

**WHAT COMES OUT IS  
WHAT'S IMPORTANT ...**

Thermal storage facility and  
flue gas treatment system /  
Emissions and residual  
material

**Page 28**

**GREEN,  
OH SO GREEN ...**

Green electricity from  
waste in accordance with  
the Guarantees of  
Origin Ordinance

**Page 32**

**FAN CULTURE**

Regional solidarity,  
social responsibility  
and commitment

**Page 44**

# We're Always on the Ball

... for environmental protection,  
energy efficiency and security of supply





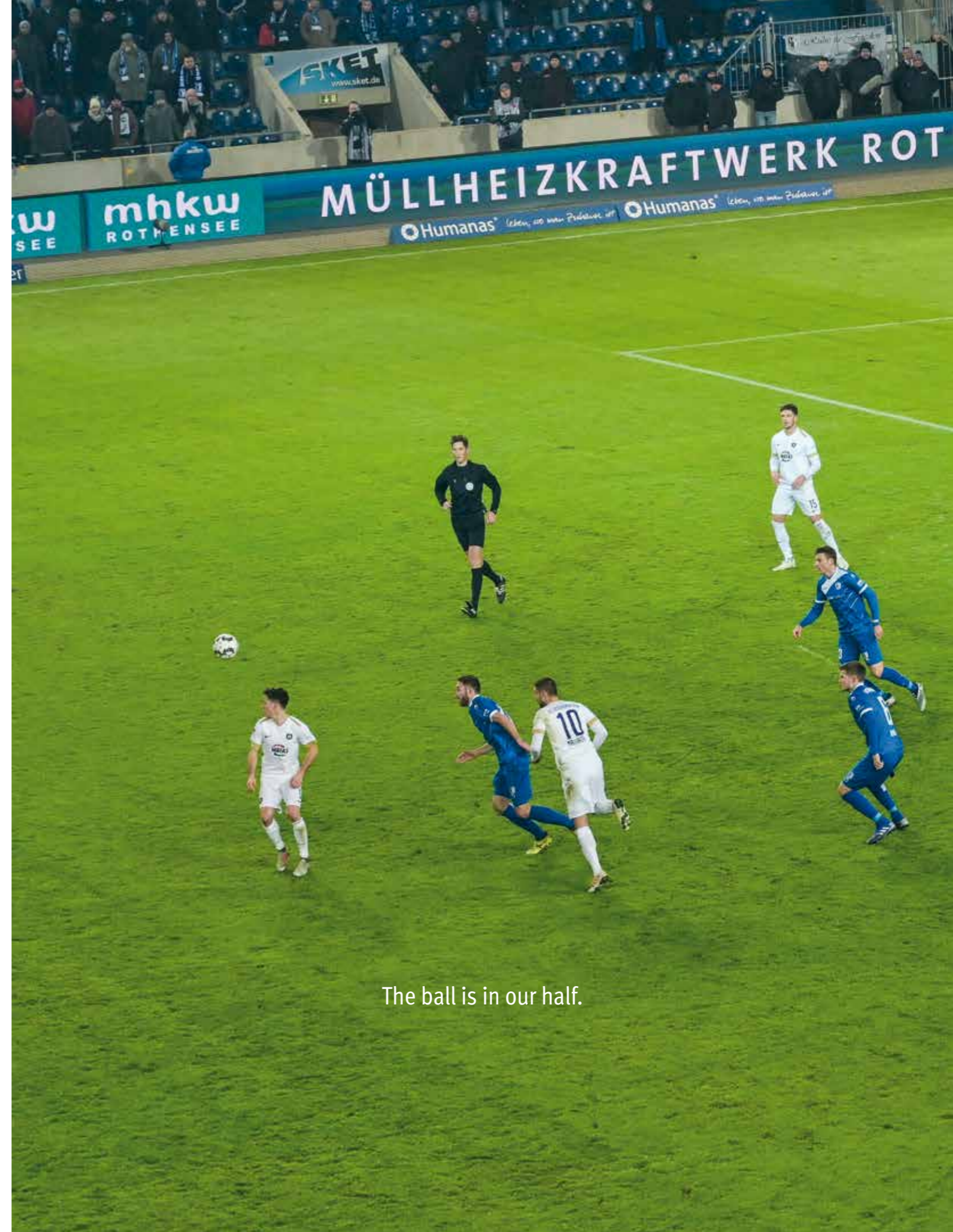
Sponsored by the partners:

**51 %**

EEW Energy from Waste GmbH  
[www.eew-energyfromwaste.com](http://www.eew-energyfromwaste.com)

**49 %**

SWM Städtische Werke Magdeburg GmbH & Co. KG  
[www.sw-magdeburg.de](http://www.sw-magdeburg.de)



The ball is in our half.

06

**THE LINE-UP**

The company and its history, development, data and location /  
The management team /  
The squad – our team players



**KICK-OFF**  
Bringing our ability to the pitch

20



22

**THE TRAINING GROUND**  
The plant and its functions

28

**WHAT COMES OUT IS WHAT'S IMPORTANT ...**  
Thermal storage facility and flue gas treatment system /  
Emissions and residual material

**GREEN, OH SO GREEN ...**  
Green electricity from waste in accordance with the Guarantees of Origin

32



36

**KNOWING WHAT'S IMPORTANT**  
Energy management

**GLOBAL PLAYER**  
At the top of the table in Europe and the world

38

42

**TALENT CENTRE**  
Recruiting and training new all-round talents

44

**FAN CULTURE**  
Regional solidarity,  
social responsibility  
and commitment



**FUTURE AND PROSPECTS**

48





In the dugout (from left): Bernard M. Kemper and Helmut Herdt

A chat with the MHKW shareholders Bernard M. Kemper (BK), Managing Director of EEW Energy from Waste GmbH and Chairman of the MHKW Supervisory Board, and Helmut Herdt (HH), Spokesman of the Management Board of SWM GmbH & Co. KG and Vice-Chairman of the MHKW Supervisory Board

## An Optimal Line-Up

*If you view the performance of MHKW Rothensee from the dugout, how is it going?*

**BK:** The team has found the optimal line-up and the game is going well, with promotion looking very likely.

**HH:** This particularly applies to the shareholder SWM, alongside our reliable fellow partner EEW, because the waste-to-energy plant, the MHKW Rothensee, plays a highly significant role in our work as Magdeburg's public utility company in terms of energy management. We are therefore absolutely delighted with how things have developed here and are full of optimism for the future.

*And when you take a quick look back at the past?*

**BK:** The landfill ban for untreated residual waste was passed by parliament in as early as 1993 but didn't come into force until 2005. In November 2002, in the run-up to the introduction of the ban, we entered into an agreement with the capital city of Magdeburg and the neighbouring Börde and Ohre districts on the disposal of waste in a future waste-to-energy plant. This proved to be an important prerequisite for ensuring that an investment in such a plant would pay off.

**HH:** ... a plant that was designed to replace the gas and oil-fired hot water boiler at the Rothensee location.

Although this boiler did indeed guarantee the operation of Magdeburg's district heating network, it was neither an ecological nor an economical solution. Weighing out the risks and investment costs for a potential waste-to-energy plant in place of the old power plant, searching for expertise and partners, inspecting the site and carrying out checks with regard to approval regulations were just some of the tasks that I tackled with my young colleague Rolf Oesterhoff back then.

**BK:** It's important to know that facilities like these are built to last 40 years, so require painstaking research on needs and utilisation, the market conditions and potential and required waste amounts in advance.

**HH:** We certainly had to acquire sufficient amounts of waste in order to achieve a secure investment concept. Rolf Oesterhoff and I therefore ventured out into the region and persuaded local authorities to get on board. At the same time, we also tried to reach out to local residents, for example by organising information events and inviting citizens of the Rothensee district and its

“Rothenseer Bürger” initiative on bus trips to locations such as Kassel and Hamburg, where similar plants have been in reliable operation for decades, including those situated close to residential areas.

All of these measures were required in order to address and counter reservations...

**BK:** ... which were indeed well-founded.

Back then, Rothensee was already a major industrial location with high levels of environmental pollution. Nowadays, the measurements of emissions from the MHKW are sometimes even below the legally stipulated limit of detection and the emissions from the chimney are cleaner than those from the local traffic.

**HH:** I still have strong memories of the residents' meeting held in the hall of the primary school in Rothensee.

It turned into a rather heated discussion and didn't calm down until I said that I'm a Magdeburg resident just like them and that I live here with my family, my

children and my dog and am therefore committed to the safety of the facility. It was equally important to communicate the growth opportunity that the project represented for the region. And the MHKW has indeed become a nucleus for corporate development on many levels.

**BK:** Trust and acceptance were and still are essential requirements for this success and we have achieved them thanks to our open and transparent approach.

**HH:** Rolf Oesterhoff has also played an extremely important role. He's been part of the project right from the kick-off and personifies this credibility. Would you like to hear another anecdote?

*Of course!*

**HH:** When travelling to destinations throughout the region, we also ended up visiting a landfill operator in the village of Deuben. Our negotiations were dragging on and seemed to have no end in sight, but he had a dog, Else. As I knelt down to Else's level to give her a stroke and started to bond with her, we also made a connection with her owner and found ourselves on the same page, thus enabling us to change his mind and obtain the final oh-so-important signature and contract for the last amount of waste needed to make our plan reality. This all happened around two days before the deadline that we had been set, so without this success, the MHKW in Rothensee would never have existed.

**BK:** So the MHKW in Rothensee is also thanks to Else?

**HH:** Thanks to Else!

**BK:** Since then, the incineration of waste in Rothensee hasn't just been used to dispose of it. The heating value of this non-recyclable residual waste is approximately the same as that of classic brown coal. Nowadays, using this process to generate electricity and heat and create a perfect local energy concept is the most sensible approach around.

