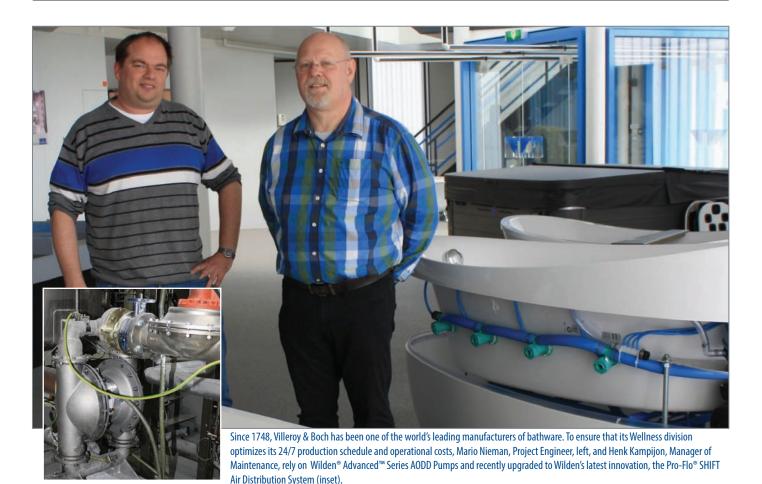
An Historic Partnership

VILLEROY & BOCH ENHANCES ITS 267-YEAR HISTORY AS A LEADING PROVIDER OF BATHWARE WITH THE ASSISTANCE OF INNOVATIVE PRO-FLO® SHIFT AODD PUMPS FROM WILDEN®



It was 1748 when Francois Boch and his three sons decided to open a pottery company in the small French village of Audun le Tiche. To illustrate just how long ago that really was, Boch's company celebrated its 40th anniversary the year before the French Revolution began in 1789. In other words, the odds of a company that was created 267 years ago still being in business today are astronomical.

But that little pottery manufacturer beat those odds and is still surviving and thriving today—though not without some significant changes. For instance, in 1801 the company headquarters were relocated to Mettlach, Germany, where they remain today and, most significantly, in 1836 Francois Boch's company merged with Nicolas Villeroy's competitive outfit and became known as Villeroy & Boch.

Today, the Villeroy & Boch name is known worldwide and its brand of ceramics, housewares, tableware and bathware

is available in 125 countries, with global sales exceeding €766 million (\$1.01 billion) in 2014. Helping Villeroy & Boch meet the global demand for its products is a network of 14 production facilities located strategically in Europe, Mexico and Thailand.

QUICK FACTS

Company: Villeroy & Boch

Location: Roden, The Netherlands **Market:** Bath and Wellness

Distributor: Holland Air Pumps, Oirschot, The Netherlands **Challenge:** Villeroy & Boch needed reliable pumps to transfer

base polymers and optimize 24/7 production

schedule at its Wellness plant.

Solution: *Wilden® Advanced™ Series Pro-Flo® SHIFT AODD*

Pumps and Almatec® CHEMICOR Series AODD Pumps

The Heart Of The System

One of Villeroy & Boch's most critical facilities is the Wellness plant located in Roden, The Netherlands. It is there that the company manufactures various bath and wellness products, such as shower floors, whirlpools and bathtubs for the worldwide consumer market.

The plant personnel at the Wellness facility are busy making its various products 24 hours a day, seven days a week. It is a production cycle that cannot be altered, with any delays due to equipment failures or breakdowns resulting in downtime that can mean added costs and lost revenue.

"Everything in this plant needs to be working 24 hours, seven days a week," said Mario Nieman, Project Engineer for the Wellness operation. "If something breaks down the entire factory comes to a standstill with a lot of added costs. So, we must have reliable systems and if we don't we have a lot of problems, a lot of expensive troubles."

Specifically, the pumps used to transfer the various raw materials needed to manufacture Villeroy & Boch's wellness products must possess the ability to operate reliably during continuous-duty operations. For 20 years, Villeroy & Boch has been relying on Wilden® Advanced Series™ (bolted) Metal Air-Operated Double-Diaphragm (AODD) Pumps to perform these critical tasks. Supplying the pumps to Villeroy & Boch is Holland Air Pumps, Oirschot, The Netherlands, an exclusive distributor of Wilden pumps in Western Europe.

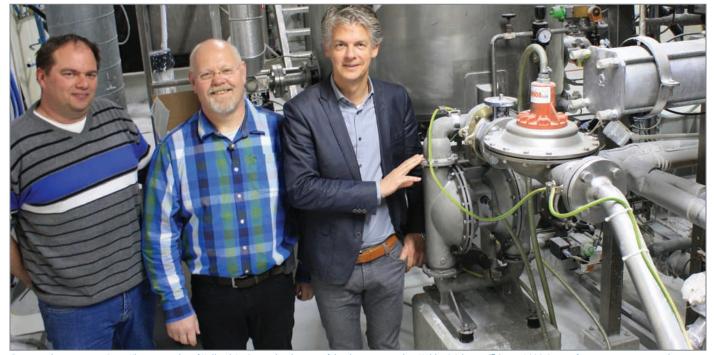
Part of PSG®, a Dover company, and manufactured in PSG's Grand Terrace, CA, USA, facility, Wilden invented AODDpump technology in 1955 and has spent the ensuing six decades establishing itself as the world's leading brand of AODD pumps.

"We have good cooperation with Holland Air Pumps and Wilden," said Henk Kampijon, Manager of Maintenance for the Wellness plant. "If I call Holland Air Pumps today, then tomorrow I have spare parts. The relationship with Holland Air Pumps and Wilden is wonderful; they are helpful, confident, do what they say, and that's what we need."

