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A BREWERY FOR THE ISLAND... NEW COMPONENT – A COMPACT AND ROBUST SOLENOID INTERLOCK

Safety in a production environment is everything. Belgian business BW Procestechniek has been using Schmersal's safety components to hermetically seal the hatches on its brewing tanks for many years. When constructing a new brewery for Heineken on the island of La Réunion, the company opted for an innovative solution in the form of the AZM40, the world's smallest electronic solenoid interlock.

BW Procestechniek N.V. is a fledgling company based in Lier, Belgium, around ten kilometres to the east of Antwerp, specialising in the manufacture of production equipment. The 'BW' in 'BW Procestechniek' stands for Borsbeekse Werkhuizen, where the company has its origins. The company started out thirty years ago in the town of Borsbeek, operating as a local technology company for the food-processing industry. Over the years, it has begun to focus specifically on brewing technology. It now counts national and international breweries amongst its regular customers. 'It's a unique world in which our experience and flexibility really help to make a difference,' explains Project Manager Bart Courtens. 'We've been operating from Lier since 2013 as Borsbeek didn't have any space left for expansion. The move gave us the flexibility to take on larger projects as well.'



Fig. 1: The AZM40 from Schmersal is the world's smallest electronic solenoid interlock, helping to ensure securing interlocking on tank hatches.

A brewery for the island of La Réunion

A good example of a larger project is the new brewery that BW Procestechniek is currently constructing for Heineken. 'It's a complete brewery with malt processing - one of the largest projects we've worked on so far,' explains Courtens. The brewery is bound for Saint Denis on the island of La Réunion and is being designed to supply between 100 and 120 hl of beer per brew. Why did an international enterprise like Heineken choose to work with a medium-sized company from Belgium? 'We retrofitted the current brewery for them in 2008, installing new valves, pipelines and automation. We had anticipated a service life of five years for those components, but it actually ended up being double that, which gave us an edge in the tender. We were familiar with the situation on the ground as well, of course. The project was ultimately guite the puzzle, as we had to install the system in a narrow building over several floors.'

AZM40 solenoid interlock

The brewery system was initially set up in Lier to allow Heineken to approve and accept. A special new component in the system is the interlock – after all, safety is very much at the top of Heineken's agenda. Courtens continues, 'The traditional solenoid interlock that we use in our projects works to the slot principle, which requires constant alignment of the valve to the tank, as there is only very little space in which the components can engage correctly. If you're not very careful when using it, you'll cause damage.' The new AZM40 solenoid interlock, which Schmersal launched very recently, proved the ideal choice.

A robust and compact alternative

The AZM40 is the world's smallest electronic solenoid interlock. Despite its compact dimensions, this solenoid interlock has a very high holding force of 2000 N, making it suitable for applications requiring hermetic locking. 'What I liked particularly during the demo by Johan Van den Broeck of Schmersal Belgium was the design. The interlock looks more compact and more robust when you first see it. The larger magnetic contact surface provides more tolerance in case of misalignment and yet still provides safety. In addition, the AZM40 offers more options too. With its angular flexibility, the interlock can be mounted in different ways, depending on the space that there is available. Cooperation with Schmersal has also been smooth since the very outset. The only "problem" was how long we had to wait for the official market launch of the new solenoid interlock,' adds Courtens, with a wink



Fig. 2: Bart Courtens (BW Procestechniek): 'Although this was our first experience with this technology, the installation was as problem-free as it could be thanks to the multitude of installation options'



Fig. 3: The brewery for Saint Denis on the island of La Réunion will supply between 100 and 120 hl of beer per brew.

Ease of installation

A total of twelve AZM40 solenoid interlocks will be integrated into Heineken's new brewery. 'Although this was our first experience with this technology, and a first for Belgium too, the installation was as problem-free as it could be thanks to the multitude of installation options,' explains Courtens. 'Our industry actually needs very few safety components overall. But we know who to go to to get them. I think that we might need to take a closer look at Schmersal's range of products to see if there are any other improvements we can make in what we use.'

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