**HH:** I am convinced that we made the right decision all those years ago. Sometimes it's worth not settling for the easier solution but instead taking on a greater challenge. It pays off in the long term.

**BK:** And, Mr Herdt, would you say the facility is now a Champions League contender?

**HH:** Without a doubt.

**BK:** The MHKW can hold its own both in the German leagues and on a European level. It's at the top of its game.

*Thanks for the chat!*



Dr. Lutz Trümper, Mayor of Magdeburg,  
the capital city of Saxony-Anhalt

## A Reliable Team-Mate Day in Day Out

“When the landfill ban for untreated household waste came into force in 2005, we had to look for a safe and reliable way to dispose of the waste produced by our city. Our politicians considered a number of different alternatives, including the options of bio-mechanical or thermal waste treatment. We ultimately opted for the construction of a waste-to-energy plant in Rothensee in very close consultation with the residents of the district. The fact that this decision was initially met with scepticism and reservations among the local population is completely understandable and came as no surprise but the results show that we definitely made the right choice. The plant is clean and strictly complies with the statutory rules and requirements without having any negative impact on the city’s air and its residents.

On top of this, the plant conserves resources so also makes perfect sense in ecological terms. It takes 650,000 tons of waste every year and transforms it into heat supplied to 44,000 Magdeburg households.

The plant additionally produces electricity.

I visited the site several times during construction, and also went to the plant after it had opened. Therefore, I have very clear memories of the first time I looked down into the bunker from the cabin of the crane above. Although lorries look big on the road, this one looked like a toy vehicle tipping out its load when compared with the magnitude of the facility. Its dimensions are out of this world.

MHKW Rothensee has been a reliable player in the Magdeburg league ever since its kick-off. It is economically successful, pays its taxes here, trains young talents, creates secure jobs and plays an excellent role as a sponsor. It is important that our city has companies that are committed to supporting local teams and clubs in the worlds of competitive and recreational sport. As you can see, MHKW Rothensee brings a multitude of benefits to the game.”

## A Strong Performance

“As a regional administrative authority under public law, the Börde district is obliged by law to organise and carry out waste disposal activities in its territory. In order to do so, we make use of services in the free market while complying with the strict regulations of public procurement law. According to these regulations, contracts can be awarded to the most economic, and not necessarily the cheapest, bidder.

When the service is provided by a bidder based in the region, this also serves as evidence of a strong local economy.

MHKW Rothensee, which is based directly on the district boundary, has been the Börde district’s reliable partner for the thermal treatment of residual waste by the book since 2005.

I’m delighted to state with full confidence that waste disposal activities between the Börde district and MHKW are a prime example of a smooth and completely non-scandalous process. Our business relations are solid and there are no negative occurrences whatsoever that could threaten to shake them.

In a world that is home to places in which people irresponsibly dump waste in the sea without a second thought, the thermal treatment of residual waste is, alongside the important pillars of “waste avoidance” and “waste separation”, the best and safest alternative here in Germany. On top of that, it also enables us to produce valuable and green energy in the form of electricity and heat.

Like I said, strong companies are important economic factors. They help to keep value creation in the region, which in turn also benefits regional administrative authorities thanks to the generation of taxable revenues, and our people in particular. These companies feel right at home in our district and attract people to the region, bringing employees who settle down and start families here. Strong companies are also excellent providers of vocational training and are dedicated to supporting social projects. In the public sector, such projects involve so-called “voluntary contributions” in areas such as sport, youth and education. These often miss out on support for fiscal reasons connected to the extensive statutory duties facing local authorities. This is precisely why the sponsorship of and support for clubs and associations in the region need more strong companies that feel morally obliged to get behind such causes, just like MHKW Rothensee.”



Martin Stichnoth, District Administrator of the Börde district



The coaching staff (from left): MHKW Managing Directors Rolf Oesterhoff (RO) and Dr Ralf Borghardt (RB)

A half-time chat with the MHKW Managing Directors Rolf Oesterhoff (RO) and Dr Ralf Borghardt (RB)

## We Always Want to Be at the Top of the Table

*Just like in the world of sport, a company like MHKW can only be successful on the pitch if it shows true team spirit.*

**RO:** Definitely! Our team is a well-oiled machine with around 90 professional players in a wide variety of positions and a state-of-the-art ‘training ground’ with sophisticated technology that proves its worth day after day. Our team spirit starts here on the management level. As coaching staff, we work together to push our team to success.

*“Electricity and heat from waste – and the environment benefits” – does this statement still apply today?*

**RO:** Without a doubt. Ever since we first started operations in 2005, our plant has been processing the valuable energy that can be found in waste. We use the heating value of waste to generate electricity and heat. By doing so, we play a role in the energy transition in Saxony-Anhalt and make a significant contribution towards reducing the conventional production of energy

using fossil fuels such as gas and oil, thus helping to lower harmful CO<sub>2</sub> emissions. This is ecological, modern and intelligent.

*Just like the safe disposal of waste?*

**RO:** The law stipulating that landfill sites must be decommissioned in 2005 was all about finding alternative ways to safely dispose of waste. This involved new constructions and active discussions in many different locations, but the topic of safe waste disposal was becoming less of a focus. Nowadays, in a situation in which there is more waste on the market than there are incineration facilities to treat it,

this issue is yet again extremely topical. After all, it’s no longer just about disposing of household waste ...

**RB:** ... but also about its complex quality. The statutory rules and requirements have been tightened and the game is tougher than ever.

**RO:** And that is the challenge: we need to succeed in consistently generating the desired amount of energy from a very non-homogeneous and difficult fuel according to our plans while meeting the high standards with regard to emission limits.

**RB:** In order to achieve this goal, we follow a constant process of plant optimisation and modernisation – steadfast tactics of improvement and renewal. When doing so, we rely on a high degree of automation. Our squad is full of highly qualified team players, including engineers and IT specialists. Making our own efforts to advance topics such as the digitalisation of processes is one of our strong talents.

*Do you want to stay in the league?*

*Or do you want to book a place in the Champions League?*

**RB:** We always want to be at the top of the table and won’t settle for anything less.

**RO:** It’s therefore important and completely right for us to play on a European level. We have customers here in Saxony-Anhalt, in Lower Saxony and even as far away as in England, Ireland and Switzerland. A lot has changed in this area in recent years.

The market is now global, at least when it comes to special waste. We also have customers with high demands, for example the Public Prosecution Department, which rely on us to guarantee the safe and thorough disposal of drugs, illegally imported cigarettes or waste after crime scenes have been cleaned up.

*The competitive situation ...*

**RB:** ... is tougher than ever and more competitors are involved. Our rivals have long since caught up with us. After all, our concept of generating electricity and heat from waste is certainly impressive. We now have to tackle this pressure. The best team wins and in this case, the best team is the one that consistently takes a cost-effective approach and focuses on strategy when thinking ahead and controlling the game.

*Other than a crystal ball, what helps you to make reliable predictions?*

**RO:** (*laughs*) First of all, of course, with experience, expertise and IT ...

**RB:** ... and, just like in the world of football, through contacts. As a team, you need to constantly communicate with all players and stay close to your customer in order to meet their needs and requirements. In order to achieve this, the energy forecast plays a very important role in our business activities. It is a well-known fact that electricity can only be stored in very small quantities. We, however, are interested in working together to adjust the production of both electricity and heat based on consumption values. If we manage to successfully master this game, everyone ends up winning ...

**RO:** ... and we have satisfied customers, which is a valuable asset. After all, our customers form the focus of our work.

**RB:** Exactly. If our customers are our fans, everything is just fine!

*Thanks for the chat!*



Christian Arnold (back left), control room operator  
Dirk Krause (front left), machine technology specialist  
Matthias Weigel (second from left at the front), process engineering specialist and power plant supervisor  
Hendrik Ebel (front right), shift supervisor  
Dirk Bormann (back right), control room operator

Hendrik Ebel

“We work around the clock – not just for 90 minutes like in a football match, but 24 hours a day, 365 days a year.”

“This is where everything comes together – ready to tackle a new match every day.”

Dirk Krause

### The Control Room: Cool Players in a Three-Man Formation

The control room is the area of the power plant in which the facilities are observed, operated and monitored, including the heating plants for Rothensee and Magdeburg

Mitte. The work carried out in the control room includes recording and evaluating data, namely measurement, control, registration, switching, calculating and, in the case of disturbances, raising alarms. Eight colleagues work in the control room during each shift: a shift supervisor, two control room operators, three runners and two crane operators. 42 cameras provide live images of all processes, even those in the incinerators.

“We are a small team on a big pitch.”

Christian Arnold

Mastering all the rules: Just like referees, the men in the control room make sure that the game runs smoothly and no rules are broken.

“There are many unknown factors and many opponents that we have to observe and control. Our job is to ensure that the game runs smoothly.”

Matthias Weigel

### Every Player Gives 100 Percent

“Teamwork is all about every single player bringing their own special individual skills to the pitch so that everything plays out smoothly. While one player is the dribbling expert, another can score a goal, a third member of the team can prevent a goal and another can maybe impress the opponent with their presence alone. It’s just like being at a company where every employee works the best they can and, just like their colleagues, always gives 100 percent. Being part of a team is a very special feeling. After joining FCM, it didn’t take me long to realise that this is a team with a strong bond. If you need help, your team-mates provide it. Private matters stay in the dressing room as they’re not important on the pitch. The most important thing there is trust, knowing that you are all working towards achieving the same goal. This kind of approach can lead to big plays.”



