÜLLER** is fully in line with the green trend with this special recycling measure for used vehicles, especially since nothing is wasted and as much as possible is reused. (Keyword: circular economy and resource efficiency).



The new chassis is waiting for its „old“ body!





In Portrait: Joshua Kuffner

Year of birth: 1996

Apprenticeship metal construction
commercial vehicle technology
(2nd chamber winner)
Master Vehicle Construction Metal
since 1.4.2020 Training Manager
currently training as technical
business economist

hobbies: downhill bike soccer,
volunteer fire department



New training Manager in the MÜLLER team!

Training in companies in the metalworking and electrical industries has been undergoing major change for some years now. Demographic change, globalization and digitization in particular are placing new demands on trainees and training companies. Small and medium-sized companies in rural areas in particular have to make a special effort to train young people with an eye to the future. As one of the larger companies in the Schieder-Schwalenberg region and as an internationally successful company in the industry, **MÜLLER** sees itself as having a responsibility to make its own young people as fit as possible for the future.

MÜLLER has been known as a training company for decades, has always cooperated with the responsible IHK Lippe zu Detmold and has always had its own employees on the examination board there. Long ago, **MÜLLER** made the experience that the qualifications of the skilled workers hired from outside

were often insufficient due to high technical requirements in the production of complex wet vehicles, which often required a very long training period. Therefore, it became a tradition at **MÜLLER** to provide training itself. In the meantime, **MÜLLER** has been a training company for many decades for metal workers in commercial vehicle construction, electronics technicians, technical product designers, vehicle painters, industrial clerks, specialists for warehouse logistics and IT specialists for system integration. In addition, various dual courses of study are possible at **MÜLLER** in cooperation with the OWL University of Applied Sciences. Interested candidates can choose between various bachelor's degree courses at the university. This is possible in the subjects of business administration, electrical engineering, logistics, mechanical engineering, mechatronics, production engineering, technical informatics or industrial engineering.

As part of the practical training at the company, theoretical knowledge is taught at the accompanying vocational school. In addition, the trainees at **MÜLLER** take part in weekly company lessons, for which extensive teaching material is available, which corresponds to the product-specific disciplines in the company.

Originally, the so-called factory lessons were introduced by the senior of the family-owned company, Dipl.-Ing. Wolfgang Müller, who also developed the company's own teaching material for the first time. After the death of the senior in 2017, Dipl.-Ing. Johannes Lensdorf took over the supervision of the **MÜLLER** trainees. Johannes Lensdorf finally went into his well-deserved retirement in May 2020 and handed over the position of training manager to Joshua Kuffner beforehand in April 2020.

The 24-year-old Joshua Kuffner began his career at **MÜLLER** with an apprenticeship as a metalworker in commercial vehicle construction and also took part in his senior's legendary factory lessons. He quickly stood out as talented and particularly determined, which is why he joined the vehicle construction department after his apprenticeship. There, in the assembly group responsible for him, he was involved in the construction of more than fifteen vehicles for the English market, among others, but also for German customers such as Remondis, Onyx, etc. He was also involved in the construction of the first vehicle for the German market. He graduated as an industrial foreman in the field of metal at the IHK (Chamber of Industry and Commerce) in Hanover on a full-time basis. He successfully passed his exam on 23.05.2019.

After his predecessor retired, Joshua Kuffner accepted **MÜLLER's** offer on 01 April 2020 and took over the position of training manager. „My predecessor Johannes Lensdorf and especially the senior boss Wolfgang Müller have always treated the trainees with respect,“ says the new trainee boss Kuffner about his predecessors. „I will certainly take over some things from them and not immediately turn everything upside down here,“ says Kuffner, relying on continuity. Incidentally, Kuffner and the management agree on one important criterion when hiring new apprentices. „Contacts on a personal level are very important. We attach great importance to getting to know the young people here directly.



Concentrated expertise and a good connection to the trainees: Joshua Kuffner in action!

Because that is ultimately much more important than many other things. The person is decisive,“ says Kuffner. Kuffner derives his aspirations from the company's philosophy: he wants to create freedom for the trainees and open up prospects. As a personal contact person, he helps when things don't go so well at vocational school. And he is also there to help if there are any questions that go beyond the day-to-day work. Thanks to his close contact with the trainees, Joshua Kuffner knows exactly where the shoe pinches and can advise each of his protégés personally. Kuffner, who teaches the apprentices subjects such as application technology, interface technology, welding technology, etc. in the company's specially created think tank, is particularly proud of the opportunity to carry out special annual trainee projects. This year, an old **MÜLLER** body from 1981 will be completely disassembled, fully refurbished and then reassembled. All the necessary preliminary work, such as a thorough inventory, the preliminary calculation with regard to working time and materials, the preparation of a directional plan and the complete documentation, is carried out completely independently by the trainees. The project is then presented to the entire **MÜLLER** management team in a presentation. Last but not least, the prepared **MÜLLER** superstructure is then permanently exhibited on the company premises.

The quality of training at **MÜLLER** has proven itself for decades. The company considers the training of young people to be an important investment in the future of the company. Every year, **MÜLLER** invests around half a million euros in training. The appointment of the training manager is also an important decision for the future and shows that **MÜLLER** also offers young, ambitious and motivated employees interesting prospects for the future.

Merry Christmas

Coming home for Christmas



No matter what storm is blowing,
no matter what catastrophe is raging,
whatever crisis dominates our lives,
there is always an anchor that gives us support.
For us, this anchor is called family,
whether in our private lives or at work.
It gives support, safety, security, advice and help.

For the coming days we wish you at home
and in the circle of your families a peaceful and relaxing time.

We are always here for you! Stay healthy!
Your MÜLLER Team

