

DORTMUND? WHY NOT?

Pump manufacturer Wilo shows that the right strategy
can make any site attractive.

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Dr. Markus Beukenberg, Chief Technology
Officer of Wilo SE. His company is a
successful worldwide producer of pump
systems for buildings, water management,
and industry.

Dortmund. In the midst of the Ruhr district, deep in western Germany. The name evokes images of abandoned industrial sites from the age of coal mining and steel production. And of soccer—the Borussia Dortmund club, of course. Less likely to jump to mind are associations with high-tech production or the Internet of Things. But the Wilo pump-making company, which is a strong local supporter of Dortmund, is intent on changing that.

The company is currently investing more than one hundred million euros in a completely new campus that will produce pumps for private households and industry. What leads a company to invest such enormous sums in a high-wage location like Germany? And in Dortmund, of all places.

“Many people have the wrong impression of the Ruhr district, one that’s still full of smoking chimneys and heaps of coal. But the area is very green. And the notion that its inhabitants are leaving in droves is also wrong. Not too many people are aware of the fact that Dortmund is actually growing. In fact, it is once again the biggest city in the Ruhr district, with a population of more than 600,000,” says Dr. Markus Beukenberg, Chief Technical Officer of the Wilo Group. Beukenberg came to the Ruhr district twenty years ago from southern Germany, although he was born in Lower Saxony. He has warmed to the region and its inhabitants—they might seem at little curt at first, but they are also known for being honest and direct. Precisely these people are one of the main reasons behind Wilo’s loyalty to its location.

MAJOR RESOURCE: EXPERTISE

“Of course we could have built a site from scratch somewhere else. Other companies are heading to best-cost countries like Romania, Bulgaria, and Hungary,” notes Beukenberg. “The fact that we’re investing here has to do with our objectives. We want to be the leader in technology in our sector, not only with our products but also with our production processes. And for that we need people with the right expertise.” The Ruhr District, with its high density of research centers, is

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ideal. “Moreover, Dortmund is home to places like the Fraunhofer Institute for Material Flow and Logistics plus numerous universities that study production engineering and train new people. That is very important to us. There are 50,000 students in Dortmund alone. And we obviously want to recruit the well-educated people who are already here.”

PIONEERING WORK IN THE PUMP INDUSTRY

With 7,500 employees, Wilo is a large medium-sized company that has to compete for skilled workers with heavyweights such as car makers. Its new construction project can help. “A factory this modern is quite appealing,” observes Beukenberg. “Many highly educated people want to work with the latest technologies.” In addition, its work stations are more ergonomic and attractive than those in the older buildings at Wilo’s main site. “Our production facilities still have some less than optimal spots that are too cold, warm, or loud.” That will change. In their place, people and robots will soon be working together in a cutting-edge environment. →



More than 5 million people live in the metropolitan area around the Rhine and Ruhr rivers.



CTO Markus Beukenberg (left) talks with Porsche consultant Christian Fiebig. Wilo’s headquarters are just a few meters from old industrial structures built to mine coal and produce steel.



Part of life: Wilo board member Markus Beukenberg likes the Ruhr district's culture, such as its small neighborhood kiosks.

Wilo has resolved to become the digital pioneer in its sector. "That's also why we're working with Porsche Consulting," says Beukenberg. Wilo wants to make itself fit for digitization, which meant starting with its core processes. "The single most important thing was to make people realize that our status quo can improve in many areas. This new approach was also and especially needed among the management staff." A visit to the Porsche plant in Leipzig was an eye-opener for many of them. "That helped," says Beukenberg, "but we still need to keep changing our way of thinking."

Wilo was able to apply lessons from the sports-car maker to its own future. "We're introducing modularization to all of our new products," explains Beukenberg. "That being said, many things are not directly comparable. We offer everything from a single unit to four million, from highly individualized products to mass production. So some of our methods differ considerably from those in the automotive industry." Wilo's most common product is a

circulation pump for heating systems. Around 40 million of them are installed in heating systems in Germany alone—which is roughly the number of private households in the country. At the other extreme, the company also makes pumps for power stations—individual large-scale units that weigh tons.

PUMPS ARE LEARNING TO SPEAK

Whether small or large, the pumps themselves are becoming digital. "We brought the first pumps for smart homes onto the market," says Beukenberg. "And as far as we're concerned, there's no turning back. All of our products will have this type of technology in the future. They will use the Internet of Things to communicate with objects around them and process information about their environments." Wilo wants to stay connected with its pumps, so it can gather valuable information about how they are used. "This will benefit our customers. And we will be able to raise our performance levels well beyond what is possible today. For example, have you ever met a pump

that you can update to the latest level of technology?" One day pumps will call mechanics themselves when they need servicing—and Wilo is not far from making such products.

Given the speed at which products are changing, flexibility was a major factor in constructing the company's new facilities. "We don't yet know what exactly we will be making in five, ten, or fifteen years," says Beukenberg. "That's why we're building a factory that can be modified with ease. We've avoided anything that cannot be dismantled, for example." So there are no set individual foundations for large machinery. But, as Beukenberg notes, "It's not hard to change the layout of the floor slabs throughout."

By the way, Wilo did not base its construction project on any previous model. "We're doing things no one in our sector has done before. If you break new ground, you have to create your own structures," says Beukenberg. And that fits in very well with the Ruhr district, which is also engaged in creating itself anew. ←

THE WILO CAMPUS

The Wilo Group has been growing for years. In 2016 it posted sales of 1.3 billion euros. The Dortmund headquarters of this globally active company has been expanded a number of times in the past. Some of its buildings from the 1950s would have required major work to bring them up to the latest standards. So in 2014 the company decided to erect a completely new facility. "We were fortunate in being able to acquire the property directly across from us," says Chief Technical Officer Markus Beukenberg. Construction started there in October of 2016.

Wilo spared no effort to remain at its home location. "We're building our new plant in a former mining area. There are all manner of old shafts and galleries under the surface." Comprehensive soil remediation was needed before construction work could even begin.

The campus is expected to be finished in 2020. A lot of preparation still needs to be done. "We're not just moving our existing production over there. The new buildings are only shells. The really new structures will be on the inside," says Beukenberg. New processes are being tested and employees are being trained in parallel to normal operations. That requires a lot of commitment on the part of the workforce. But the prospect of high-tech production clearly has a motivating effect.

"In addition to the production processes, we're also changing our offices." Wilo is introducing a completely new model that allows work to be done independently of time or place. "These are dramatic changes that affect everyone, including the board members," adds Beukenberg. But he is looking forward to Wilo's innovations in Dortmund, which will also be setting standards for the company's other sites worldwide.



Wilo is making a triple-digit million-euro investment in its Dortmund headquarters. The new company campus will be completed in 2020.