To say that the Wellness facility's operation would grind to a halt without a Wilden pump would be an understatement. One of the plant's key activities is pumping base polymer to various production areas where it is needed to produce various styles of bathtubs, and shower floors. Every drop of the base polymer that travels through the plant finds its way through a single Wilden Advanced Series metal pump.

"That is the heart of our company," said Kampijon. "If this pump goes down, then we have a lot of problems and no more production. This pump runs 24/7 and it is reliable, and it is necessary that it is reliable. It's pumping all of the materials around the company, feeding many different machines."

The Wilden pump is not only reliably delivering the polymer where it needs to go all day, every day, but it is also doing it safely.



For more than 20 years, Gerrit Klaassen, right, of Holland Air Pumps has been confidently recommending Wilden® Advanced™ Series AODD Pumps for various continuous-duty pumping operations to Mario Nieman, left, and Henk Kampijon of Villeroy & Boch's Wellness division in The Netherlands.



"The safety at this company is very important and that's another reason we have Wilden ATEX pumps," continued Kampijon. "It's very necessary to create a safe atmosphere for all of the people working here. We don't have any problems with the Wilden pumps, no leakage, no spills."

The Best—And Getting Better

While Villeroy & Boch is undeniably committed to Wilden pumps, the company is also pragmatic, meaning that when it can find a way to save production or operational costs, it will. Fortunately, Wilden is also constantly on the lookout for ways to improve the operational characteristics of its pumps.

Wilden's latest innovation was released in June of 2013. Known as the Pro-Flo® SHIFT, it is an AODD-pump air distribution system (ADS) that effectively eliminates the main hiccup in AODD-pump operation, namely the air that is wasted at the end of each stroke. The Pro-Flo SHIFT accomplishes this by incorporating an air control spool that automatically meters the air to prevent overfilling at the end of the stroke—with no corresponding reduction in product yield.

Holland Air Pumps and its Commercial Director, Gerrit Klaassen, introduced Kampijon and Nieman to the Pro-Flo SHIFT ADS technology in 2013—and it was virtually love at first sight.



and has recently taken advantage of Wilden's latest innovation by installing the new Pro-Flo® SHIFT ADS on all of its existing pumps. The result is the same reliable performance with a significant decrease in air consumption and operating costs.



Reliability is a key characteristic of the Wilden* Advanced* Series AODD Pumps as a single pump is required to pump base polymers to 11 different machines around the clock in Villeroy & Boch's Wellness manufacturing operation.

"For the Pro-Flo SHIFT, Holland Air Pumps showed us what the savings could be in our particular situation," said Nieman. "They made a very good case, showing us the actual pump and showed us that we could make an annual €5.000 (\$6,200) a year in savings with quite a small investment. The return on investment is three months and that is a very short return on an investment period for any pump."

Kampijon's reaction was more succinct—and incredulous: "Is this true? We said, 'Is this true?' It is a great savings."

Immediately sold on the financial and operational benefits of the Pro-Flo SHIFT, Nieman and Kampijon have had the revolutionary new ADS installed on all of the existing Wilden pumps in the Wellness plant.

"I think the Pro-Flo SHIFT also makes the pump's construction better, it's not over-expanding the membranes (diaphragms)," said Nieman. "At the end of the cycle, the air pressure is always getting lower and not putting that much stress on the membranes at a critical point, so we expect to have less maintenance costs. The Pro-Flo SHIFT also makes the pump somewhat quieter because at the end of the cycle there's less strain, less pressure; it sounds better."

Joining the fleet of 15 Wilden pumps on the plant floor are three CHEMICOR Series AODD Pumps from Almatec®. Like Wilden, Almatec is a leading brand from PSG®, Oakbrook Terrace, IL, USA. Almatec AODD pumps are manufactured in PSG's Kamp-Lintfort, Germany, facility. Used to pump oils and color pastes for Villeroy & Boch, the CHEMICOR pumps feature a solid-block plastic design with soft product chambers that deliver smooth product flow with no dead spaces.

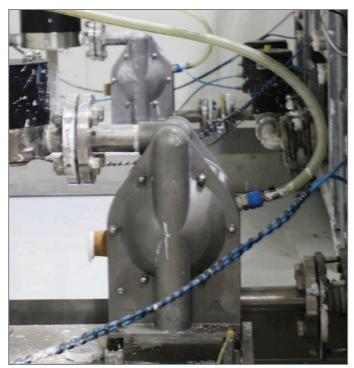
"We have three Almatec pumps that have been in operation for 20 years and they are also very reliable," said Kampijon. "You can also hear when the pump is running that they are very quiet."

Conclusion

For a manufacturing company to remain viable for more than two-and-a-half centuries it must successfully identify and implement the equipment and systems that help it most effectively conduct its operations, with the end goal being the creation of products that the consuming public will continue to purchase. That company must also constantly look for ways to improve the efficiencies within its operations.

Two decades ago, Villeroy & Boch decided that Wilden AODD pumps were the ideal pump technology for the production operations at its Wellness facility. The partnership with Wilden continues to pay dividends because Wilden is also a company that does not rest on its laurels and is continuously looking for ways to improve its products. The Pro-Flo SHIFT is the latest invention that is setting a new standard in AODD-pump operation, and Villeroy & Boch is reaping the benefits of Wilden's innovative spirit.

"Wilden is always doing a lot of modifications on its pumps, and now they have the Pro-Flo SHIFT, which brings a lot of savings to the operation," said Kampijon. "We've been using Wilden pumps here for 20 years and we have had a very good experience with them. We have no problems and they always work very well."



Villeroy & Boch utilizes three Almatec® CHEMICOR Series AODD Pumps to transfer various oils and color pastes at its Wellness plant.



wildenpump.com

PSG 22069 Van Buren Street Grand Terrace, CA 92313-5607 USA T: (909) 422-1730 / F: (909) 783-3440

