



## APEX hose pumps replace progressive cavity (PC) pumps for bentonite metering

- PC pumps subject to wear in abrasive application
- Bredel APEX15 pumps prove far more durable than PC pumps

Umgeni Water, a major waterworks in South Africa is benefitting from replacing PC pumps with Bredel APEX15 hose pumps for metering of bentonite into the source water to help flocculation.

Bentonite is a crystalline quartz (naturally occurring) clay product. The abrasive nature of the substance can cause costly damage to the PC pumps, a factor that is not encountered when using APEX technology.

### No blockages or abrasive wear

Conventional treatment methods for removal of suspended and colloidal material from water include chemical coagulation of small colloidal particles and flocculation of the small particles to form larger flocs or aggregates.

Bentonite is added when the water to be flocculated contains too few particles for effective flocculation.

Several Umgeni Water plants have experienced difficulties with their PC pumps as a result of bentonite metering, which typically take place once a month on average. Upon start-up, the PC pumps will immediately run dry due to the properties of bentonite. Suction lines can sometimes become blocked and the pump stator is subject to damage.







## Improved reliability

The application sees bentonite offloaded into a 3000 litre holding tank and then mixed. The abrasive liquid is then pumped so that the solids are kept in suspension. Importantly, the two APEX15 hose pumps can be reversed if blockages are encountered, then run in the correct direction again once clear.

Designed to suit all metering and transfer applications from 2.8 to 6200 litre/hr flow across a broad range of applications, APEX pumps are now the first choice for processing plants worldwide. Offering a robust and compact direct-coupled design, these innovative hose pumps are engineered for uptime and process continuity.

*To learn more about our solutions for your applications please contact your local sales company:*

**[wmftg.com/global](http://wmftg.com/global)**



**WATSON  
MARLOW**

Fluid Technology Group