

ROBERT KÖRNER, HEAD OF DIVISION MARKETING & STRATEGIC SALES AT WEHRLE, SHOWS US THE SOLUTIONS HIS COMPANY OFFERS TO THE WATER TREATMENT SECTOR

WEHRLE is synonymous with turnkey solutions for environmental technologies.

With more than 350 references in more than 45 countries throughout the 5 continents, they guarantee their experience as an engineering company, technology supplier and service provider for the treatment of high-load wastewater and waste recovery.

Robert Körner, Head of Division Marketing & Strategic Sales, tells us about the solutions WEHRLE offers to the water treatment industry.

Robert, what has been the history of WEHRLE from its birth in 1860 to the present day, 160 years later?

Wehrle started small, as a locksmith workshop, but grew fast, actually on brewery equipment – a big market in Germany at that time. Steam boilers played a big role here, and steam boilers became important in the early 1900s for power plants and in the late 1900s for waste incineration plants. When handling waste, you also have to consider the leachate. So, WEHRLE built the first big-scale Membrane Bioreactors for leachate treatment already in 1990, the begin of a new success story – especially when you consider that many of these early plants are still in operation today! Other ground-breaking innovations followed. Today, our company, who is still run by the founder's family, now in the 6th generation, has established itself as technology leader for the treatment of complex wastewaters.

In general, what are your company's main business lines in the water treatment sector?

The biggest business line is still the treatment of leachate and other waste derived effluents, e.g. wastewater from MBT plants, digestate or even pig manure. But we have other fast-growing business lines where our high-performance technology offers unique benefits to the clients. For the industrial sector we do not only provide the effluent treatment, here we can also offer all steps of water re-use and recycling, up to ZLD (zero liquid discharge) solutions, as well as material recovery or biogas generation from wastewater. The main benefits are that our plants automatically adapt to the typical fluctuations in flow and concentration of industrial effluent, require very little space on the factory ground and, most important, are of a modular design that can grow with the needs. This way, our clients can focus on their growth plans and do not need to worry so much about effluent treatment limitations.

What kind of products and solutions do you offer and how do they work on the processes?

I believe our most important product is our process knowledge and the experience of our engineers about different applications and effluent sources. Depending on the task at hand we combine treatment processes in a way that does the job and considers other customer requirements, for example possible future upgrade plans for water re-use. Even though we offer a wide range of technologies, in retrospective we see that most of our plants include our BIOMEMBRAT® Membrane Bioreactor (MBR). This is because this technology is a real working horse and offers the benefits that most operators like: reliability, simple operation and predictable low operation costs. Often the

MBR is combined with different pre-treatment and polishing technologies, such as Nanofiltration, Reverse Osmosis, Activated Carbon or Evaporators, you name it. Especially for municipal sewage treatment plants we also have with our BIOMOX® technology a continuous flow treatment process for the return liquor from the digestion towers. For this customer group we also build small-size, decentralized sewage sludge incineration plants – a business field that is currently going through the roof in Europe.

In the treatment of industrial waste water, what are the sectors with which you usually work?

This is a very important question, as every industrial sector has its own typical wastewater and treatment requirements. For pharmaceutical producers we build plants that safely take out active pharmaceutical ingredients from their effluents, producers of household and personal care products have a difficult effluent to treat – which is our specialty, petrochemical plants have complex molecules in their effluent that can be digested by the right set of microorganisms, the dairy industry has a huge variety of effluents, but is often challenged with COD peaks – something our technology is adapted to cope with. And so on. We even work with clients that have toxic wastewaters and we find ways to treat them biologically. More and more we sell plant upgrades for water re-use, this seems to become an important application as it helps many companies in many parts of the world to reduce their dependency on external water supply.

Robert, in which countries are you currently established and with what kind of projects and solutions?

Our Headquarter is in the South-West of Germany, we have subsidiaries in Spain, UK, Switzerland and are currently founding new ones in Russia and Malaysia. In many other countries we work either directly or with established partners that can work very close to our clients. With our wastewater treatment plants we are also being ‘pulled’ into many countries, be it for a Dairy effluent treatment to New Zealand, leachate treatment to Columbia, pig manure treatment to Sakhalin island in Eastern Russia, Whiskey distilleries in Scotland, pharmaceutical in Singapore or even to Mauritius where we regain resources from wastewater in the Sugar industry. It is quite uncommon for a relatively small German plant builder to get that much around, but this is because we can offer something that local wastewater treatment suppliers cannot offer.

In the short term, how is your company and its workers dealing with the current health crisis caused by the Coronavirus?

In a very professional way, I can say. We have some colleagues that are working from home, but are very closely connected to the colleagues in the offices. Our manufacturing and service teams are working in shifts to reduce risk of infection. Purchasing is doing a marvellous job to secure supply lines whilst our Sales team is helping clients to secure theirs. Marketing and Research & Development are using these times for new ideas and concepts. We see our responsibility as a “system-relevant” supplier and plant operator and we also make use of the time to improve our position.

In the long term, what are WEHRLE's expectations for the next decade in terms of projects, works, developments, R&D, etc.?

We are established in the growing business fields of waste treatment, wastewater treatment and water re-use. For many applications in these business fields we are the technology leader and offer cutting edge treatment concepts to our clients. Especially for clients from the industry, that want to focus on producing things rather than on treating effluents or waste, we have convincing solutions helping them to reduce their water and carbon footprint in an uncomplicated and future-proof way. We expect the demands for these applications to rise and we are already there to offer proven

solutions.

In the same time our ongoing innovations widen the portfolio we can offer here, be it material recovery from industrial effluents or phosphorus from sewage ash, that can be used as a fertilizer. Our Research & Development teams have several amazing things coming up that will also open new doors and offer new solutions to industries.

Finally, Robert, which of the projects carried out by your company in recent years do you feel particularly proud of because of their importance and significance?

As most of the projects WEHRLE is doing are somewhat non-standard, this is quite difficult to answer. On top of my head I could name one of our latest projects where we treat something simple as municipal sewage, but in a city called Pevek in the Arctic Circle of Northern Siberia at extreme ambient temperature levels, certainly not a standard solution. In Thailand we just built a plant that treats a fierce combination of leachate and different industrial effluents together and in England we just helped a biodiesel producer to recover water from three very different effluent streams that keep changing their composition. In Germany we will start to build our first decentralized sewage incineration plants that will be a milestone for this application in Europe.

In Spain it is probably the leachate treatment plant in Bilbao, where we treated round about 8 million cubic meters of very difficult biodegradable leachate in the last 15 years since its commissioning.

ABOUT WEHRLE UMWELT

For more than 35 years WEHRLE has been setting benchmarks as pioneer and technology leader for the treatment of very complex (waste)waters, such as landfill leachate or industrial effluents.

The wide range of available process technologies allows intelligent process combinations under comprehensive consideration of investment and operating costs, to fulfil the requirements and expectations of the client in the best possible way. WEHRLE consults, plans and builds plants and offers corresponding services such as Water Mapping, laboratory tests, piloting, efficiency optimization, retrofit of existing plants up to full plant operation. The WEHRLE employees are dedicated to the company's history: as a 100% family-owned company in the 5th, 6th and 7th generation reliability, longevity and openness towards clients and partners are the top priorities. The clients of WEHRLE trust in this philosophy – in over 40 countries and on 5 continents.

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