

Industry: Cement

Product: Larox Flowsys Peristaltic Pump (LPP)

Process Application: Autoclaved Areated Concrete (AAC)

Process Conditions	
Specific Gravity	1.3 – 1.6
Solids Content	30 %
Temperature	40 – 60 °C
Medium	Abrasive

## LPPs Save Time and Money

*Celcon-owned H+H Siporex is a leading producer of aircrete in Northern Europe and the UK. The key raw materials of Autoclaved Areated Concrete (AAC) are lime and quartz sand. Incorporating a new operating principle, the robust LPP65 had provided H+H Siporex with a perfect solution for their demanding and abrasive slurry duty.*

## Larox Flowsys in the Process

Together with furnace slurry, the raw materials of AAC are fed to a ball mill prior to being mixed together in reactors. From these reactors the abrasive slurry mixture is then pumped to a storage tank for further processing.

The pumping of this slurry is a demanding task. Previously used and tested conventional hose and centrifugal pumps proved unsuccessful resulting in high maintenance costs, reduced maintenance intervals and frequent bin repair.

In this application, the LPP pump normally operates from 20 to 22 hours per day with a pumping speed of 36 rpm and a flow rate of 11.5. m<sup>3</sup>/h at 3 bar pressure. The LPP pump is equipped with a 5.5. kW motor and a hose leak detector.



Following successful test results, H+H Siporex decided to replace the existing conventional hose pump with an LPP40 for their mineral saw dust slurry pumping. In this part of the process, the aicrete elements are cut to the final dimension in a wire-cutting platform. The resulting scrap material drops to a mix tank below where the scrap particles are wetted, turned into a slurry and pumped back to a 27 meter high storage tank.

Operated with an inverter, the LPP pump is controlled with a level switch in the mix tank. The LPP empties this 3.5 m<sup>2</sup> tank during the sawing process. The specific gravity of the saw dust slurry is between 1.3 – 1.6 and the process requires a flow of 4.5 m<sup>3</sup>/h.

### Flowsheet: Autoclaved Areated Concrete (AAC)