**Dennis Erdmann** was born in the German town of Frechen in 1990 and joined 1. FC Magdeburg in 2017 after previously playing for F.C. Hansa Rostock and Dynamo Dresden. Erdmann is known for his role in stabilising the defence and leading the team, two skills that allowed him to celebrate FC Magdeburg’s promotion to the German second division in his debut season at the club.

**Kerstin Brodmann,**  
Head of the Plant Office and  
waste management engineer

### The Plant Office: the Ultimate All-Rounder



“Although 90 percent of my work here involves dealing with paper documents, these documents form the heart of the entire organisation of the company, a management system that really packs a punch. Every day, we evaluate more than 500 items of data on waste throughput, heating values, energy values, emissions, events and assignments. Our work covers licences, contact with the authorities and occupational health and safety. The best way to put it is that although we don’t wash our teams’ kits, there would be absolute chaos on the pitch without us.”





## Captain of Maintenance

“We support the whole team by covering the entire pitch. The area of maintenance has many areas of application: in mechanical engineering and boiler technology, electrical engineering and process control. We work to guarantee that the plant is fully functional at all times. The fact that it is an automated facility means that the devil is in the detail. Our work involves measuring, controlling, regulating, monitoring and programming activities. In order to do so, we have to explore technology in depth, develop an understanding of the finesse of technology, know the technical processes down to the finest detail and use this as a basis for the optimisation of programming where needed. We help to ensure that everything runs smoothly and functions perfectly across all departments.”

Thomas Deike

## The Maintenance: the process control engineer

“We are specialists, professionals and top athletes who are right up there at the top of a high-class game. Our work involves highly complex and also sophisticated plant components used under high pressures and temperatures. Safety-relevant decisions play an important role in our day-to-day work and we have to keep a cool head while ensuring that they are made quickly and precisely. These moments determine the success of the entire team.”

Denny Seidewitz

Thomas Deike (left), Head of Maintenance, and Denny Seidewitz (right), process control engineer

## The Coaching Adviser

“It’s a common saying that in order to recognise the best opportunities, you have to be aware of the risks. This forms the basis of our responsibility at MHKW. We act as the service department for the management team by giving it the tools that it needs to consider and ultimately make its decisions. We do so by producing and analysing the company’s operating figures. When evaluating such results, we also factor in external influencing variables such as the development of the market and internal factors like day-to-day operations. Based on these considerations, we create scenarios, calculate probabilities and produce forecasts. The main aim of all of these tasks is to recognise the direction in which our company is heading at an early stage: What measures do we need to take? What do we have to do to stay in the league? It’s all about tactics and a solid game strategy. In this sense, we are the advisers for the coaches behind our team, team MHKW.”



Jens Klingemann,  
Head of the Finance/Controlling Department



The club's motto, "EINMAL IMMER" (Once & for always) is right at home in the MDCC Arena

“If our logistics software didn’t work, the lorries would be stuck in a huge queue stretching right back to the main road!”



The flue gas treatment system viewed from the outside – the residual material is taken to a silo via a bucket elevator

**Helge Viererbe,**  
Head of Information Technology,  
IT System Administrator and  
computer scientist

## A Perfect Match

A chat with Helge Viererbe

You are responsible for the entire field of information technology at the waste-to-energy plant, namely data processing including the EDP system, in other words software.

Alongside the administration IT, my work also covers the plant IT and the peripheral technology, from telephones to printers. Electronic data processing in the field of logistics was extremely important at the waste-to-energy plant right from the word go: starting with the recording of data when waste is delivered to the scales through to the logging process when waste is unloaded at the bunker and right through to the settlement of accounts.

A special milestone in this area ...

... was the introduction of paperless weighing at the scales in 2010 and the electronic recording of weighing and delivery data resulting from this development, ...

... which laid the foundation for the second milestone: the Service Portal.

By setting up the portal, we created an information platform that provides registered customers with an abundance of up-to-date process information. Customers can access details on the current status of their disposal quotas or delivery volumes together with statistical evaluations filtered according to dates or materials around the clock.

The portal ensures ...

... perfect cooperation between all parties involved in a give-and-take process. This provides us with a perfect overview that can in turn be used for volume planning and the tracking of data from delivery to storage. It enables us to plan shortfall and surplus volumes commensurate to sales and logistics.

The software came from ...

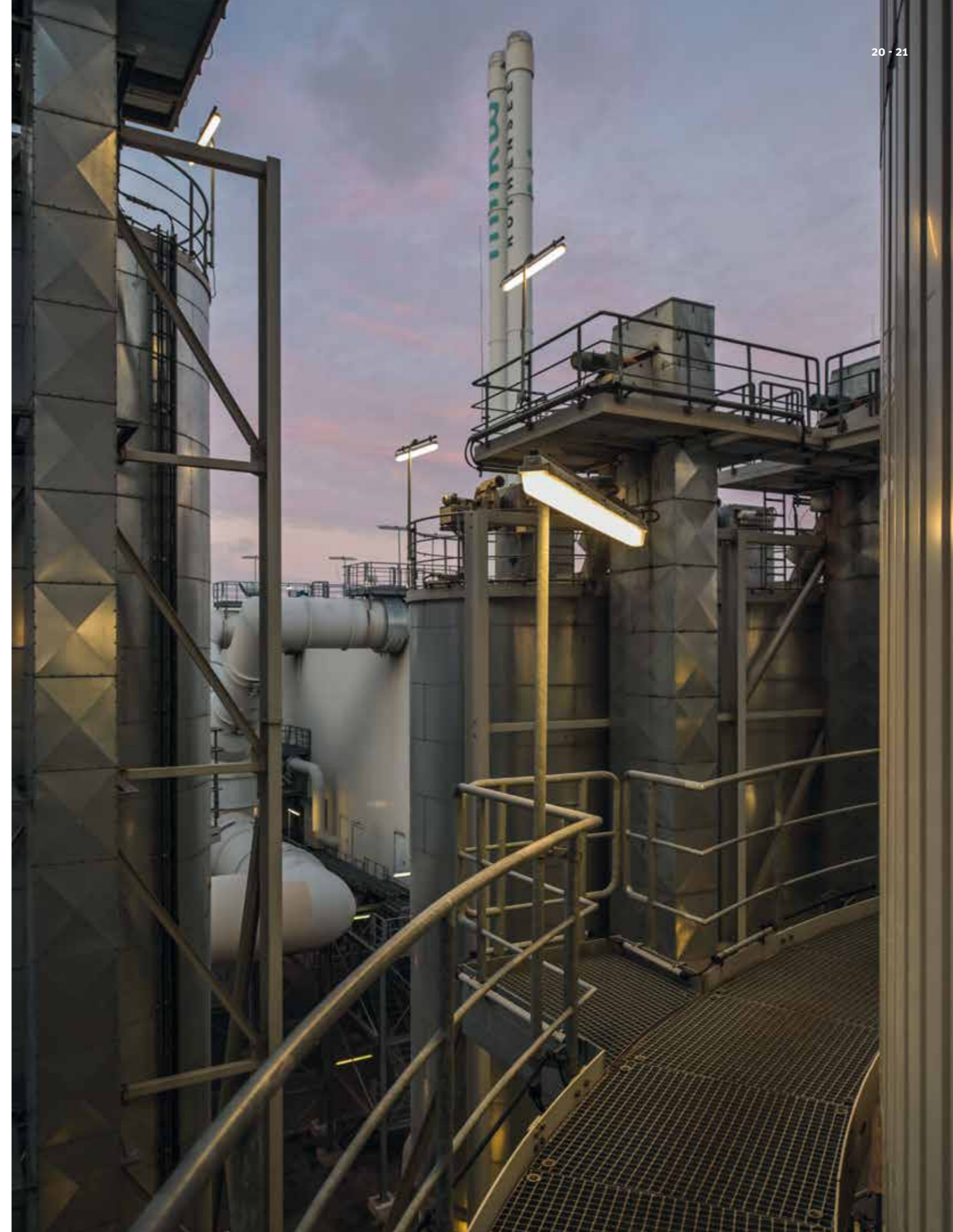
... our company. It was fully developed by MHKW itself and has proven its worth in many years of productive use. This makes us a pioneer among providers in the waste management industry and puts us in a leading role in Germany.

And when it comes to the essential factor of security?

Security is a top priority in my profession and was an essential focus long before the introduction of the European General Data Protection Regulation in May 2018. We not only guarantee security in close cooperation with our shareholders and with the option of accessing their data processing centres but also use standards such as encryption processes, for example login password rotation. One thing’s for sure: it’s important to achieve a balance between transparency and confidentiality because our rivals in the market are also on the ball.

So you play the role of defender in the overall game?

... in order to stop the opponent from scoring? That’s a good image and could easily be applied to copy protection or possible hacker attacks. The main aim of our work is to ensure that everything runs optimally: a perfect match.





Roland Pech, a welding engineer and boiler technology specialist

### A Burning Passion for a Hot Topic: the Greenkeeper

“The ‘grass’ on the pitch on which our day-to-day work plays out can be found inside the plant’s four boilers, which are 40 metres high, 7 metres wide, 5 metres deep and designed to reach temperatures of more than 1000 degrees Celsius. My task is to look after this ‘grass’ just like a greenkeeper, namely by preparing, carrying out and completing follow-up work on the regular boiler inspection – a routine check that is conducted twice a year.

This involves constantly detecting and inspecting damages connected to mechanical and chemical/thermal wear and being responsible for cleaning, repairs, servicing and maintenance. I have a burning passion for this hot topic.”



