

INDUTECH 2017

Pumps and pipes, valves and water in the limelight

INDUTECH 2017 ran from 17 to 19 May at the Gallagher Convention Centre, Johannesburg with a special focus on the pumps, valves and pipes (PVP) sector in sub-Saharan Africa. Pumps, Valves and Pipes Africa 2017 is the 10th edition of this large and comprehensive tradeshow dedicated to the industries that are involved in the conveyance of liquids, gasses and slurries.

INDUTECH also hosted two key industry conferences over the three days: PVP Live and WaterTec, both endorsed by the Department of Trade & Industry (dti).

Kamagelo Mampane, Chairman of the State Owned Entities Procurement Forum (SOEPF), was unequivocal in his enthusiasm and positive focus on the vital role it plays in both ensuring economic purchases for the public sector combined with positive support for local business. He was one of the panelists for the session overcoming local industry challenges at the first day of the PVP Live 2017 conference programme, where he explained the vital balance between successful production but also ensuring job opportunities for local people. "People want to be involved, they ask 'what can we do?' and in that way they can be integrated into the supply chain. It's about collaboration."

Reducing the pressure, simplified

During one of the PVP Live sessions, Peter Telle, of Ultra Control Valves, shared that leaks are a part of every water supply system in the world, but in southern Africa these losses pose a threat to future water security. Reducing the pressure, especially during low demand, can offer huge savings – on both the essential resource itself and in financial terms, he told his audience. Pressure reducing valves (PRV) are the natural choice but can only really operate at a 3:1 ratio (reducing pressure for example from 12 bar to 4), but sometimes that's not enough, he explained. He said there are four or five brands in South Africa, some operate by a timer, others by detecting changes in demand. They cost around R50,000 (\$3,700) but they are maintenance intensive and Telle noted "too complicated" for local conditions. "When the automated valve starts playing up, often engineers simply disconnect them, which is a costly loss," he said.

He explained to the delegates how to increase the reduction in pressure above the 3:1 ratio; PRVs can be run in series, theoretically offering 9x reduction in pressure. "But that can encourage cavitation," he said. Cavitation is the formation of bubbles or cavities in liquid. These develop in areas of relatively low pressure around an impeller. As these bubbles collapse, they trigger forces within the pump, causing significant damage to the impeller and/or the pump housing.

A simpler system could work well in Africa to reduce water loss through leaks and he showed the audience a new acquired ratio valve (ARV) with no controls and a Maric flow valve, which is able to operate with soiled water. He showed how they operated successfully in large buildings, ensuring adequate water flow but offering huge savings from high-rise buildings and hotels to street level properties.



CLOCKWISE FROM TOP LEFT. Peter Telle of Ultra Control Valves; "This transport box would take more weight, but I don't want to damage the exhibition hall floor," says Jan Vreken, Kimmo managing director; Kamagelo Mampane, Chairman of the State Owned Entities Procurement Forum.

Paper products at a pumps and valves trade show?

Not everyone at INDUTECH 2017 was exhibiting pumps, valves and pipes: one smart business was targeting the transport sector with some of the strongest cardboard boxes in the world. KIMMO, which counts some of the world's leading names amongst its clients, offers a solution to traditional wooden crates that is cheaper and stronger. "The cardboard honeycomb is amazingly strong, it's lightweight and offers huge advantages compared with traditional transportation," said Jan Vreken, KIMMO Managing Director.

The South African company has an enviable list of clients and saw an opportunity at INDUTECH to meet both visitors to the expo, and the exhibitors themselves. "I'd rather be the sole cardboard box exhibitor at a show like this where our transport solution is a real benefit, than one of dozens at a transport show," said Jan, smiling. He agreed to be photographed on top of a 600kg paper roll, perched on a pallet, which had its total weight borne by the honeycombed cardboard crate. "It would take more weight, but I don't want to damage the exhibition hall floor," he said.

KIMMO has been operating for 10 years and turned its attention to the honeycomb version three years ago. ■