ABEL changes hands

Earlier this year, **IDEX Corp** acquired **ABEL Pumps** and certain of its affiliates from Hillenbrand Inc as it looked to gain further exposure to the positive displacement pump designer and manufacturer's end markets – one of which is mining.

IDEX Chief Executive Officer and President, Eric Ashleman, said the company looked forward to ABEL's expertise complementing the longstanding strength IDEX had in pump and valve manufacturing within its Fluid and Metering Technologies segment.

"As part of our great team, together we will further expand our abilities to solve customers' toughest fluidics challenges," he said.

ABEL's diaphragm and high-pressure piston pumps serve harsh, demanding applications involving abrasive or corrosive substances and fluids with high solids content. Its administration office and manufacturing plant are in Büchen, Germany, with sales and service locations in Madrid and Pittsburgh.

Speaking of diaphragm pumps, ABEL's HMQ series pumps have stood the test of time at a Latin America-based gold, silver and copper producer, helping transfer tailings over a distance of some 2,000 m for close to six years.

In the lead-up to the installation in 2015, the underground silver mine had been growing production, reaching up to 2,300 t/d. At the same time, the company had been focusing on reducing operating costs and improving production processes.

To achieve efficient tailings transport, it was necessary to provide the mine with a pump technology capable of transporting the thickened tailings with the highest possible solid content. Piston-diaphragm technology appeared to be the best option to tackle this task, ABEL said.

The installed equipment also needed to guarantee maximum operating availability.

"Any unexpected downtime or interruption would be costly, causing the mine treatment line volume requirements not to be met as its supply would be interrupted," ABEL added.

The transfer of tailings to this new reservoir using 8 in (203 mm) piping amounted to some 2,000 m, with a preliminary basic engineering technical study proposing the installation of a chain of centrifugal pumps arranged in series to tackle the high-pressure fluctuations of the pumping application.

"As an alternative to this proposal, ABEL examined the value proposition for the client and recommended installing only one single piston-diaphragm pump (HMQ series)," the company said.

Since the main objective was to ensure maximum availability of the system, as well as provide the lowest possible consumption of resources, ABEL's proposal was selected as being the best solution for the process, it said.

The ABEL HMQ pump in question handles a product flow rate of 150 cu.m/h with 70% solid content and ensures a discharge pressure of 22 bar (maximum design pressure of 60 bar). These pumping parameters are met with a power consumption of less than 100 kW (maximum 250 kW at 60 bar), in accordance with the customer's efficiency requisites required on all its projects.

"The ABEL piston-diaphragm technology offers peak operating versatility and maximises efficiency levels for any given operation parameters – ie fluctuations of pumping properties (solid content, viscosity of the mixture, flow rate, product density) do not impact the operating efficiency of the pump," ABEL said.

The ABEL pump was installed and commissioned in mid-August 2015 and has been in continuously operation since.

The ABEL HMQ piston-diaphragm pump was installed and commissioned in mid-August 2015 at the Latin America underground silver mine and has been in continuously operation since