Chris Wend, weighing specialist in the field of sales and logistics

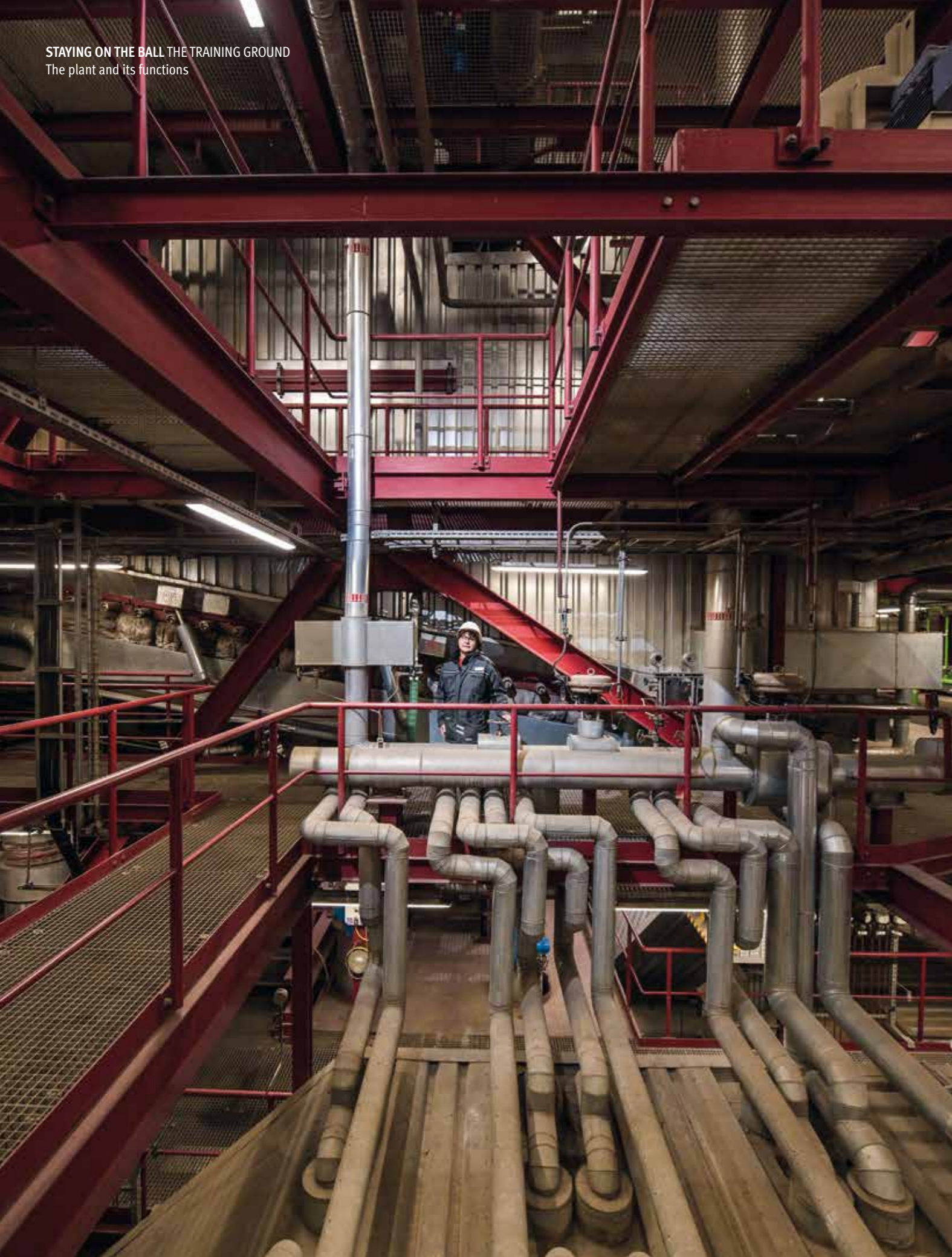
### On the Scales: Always in the Right Position

“Between 200 and 250 lorries arrive at our waste-to-energy plant every day. Once they have been weighed, we have their data in our system and know exactly who has been to our plant, what they have delivered, when they arrived and departed and what type and quantity of waste they supplied. We are also responsible for allocating the drivers a vacant gate at the waste bunker so that they can deliver their load, thus ensuring that the entire delivery process runs smoothly. In order to do, extensive knowledge of waste-related issues is without a doubt an absolute must. We are a small but well-oiled team that works in a two-shift system.

### The Scales

... are located at the entrance leading onto the MHKW site and are the central facility for recording data on the waste delivered. When they arrive at the site, vehicles are weighed. The deliverer and type of waste are then identified and checks are carried out on the cargo documents and the origin of the waste according to the waste disposal documents before the driver is allocated a gate at the waste bunker for the next stage of delivery. Radio MHKW (88.6 MHz FM) is used for communication with the drivers. Information technology has long established itself as an important tool at the weighing facility. Ever since the introduction of paperless weighing in 2010, all weighing and delivery data have been electronically processed and cargo documents have been scanned into the system. Once the required details have been recorded, the assigned process data are available to MHKW for further processing in the system and to the registered customer on the service portal.

Our training comes in the form of a fixed working day with clearly defined working procedures that help to keep us efficient. In fact, it’s very similar to the world of competitive sport, which was my home before joining MHKW.”



Annette Jäger, Head of Operations

## The Captain on the Pitch

“My responsibilities start on the edge of the bunker, where the waste delivered to the plant is fed into the system, and end with the emission of flue gas from the chimney. I am responsible for the fully functional operation of the entire plant technology in the complex: the bunker, the furnace, district heat extraction and electricity generation plus flue gas cleaning. In fact, I deal with all of this four times over when you add the operations at the heating plants here in Rothensee and in the city centre plus the thermal storage facility to the mix. One thing’s for sure: my home ground and training base are about as challenging and sophisticated as it gets!”

“My position is all about acting as the tactical captain, working to ensure that every pass is as smooth as can be and that we can generate district heating and electricity based on consumers’ needs. When it comes to our customers, we guarantee reliable waste disposal, meaning that their waste will be accepted in a smooth and trouble-free process. In my job, quick reaction times are an absolute must and I have to develop new moves and sometimes even make changes to the starting line-up or formation. It’s just like being a captain on the pitch.”

## A Brilliant Concept and a Brilliant Plant

The plant at the MHWK Rothensee is one of the most state-of-the-art facilities of its kind in Germany and is both my home ground and performance centre all rolled into one. Its around 90 employees are absolute professionals in their field of work – highly qualified and highly committed. The brilliant concept: using waste to generate electricity and heat.

The principle?

Surprisingly straightforward! It consistently complies with legislation and is clean, efficient and environmentally friendly: the waste delivered to the plant is collected in the bunkers before crane grabs transport the mixed material onto the incineration grates of the furnaces. After a burn-out time of approx. two hours at 1000°C, all that’s left in the furnace is slag as a residual material. When processed by external companies, this slag can be reused, for example in road construction.

The steam generators use the heat energy of the hot flue gases from the incineration process to produce high-pressure steam. This steam is fed into the turbines, where it uses its energy as kinetic energy to power them. The design of the turbines allows us to obtain both useful heat and mechanical energy that enables the generators to produce electricity at the same time, so-called combined heat and power.

As a result, some of the steam from the turbines can be taken and used to produce district heating. This steam passes through heat exchangers that form part of the district heating network. The heat transferred into the network is then used to heat up the hot water network of the public utility company SWM, based on consumers’ needs and depending on the outdoor temperature. The intermediate storage of any excess heat is possible thanks to the thermal storage facility. The steam that remains in the turbines is used for the generation of electricity, subsequently passing through generators that transform mechanical power into electrical power. The electricity generated is not only used to cover the plant’s own energy needs but also fed into SWM’s municipal grid to be used by the people of Magdeburg.

The flue gases from the incineration lines are initially contaminated with pollutants, so are cleaned in our plants’ flue gas cleaning systems in accordance with the applicable statutory and approval regulations before being released out into the atmosphere. The parameters stipulated for the flues are strictly monitored by the authorities online.

“In times of increasing amounts of waste, the topic of safe and reliable waste disposal is yet again growing in importance. With our team, we work hard every day in order to continue to be a reliable partner for our customers. With a total of 650,000 tons of waste thermally treated in 2017, we are one of the top 5 facilities in Germany.”

We treat waste with a heating value of between 7,200 and 15,000 kJ/kg. The waste-to-energy plant contains 4 incineration lines and has a rated output of 22.0 Mg/h of residual waste per line. The rated thermal input per line is 66.7 MW.



Hydraulic rams provide the fuel required for the incineration process



Andreas Bienert, Division Manager for Network Operations for Gas, Water and Heat Supply at the public utility company SWM GmbH & Co. KG, a water management expert and the man responsible for the hot water storage facility in Magdeburg-Rothensee

## Nine Substitutes

“Although MHKW and Städtische Werke Magdeburg are two different companies, we both share the same profile and interests as suppliers.

We ultimately work in close cooperation to ensure a reliable supply of energy for the city. I am responsible for the hot water storage facility in Rothensee, which is located right on the doorstep of the MHKW site, and I feel just as home here as I do at our headquarters in Magdeburg city centre. And the nine tanks? The tanks are like our substitutes, sitting on the bench and ready to race onto the pitch when needed. They join the team in the case of peak demand and use the heat stored overnight to compensate for any shortages.”

“There aren't many cities in Germany that have an approximately 130-kilometre-long district heating network like that provided by the MHKW in Rothensee, which puts Magdeburg in the extremely convenient situation of being able to supply environmentally friendly heat while achieving CO<sub>2</sub> savings at the same time.”

## The Ultimate Shortage Solution

In November 2016, the MHKW welcomed nine new neighbours in the form of bright and colourful hot water storage towers stretching high up into Magdeburg's blue skies. Together with their heat pumps, the 30-metre-high tanks, which are filled with hot water that can reach temperatures of up to 135 degrees Celsius, form part of the thermal storage facility of the public utility company Städtische Werke Magdeburg (SWM).

In fact, the tanks provide a total of three main advantages by also optimising the city's district heating supply and the production of energy in the MHKW.

### How does it work?

1. The thermal storage tanks, which boast a storage volume of 3500 cubic metres, work like rechargeable batteries: excess heat produced in the MHKW is stored in the facility during the off-peak hours at night so that it can be made available during periods of high consumption (peak demand). If the supply becomes limited, for example in the case of disturbances, breakdowns or revisions to the energy network, the facility is activated and its capacity of more than 250 megawatt hours comes into play, providing heat for around 10,000 Magdeburg households for a period of eight hours.
2. The energy supplied by the thermal storage tanks additionally enables the MHKW to continue its efficient and ecological production of electricity while still providing heat, without requiring any supplementary heating from gas or oil-fired reserve heating plants whatsoever, especially in the case of peak demand.
3. When the weather gets hot, like in the record-breaking summer of 2018, the tanks can be used as additional temporary heat sinks, thus preventing the need for limited operation of the MHKW.

“Our main focus is always to ensure that the plant is fully functional. The money that we earn at the front is put straight back into optimising the processes at the back. So yes, I guess you could call me a defender: nothing comes out of here unless it's allowed to. I prevent impure air from escaping.”

## The Defender: Keeping the Air Pure

“Here at the waste-to-energy plant, we operate four lines in which waste is incinerated. That's our job. Four lines = four flue gas treatment systems in which all harmful substances are eliminated from the gas resulting from the incineration process. On cold days, you can see the purified and clean exhaust gas leaving the chimney as white steam standing out against the blue sky.”

“This air is pure. The purification process is strictly monitored down to the finest detail from the control room. Pollutant concentrations are continuously measured, monitored and reported, with the data recorded being transmitted directly to the Administrative Office of Saxony-Anhalt. Nobody can manipulate anything as it would be detected right away.”



Dirk Schubert, master electrical engineering technician and specialist responsible for the flue gas treatment system in the field of operations

## A Clean Result Metamorphosis: Turning Flue Gas Back into Pure Gas

The waste-to-energy plant wouldn't exist without the flue gas treatment system. The aim: to transform flue gas back into pure gas, namely clean and pollutant-free air for the Rothensee district and the city of Magdeburg. All of the harmful substances produced during the incineration process are reliably filtered out by the system.

### Why does it work? Six reasons:

1. The process ensures that the hot flue gases resulting from the incineration can be safely cleaned
2. A spray absorber uses lime milk to separate harmful acidic gases from the flue gases
3. Activated carbon absorbs substances such as heavy metals, inorganic materials and organic matter
4. A fabric filter is used to collect and separate out the flue dust
5. Seamless pollutant concentration checks
6. Online transfer of information to the responsible regulatory authorities





Dr. Wolfgang Ortlepp, Chairman of the Interessengemeinschaft Rothenseer Bürger e.V. interest group

### Building Trust Over Time

“At the time, of course, many Rothensee residents thought that the construction of the waste-to-energy plant right on their doorsteps would be like coming out of the frying pan and straight into the fire. This is understandable, especially in light of the fact that the district has a deep-rooted industrial history and had only just gotten rid of its old polluters. Over time, however, a close relationship on a strong basis of trust has been established between the plant and the local residents. One of the main factors behind this relationship is the open approach taken by the facility and the fact that visitors are welcome to come and discover the excellent performance of its modern high-tech equipment, especially with regard to compliance with emission limits. We have proven that the air is kept pure and as a result, trust has been established. Another factor is the fact that the “Interessengemeinschaft”, the local interest group, has understood the importance of encouraging MHKW and many other companies based in Rothensee to support the interests of the district, its Christmas market, which has now been running for 15 years, and other local causes and activities. These companies now form an integral part of Rothensee, just like its residents. MHKW is also a reliable partner and neighbour that offers us its support, for example when dealing with flooding, tackling an infestation of Asian long-horned beetle and helping to modernise and extend the district’s school playground and public playground.”

### On the Safe Side

Nowadays, waste management is a climate activist in Germany. According to the German Environment Agency (UBA), a total of around 324 million tons of greenhouse gases (carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) was saved between 1990 and 2015 compared to the levels recorded at the start of the 1990s.\*

#### The reason?

MHKW: The main reasons behind this positive development are the shutting down of landfill sites for untreated municipal waste enforced in 2005 and the start of thermal waste treatment like at the MHKW in Rothensee.

#### The recipe for success?

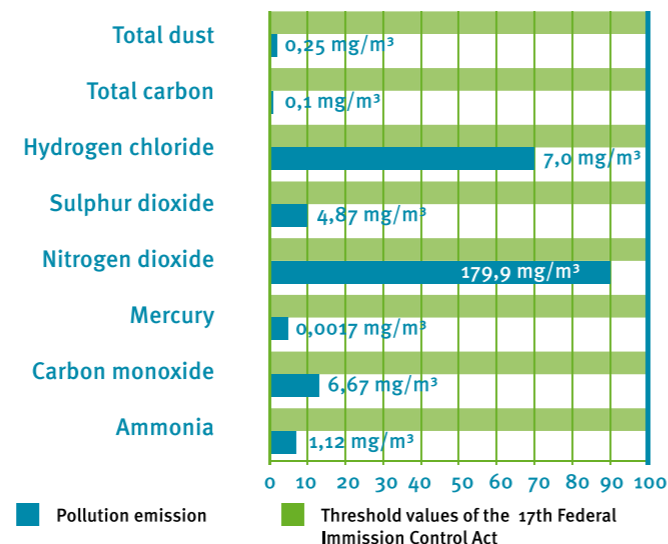
MHKW: High technology combined with finely adjusted flue gas cleaning systems

#### And what about safety?

MHKW: All waste incineration plants in Germany are subject to strict legislation anchored in the German Federal Emission Control Act (BLmSchG) and its regulations. Permanent measurement, constant monitoring and the consistent online transmission of data to the responsible regulatory authority, all of which are subject to strict inspection, ensure safe compliance with the legally stipulated values at all times. This also applies to the MHKW Rothensee, where the emission values are sometimes so low that they can barely be detected.

After all, it's best to be on the safe side.

MHKW pollutant emissions for lines 1 - 4 in 2015



### Obtaining Iron from the Ashes

“We work in an industry that has two image problems: A, it is not very sexy and B, it has the reputation of involving unfair practices. We are very dedicated to contradicting these clichés by providing good and loyal work. Our business activities are anchored in the basic understanding that people should work together in cooperative partnerships, maintain collaborations and help each other.”

“In 2019, STORK is looking back on a track record of 25 years, including its cooperation with MHKW since 2005. In fact, we have been the facility’s slag disposal partner, specialising in obtaining aluminium, copper, steel or high-grade steel – our iron – from the ashes, right from the word go. Loaded with 25 tons of material, our lorries frequently travel between the MHKW and STORK on the Magdeburg-Rothensee industrial site, with the short distance enabling us to avoid traffic and minimise exhaust emissions.”



Maik Franz, aka “Iron Maik” (left), Sporting Director of 1. FC Magdeburg, and Kerstin and Bernd Stork, STORK Umweltdienste GmbH, Magdeburg/Leipzig, headquarters in Magdeburg-Rothensee

### As Hard as Iron: “Iron Maik”

“As a professional football player, I was tough and uncompromising, which is why the Karlsruhe football fans decided to name me ‘Iron Maik’. Nevertheless, being an athlete is equally about taking fairness and loyalty and combining them with experience, fitness, stamina and courage in order to win. The exact same can be said about life in a commercial enterprise: You have to be able to deal with the competition and the pressure and nothing comes for free. If you want to achieve success, you always need a good team that actively promotes the same values. At 1. FC Magdeburg, these values focus on respecting each other and working together as a team on the pitch. Football is all about passion, emotion and commitment with your heart and soul. Football is love.”

Maik Franz was born in Merseburg, Germany, in 1981 and is now the Sporting Director of the football club 1. FC Magdeburg. He retired from professional football in 2015 after playing for clubs such as 1. FC Magdeburg, VfL Wolfsburg, Hertha BSC and Karlsruher SC. Franz also played for the German U-21 national team and represented his country in a total of 19 matches, including at the European Championship in 2004. Franz, who now lives in Magdeburg, still goes by the nickname of “Iron Maik” nowadays, years after ending his active career.

### “Black Gold” in a Grey Disguise

Whatever you burn, one thing’s for sure: you’ll end up with ash. This also applies in the case of waste incineration. The 650,000 tons of waste processed in the MHKW in Rothensee every year not only generate energy for electricity and heat but also produce around 180,000 tons of slag, bottom ash and boiler ash, which are valuable mineral mixtures. We like to call them “black gold” in a grey disguise.

#### What happens to them?

- >> The slags are processed to recycle metals: aluminium, copper, steel and high-grade steel
  - >> The bottom and boiler ash are used as construction materials for road and landfill construction or as filling, packing or sealing material in mining
  - >> The filter dusts are combined with additives to produce new construction materials, for example for stabilising old tunnels in potash mining
- The recycling of the residual material resulting from thermal waste treatment has formed part of the ecological and holistic overall concept of MHKW Rothensee right from the very start.

\*<https://www.umweltbundesamt.de/daten/ressourcen-abfall/klimavertraegliche-abfallwirtschaft#textpart-2> (14.3.2019)



## Getting the Ball in Play: We Ignite the Game.

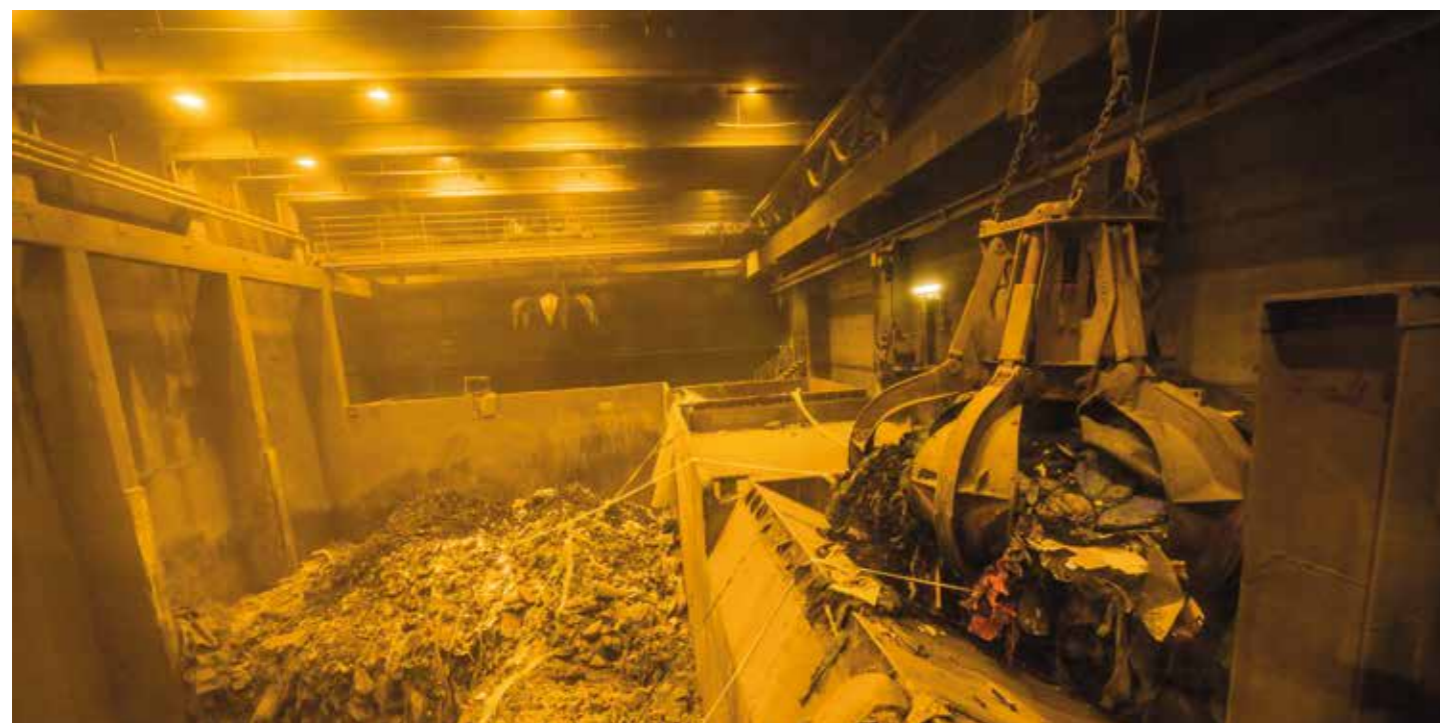
“The waste is delivered to our four bunker gates at a depth of 30 metres. Waste comes in many different shapes, sizes and types.

The waste delivered to our plant is both household and industrial waste, a heterogeneous mix.

For a good firing capacity, the waste needs to be homogeneous. To achieve this, the grabber picks up as much 7.5 tons of waste and distributes it, rotates it, loosens it and aerates it before finally releasing its load into the feeding hopper of the boiler. Up to 500 tons of waste are moved during a shift. My job is to guarantee a smooth and continuous supply of waste and ignition process. I keep the ball rolling.”



Jens Vinzelberg,  
crane operator of the crane cabin in the waste bunker



## Green Electricity

... is ecological electricity obtained from environmentally friendly renewable energies.

Question:

Is electricity generated from waste environmentally friendly and a renewable source of energy as intended by its inventor?

MHKW:

Definitely!

Independent and certified experts regularly examine the waste delivered to the plant in order to determine what percentage of the waste is “biogenic” and therefore renewable. With an average of 50 percent classified as biogenic, half of the electricity generated by the waste-to-energy plant is certified GREEN ELECTRICITY.

The view of the waste bunker  
from the crane cabin

The grabber in the bunker transports  
the waste into the feeding hopper of the boiler

Question:

What exactly are the so-called “Guarantees of Origin” for electricity produced from renewable energies and the register of the same name and what do they involve?

MHKW:

The Guarantees of Origin, which have been required by law since 2013, provide consumers with evidence that the GREEN ELECTRICITY purchased is genuinely obtained from renewable energies. They provide transparent and traceable information on the origin of the electricity and help to avoid double labelling. When compulsory fuel mix disclosure (Section 42 of the German Energy Industry Act (EnWG)) was introduced, the German Environment Agency (UBA) created a register of all energy providers that supply electricity produced from renewable energies.

The GREEN ELECTRICITY from waste generated by MHKW Rothensee can, unlike other renewable energy sources, be produced around the clock (even at night) 365 days a year, whatever the weather and even in the case of lulls in the wind.





Inside the waste bunker when waste is delivered

## Energy Management: Knowing What's Important

Focusing on what's important, recognising opportunities and using strengths are all signs of a good management approach. In these times of energy transition, every company needs to find solutions that enable them to handle electricity and heat more efficiently. By doing so, less becomes more: natural resources are conserved and the climate is actively protected.

MHKW Rothensee has been using an energy management system in compliance with ISO 50001 since January 2017. By following this standard, the company is not only able to systematically and continuously improve its own energy efficiency but is also committed to sustainably reducing its energy consumption and the resulting CO<sub>2</sub> emissions while observing the statutory demands.

Taking a mindful approach when dealing with energy within our own four walls therefore now forms an integral part of our daily working principle and sends out the right message to our service providers and suppliers. It's important to know what's important.



Florian Wellbrock at a training session

### Going with the Flow

“For me, swimming started out as a hobby, then turned into a passion and is now my profession. Magdeburg provides me with optimal training conditions and is home to a strong environment with really good energy. I train ten to eleven times a week and even like to head to the pool at 6:30 am early on a Sunday morning. When working on myself and my technique in order to perfect



Florian Wellbrock was born in the German city of Bremen in 1997 and joined SC Magdeburg at the age of 17 in order to train at one of Germany's two main training centres for long-distance swimming. In summer 2018, he celebrated his first European Championship title in Glasgow, winning the 1500-metre freestyle in a time of 14:36.15 minutes, a new German record.

my movements, achieve maximum efficiency and produce the best possible times day after day, good timing is absolutely essential. In fact, it's a prerequisite for the goal shared by all athletes: making it to the top of the podium. Achieving this goal really is an unbelievable feeling.”

**Gesa Kupferschmidt,**  
Head of the Energy, Climate Protection and Sustainability Department at the Ministry of Environment, Agriculture and Energy of the German Federal State of Saxony-Anhalt

### The Climate Protector

“Saxony-Anhalt has come up with a comprehensive climate and energy concept that summarises all measures that can be taken to reduce and, in the best-case scenario, avoid greenhouse gases that are harmful to the climate, for example carbon dioxide, in the state. By implementing these measures, we ensure that our children have a future.”



“If climate change continues in its current form, it will start to have a stronger impact on life in Saxony-Anhalt. Extreme weather phenomena will become much more common, for example droughts, flooding or storms such as that experienced during this photo shoot. Nobody is safe from these noticeable effects of climate change. Considerations as to how fossil fuels can be avoided in the field of transport lead to the option of electromobility. This is where the waste-to-energy plant comes into play. When it comes to the waste/environment hierarchy, avoiding waste is still the number one priority, followed by recycling. A subsequent focus on the incineration of residual waste that cannot be recycled in order to produce energy without using fossil fuels is a good method. **This electricity is certified in accordance with Section 79 of the German Renewable Energy Sources Act (EEG) and is comprised of at least 50 percent green electricity. Using green electricity for our electromobility puts us on the right path towards achieving transport that is fully decarbonised and therefore involves no carbon whatsoever.** The result: mobility using renewable energies and with no guilty conscience.”



Matthias Wojke (left), Head of Sales and Logistics, and  
Christian Lux, Sales and Logistics Manager

“We are at the top of the table on a European and international level – a global player for both local authorities and private customers. We guarantee completely reliable waste disposal despite the fact that the conditions are constantly changing. The legislative bodies lay out the framework for our work. Within this framework, we work in close consultation with our customers and are fully prepared for the new age of digitalisation. We have ensured that our IT department is well-equipped for the digital future and already digitally record and process all data. We are a prime example of Industry 4.0!”

Matthias Wojke

“Waste is always a major issue and reliability is a valuable asset. Reliable waste disposal is always connected to capacity. Every day, we search for and find solutions for a smooth disposal process. Nevertheless, waste comes in many different shapes, sizes and types. We sometimes face previously unknown challenges in the form of new composite materials, for example in sports attire and equipment. The disposal and recycling of such materials is extremely problematic. In the world of logistics, and therefore also in the waste management industry, the time factor is the all-important component and plays a crucial role. In the MHKW team, we attack and defend at the same time, depending on the situation.”

Christian Lux

## The Global Player

MHKW has now progressed far beyond the youth leagues and secured a place in the Europa and Champions Leagues. The market has changed: the economies are in great shape and waste disposal facilities are in high demand. Nevertheless, the main focus remains the same: “Waste must be properly disposed of with no harmful emissions in accordance with the German Circular Economy Act (KrWG). When doing so, protecting people and the environment should be the top priority.\*

In the process of climate-friendly waste management, MHKW Rothensee is a strong and reliable partner for the city of Magdeburg, the districts of Saxony-Anhalt, the German federal state of Lower Saxony, institutions and major private customers, for example in England, Ireland and Switzerland.

A number of different options are available for the delivery of waste to the plant depending on the customer's transport concept, for example by road or even by ship via the Port of Magdeburg. Our long-standing excellent contacts allow us to make the most of short response times, which in turn enables us to optimally react to day-to-day business and avoid bottlenecks.

**Our team motto:**  
We make waste disposal safe and reliable. And this benefits the environment.

\*<https://www.umweltbundesamt.de/tags/entsorgungspflicht> (26.02.2019)



Matthias (Matze) Musche, left winger at SCM

## Competing with the Best in the World

“The starting line-up?

That clearly depends on each player’s individual performance!

The best players get selected, go out onto the court and give it their all. After all, a team really is only as strong as its weakest link. If everyone is strong, we have a good chance of success. The season is long and hard and everyone pushes themselves to their limits. But it’s not really about the number of goals that you score. You have to win the game, which means successfully preventing your opponent from scoring.

I’m the left winger, so am responsible for speeding up the game and initiating counterattacks. Like any player, I’m obviously proud when I score goals that help my team to secure victory. When we reached the semi-finals of the World Championship, our aim was, of course, to take home a medal. Although we failed to do so, knowing that we are the fourth best team in the world more than makes up for it!

I still can’t stop talking about this unbelievable experience.”

Matthias (Matze) Musche was born in Magdeburg in 1992, fell in love with handball at the age of six and joined the SC Magdeburg handball club in 2000 after previously playing for Fermersleben SV 1895. Musche is the top scorer in Germany’s premier handball league and also plays for the German national team, which narrowly missed out on a medal at the World Handball Championship in 2019, ending up in fourth place.

## A Top International Match

„ANDUSIA develops comprehensive and flexible international supply chains for waste processing. We consider the exportation of waste to be an important environmental task. Up to now, the UK has only offered a minimal incineration capacity, thus making landfilling the only alternative. In our job, we are a global player and compete in the industry’s premier league, just like MHKW Rothensee.

We have been working in a close and reliable contractual relationship with the Magdeburg-based company since 2018 and enjoy collaboration focusing on our shared goals of fair play and a cooperative playing attitude that would satisfy even the strictest of referees. MHKW Rothensee boasts one of the largest and most state-of-the-art waste management facilities in Germany, at which it uses

non-recyclable waste to generate electricity and heat – a game strategy that is su-re to continue to strengthen our partnership in the future. Whatever the ‘referees’ decide when it comes to our country’s foreign affairs, our cooperation will keep standing strong!“

## Top-Länderspiel

„ANDUSIA entwickelt umfassende und flexible internationale Lieferketten für die Abfallverwertung. Abfall zu exportieren, ist für uns eine wichtige Umwelt aufgabe. In UK gibt es bis heute nur geringe Verbrennungskapazitäten, daher bliebe allein die Alternative einer Deponierung. In unserem Job sind wir Global Player und Erstligisten wie das MHKW Rothensee. Mit den Magdeburgern verbindet uns seit 2018 eine enge und zuverlässige Vertragspartnerschaft, die Fairplay und kooperatives, regelkonformes Spielverhalten in den selbstverständlichen Mittelpunkt stellt. Das MHKW Rothensee hält eine der größten und modernsten Entsorgungsanlagen Deutschlands vor, hier entsteht aus nicht mehr verwertbarem Müll Strom und Wärme – eine Spielstrategie, die auch in Zukunft unsere Partnerschaft tragen wird. Egal wie die ‚Schiedsrichter‘ über die außenpolitische Situation unseres Landes entscheiden werden. Die Zusammenarbeit geht weiter!“

Since being founded in 2012, ANDUSIA has progressed to become Great Britain’s leading independent exporter and, as the winner of a “Queen’s Award for Enterprise” in 2016, is an award-winning pioneer in the waste and recycling industry.



Christian Lux, Sales and Logistics Manager skypes with Christopher May, commercial manager, ANDUSIA Holdings Limited, Hertfordshire, UK



**Moritz Hündorf**, sixth-form graduate in his second year of training as an electronics / operating systems technology expert specialising in process control in the field of maintenance, and **Gert Vogt**, instructor, electrician and industrial specialist in the field of maintenance

## A Youth Squad with Career Potential

“MHKW is looking for good workers who are team players with excellent ability and knowledge of the game. My training is going well. I never thought that process control would be my thing but it actually really suits me. I get to work independently and use and improve my skills. The training conditions are also optimal. They give me the opportunity to get to know the entire plant and be part of a great team. Maybe I’ll even end up working as a great striker surrounded by strong midfielders. ... I definitely want to reduce my training period to three years because I’m confident that I can reach my goal in this time.”

Moritz Hündorf

Attracting new players and recruiting young talents is a strategic task that is essential for every company keeping a watchful eye on strong future planning. The transfer market is a challenging environment and the impacts of demographic change have now been making themselves known for quite some time. MHKW Rothensee therefore focuses on offering new substitutes industry-wide training in technical occupations requiring vocational training, for example in the fields of plant technology, electrical engineering and process control and with specialisations right up to the role of plant operator.

This enables us to constantly introduce fresh young talent to our team. Our squad is currently comprised of around 90 players, including engineers, technicians, commercial experts and specialists. As a Champions League company, MHKW Rothensee is an attractive training ground for all-rounders who love their work and are ready and willing to take on responsibility and make decisions both on their own and in close cooperation with their team-mates. Working at our power plant is extreme sport for true professionals.

## The Youth Coach

“When it comes to young talents in the field of maintenance, we’re looking for all-rounders. You have to be able to master everything and for the new members of the team, making up for the lack of experience compared to our older players is a real challenge. That said, our young talents have a significant advantage in that they are more self-confident. They know what they can do and on top of this, they tick plenty of boxes when it comes to digital skills and expertise. They also, however, face a training programme that is much more demanding than in the past. In the field of maintenance, mutual support among players of all ages and experience levels is an absolute must. After all, if a problem occurs, it’s our job to solve it as quickly as possible. Our work is all about rapidly identifying errors and their solutions. In order to do so, we have to work together as a well-trained team, a well-oiled machine. Our training optimally prepares young talents for this challenge.”

Gert Vogt

## Raising our own Young Talents is Good for the Fans, the Club and the City

“The fact that we belong to the largest association in the world, which boasts around seven million members, automatically puts us in the fortunate situation of working in the most popular sport among children in Germany. When it comes to developing young talents, however, we face a real problem, namely working at the highest level. We can only find and attract the right and most talented candidates if we understand how to make the most of our potential. The three stars that we received for the ideal certified training conditions at our performance centre in 2019 are a prime example of this approach.”

Michael Oenning (left) was born in the German town of Coesfeld in 1965 and has been the Head Coach of the football club 1. FC Magdeburg since 14th November 2018.



## Training Is a Team Game

“In year 10 of secondary school, I completed an internship at MHKW Rothensee. My time at the company was so much more exciting than at my previous internship host, where I found the work boring and monotonous. The work here involves a much wider and more interesting range of tasks and activities. I’ve been a big fan of tinkering and tailoring ever since a young age and I am now training as a system mechanic, which is basically another word for a fitter. My first two years at the plant allowed me to acquire basic knowledge in the training workshop. I’m now in my third year and getting to know the operations and the area of maintenance. Although I don’t often get the chance to work fully independently, I always have someone who trusts that I know what I’m doing and watches me as I work. My trainers are all maintenance employees, so the team is my coach.”

Markus Mach (right), a future system mechanics specialist in the field of maintenance currently in his third year of training

## The Fan Representative: an Open Approach

“Transparency creates trust. Be it on an Open Day or in the case of group tours, we want to provide our visitors with an insight into the work carried out at a waste-to-energy plant and show them just how important, exciting and highly topical it is. You don’t have to be a rocket scientist to understand thermal waste treatment.

We simply take waste and use it to produce light and thermal energy.

By doing so, MHKW Rothensee plays a role in the energy transition taking place in Germany.

This is our message and forms an integral part of our fan culture.”



Sabine Böse, Public Relations

In the Internet era, the fan culture also covers portals such as Facebook and Instagram, which the plant uses to communicate with its community of fans on both a local and global level.

It values its intensive contact with its neighbours in the Rothensee district and is involved in a number of projects that aim to make the area more attractive and a better place to live. Such activities include cooperation with secondary schools such as the Sportgymnasium Magdeburg and supporting school projects focusing on waste and waste prevention. MHKW Rothensee even uses its plant as a venue for concerts that provide visitors with a clear and uncomplicated insight into the topics of the energy transition and green electricity. The company’s local involvement also includes sponsoring community organisations such as the Freiwillige Feuerwehr Rothensee voluntary fire brigade, social issues such as those tackled by the disability organisation Lebenshilfe-Werk Magdeburg gGmbH and the “Hospiz im Luisenhaus” hospice run by the organisation Pfeiffersche Stiftungen and associations dedicated to social causes such as Tierisch geborgen e.V., which provides assistance dogs to people in need. As one of the organisers of the annual TASIMA conference held by the municipal waste management society

“Siedlungsabfallwirtschaft Magdeburg”, it additionally facilitates the transfer of knowledge and an exchange of ideas and experience. Last but not least, MHKW Rothensee is also committed to supporting and promoting sport. The company is a big sports fan and a prominent sponsor of the SCM handball club and 1. FCM football club, two major players in the world of sport that act as projection screens, attracting the attention of and forming strong bonds with many sports lovers in and around Magdeburg.



Jasmin Fritz (left) was born in the German city of Halle (Saale) in 1996 and joined the SCM canoeing team in 2009. Her most successful achievements to date: World U23 Double Kayak Champion (together with Nina Krankemann) in Minsk in 2016, 3rd place at both the European Championships and World Championships in 2018. Nina Krankemann (right) was born in Magdeburg in 1995 and joined the SCM canoeing team in 2008. Her most successful achievements to date: European Kayak Single Champion 2018, 4th place at the World Championships in 2018. Both athletes completed their police officer training with the German Federal Police after three and a half years in February 2019. They are now back out on the water with their minds free to focus on their training for their next big goal: the 2020 Olympics in Tokyo.

## In the Same Boat: World-Class Contenders

“What drives me to perform? Having the Olympics in my sights! Once you’ve stood on the podium, you want to experience it again and you know that all of your training was worth it. If I didn’t have this burning ambition, I wouldn’t go out in my canoe in the cold morning temperatures instead of

partying at a festival with my friends. When we’re out on the water as a pair, we are one entity, a team, a formation. In competition, we have to be able to fully rely on each other. The person at the front sets the stroke rate, decides on the tactics and leads us along the course.

You have to be able to trust the person at the back 100 percent and know that you are both giving it your all. After all, you are quite literally in the same boot.”

Jasmin Fritz

Nina Krankemann

“We train here every day, whatever the weather. If you go three days without training, you lose the feel of being on and working with the water. You therefore have to stick to it. Winning the European kayak single title over 1000 metres in 2018 was my first step towards competing in the World Championships. Although I only managed to achieve fourth place in the summer, that makes me the fourth best in the world, plus it provided me with important experience! When working as a team, for example in a double kayak, you get to know your partner’s strengths and weaknesses. You have to find your ‘shared stroke’. You may well have different styles. I, for example, have a fast stroke but my team-mate may be more powerful with their oar. If we want to achieve success, it’s essential that we find a way to work together.”

## One for All and All for One

“Some people probably find it rather strange: going out at night when everyone else is asleep – voluntarily?! But I actually like doing it. I’ve been involved in the voluntary fire brigade ever since I was 15 and it feels like a big family with excellent team spirit: one for all and all for one! Last year alone, we attended a total of 128 alarm calls, including incidents at MHKW Rothensee. Every so often we have to deal with precarious situations in the waste bunker, which normally occur when the waste delivered spontaneously ignites. When this happens, the professional fire brigade also comes to help out. The voluntary fire brigade is a community organisation and therefore depends on sponsorships. In spring 2019, for example, support from MHKW Rothensee enabled us to purchase an infrared camera. The device localises hotspots and is a huge help for us when fighting and preventing fires or searching for missing persons. This year, we are celebrating our 125th anniversary and I’m sure that MHKW will be part of the event – maybe as a sponsor and most definitely as a very welcome guest. We know each other well and help each other out.”



Thomas Rohde, Commander and Chief Fire Officer of the Freiwillige Feuerwehr Rothensee voluntary fire brigade and construction machine operator at the company Stork

## Supporting the Local Hospice

“Every year, MHKW Rothensee teams up with its fellow local companies to host a charity football tournament in support of our hospice. We use the proceeds of the event for services such as our professional therapy sessions for our guests, which we are unable to fund from our current budget.

MHKW has now been a reliable supporter of our cause over the years in what is truly a unique cooperative partnership. Hospices and their services are indeed always closely linked

to society in connection with the question of how we can provide dignified care for people in the final stages of their lives. Anyone who actively addresses this issue helps to raise awareness of our cause and we’re pleased to see it form the focus of a football event at which people are happy and have fun. After all, dying is also part of living.”



## Therapy’s Best Friend

“Our association has now been around for 15 years and currently has around 100 active supporters in Magdeburg and the surrounding region who are working on the implementation of our “Tierisch geborgen” animal-assisted therapy project, the only project of its kind in Germany. Our animal visitation services and animal-assisted therapy sessions at schools, nursery schools, retirement homes, facilities for the disabled, hospitals, hospices or our own therapy centre, which was opened in 2018, provide people who are ill, disabled, elderly or with reduced mobility with new confidence and a zest for life. Dogs often help to build bridges, motivate people and become their new best friend. It always gives me goose bumps when I see how children with severe disorders like Emily are nevertheless able to make progress, train their mobility, fine motor skills and patience and discover the world from a whole new perspective as they grow together with and thanks to our therapy dogs. Our sponsors such as MHKW Rothensee are ambassadors for this positive cause.”

The therapy dog Sam and Stephanie Brehm, a founding member and the Head of the Board of the association “Tierisch geborgen e.V.” and Training Director at the Magdeburg Therapy and Training Centre (TAZ Magdeburg), with Emily Sauermilch



Tabea Friedersdorf, Head of Department at the “Hospiz im Luisenhaus” hospice run by the organisation Pfeiffersche Stiftungen zu Magdeburg





Rolf Oesterhoff, MHKW Managing Director

Rolf Oesterhoff

**Future topic: The Next Generation of Specialists**

“Our demographic planning activities help us to prepare for the situation of the upcoming generational transition. As an attractive employer with very low fluctuation, we place great value on providing optimal and comprehensive training and helping our young talents to achieve qualifications and acquire specialist expertise.

This approach is not only close to our heart in terms of our corporate development but also because it is important for the attractiveness of our city and the surrounding region.”

Rolf Oesterhoff

**Future topic: Sport Sponsorship and Social Commitment**

“We are well-known sponsors of sport in Magdeburg, for example the SCM sports club and 1. FC Magdeburg football club. We are both fans and supporters and regularly attend matches with the knowledge that as a team, just like the staff at our company, we can only achieve success by working together. We are also actively involved in social projects and activities in Magdeburg and support associations and their social commitment in the city.

Such support forms an integral part of our corporate policy and is an important value that we enjoy pursuing.”

**We’re Always on the Ball**

Rolf Oesterhoff & Dr Ralf Borghardt

**Future topic: The Environment**

“We work day in, day out on protecting the environment, disposing of and recycling the waste produced by society in a safe and environmentally friendly manner and processing the energy obtained from this waste. By doing so, we play a role in the energy transition and make an active contribution towards reducing the carbon footprint. While carrying out this work, we equally appeal to every single individual to help to actively avoid waste. Every player around can join this team and share its message.”

Dr Ralf Borghardt

**Future topic: Concepts & Partnerships**

“Stagnation is definitely not for us. We therefore combine the ample opportunities provided by automation, IT and digitalisation to design future-oriented concepts on how to strengthen or increase the size of our business activities: with a high level of market expertise and in close cooperation with strong partners, our shareholders and our customers.”

Rolf Oesterhoff

**Future topic: Investment**

“The challenges involved in the electricity market are getting bigger. It’s important to be able to generate the right amount of electricity at the right time. The SWM thermal storage tanks allow us to always supply a sufficient amount of district heating while still being able to generate the maximum amount of electricity required to deal with times of peak network demand. This is a good example of how we respond to changes in the market and invest in the future.”



Dr Ralf Borghardt

**Future topic: Growth**

“Two topics play a decisive role at our company. A: accepting and incinerating waste and B: marketing the energy obtained from waste incineration. When doing so, we have a major advantage: we can generate and sell both electricity and heat and therefore use the classic combined heat and power (CHP) method. This solid starting position and development situation are the source of our growth and optimisation options for the upcoming years.”

Question: Where do you see MHKW Ronthensee in, let’s say, ten years’ time?

Dr Ralf Borghardt:

“Still standing strong.”

Dr Ralf Borghardt, MHKW Managing Director

## STAYING ON THE BALL

Acknowledgements and Publication Details

WE WOULD PARTICULARLY LIKE TO THANK THE FOLLOWING ORGANISATIONS FOR THEIR SUPPORT:  
Freiwillige Feuerwehr Rothensee, Tierisch geborgen e.V., Hospiz im Luisenhaus der Pfeifferschen Stiftungen, IG Rothenseer Bürger e.V., SC Magdeburg e.V., 1. FC Magdeburg, City of Magdeburg, Börde District and Ministry of Environment, Agriculture and Energy of the German Federal State of Saxony-Anhalt

## PUBLICATION DETAILS

PUBLISHER: Müllheizkraftwerk Rothensee GmbH, Chairman of the Supervisory Board: Bernard M. Kemper, Managing Director: Rolf Oesterhoff, Kraftwerk-Privatweg 7, 39126 Magdeburg, Germany, tel. +49 391 5872534, fax +49 391 5871764, info@mhkw-rothensee.de, www.mhkw-rothensee.de | IDEA & CONCEPT: punktpixelstrich – Büro für Gestaltung, Jana Ignatius, www.punktpixelstrich.de | DESIGN: www.punktpixelstrich.de | PICTURE CREDITS: Nilz Böhme, Leitzkau, www.nilzboehme.de; Cover: fotolia©hanohiki | TEXTS & EDITING: Cornelia Heller, Magdeburg, www.die-biografen.de | TRANSLATION: itkplus, Meschede, www.itkplus.de | PRINTING: Salzland Druck GmbH & Co. KG, Staßfurt | PRINT RUN: 1000 (English) | LAST UPDATED: May 2019 | The information provided in this brochure was correct and up to date when the publication went to press. The publisher accepts no responsibility for the correctness and completeness of this publication.

**#stayingontheball**