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CHEMICAL

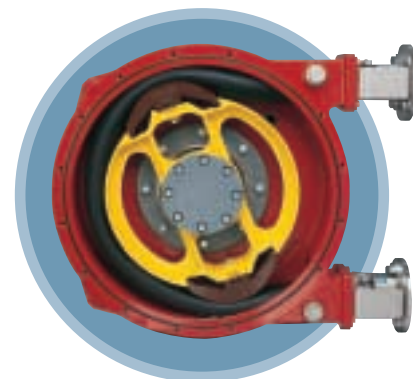
Improve your Process



Prevention of chemical attack and leakage ...

The chemical industry places high demands on pumps which are vital to uninterrupted production and health and safety compliance. Fluid containment and pump chemical compatibility are essential. Peristaltic pumps from Watson-Marlow Bredel provide process improvements and cost savings to the industry by:

- **Extensive chemical compatibility**
- **Total fluid containment with no seals**
- **Greater accuracy and repeatability**
- **Extended pump life and reduced maintenance**
- **Continuous dry-running and self-priming capability**



sodium hypochlorite, titanium dioxide, calcium hydroxide, plating solution, catalytic agents, trichloroethane mix, sulphuric acid solution, lime slurry, acidic liquors, solvents and resins

... to give confident plant operation ...

Chemical compatibility

Any compromise in pump material selection will result in pitting and corrosion, leading to rapid reduction in performance and eventual failure. Watson-Marlow Bredel offer a range of tube materials to ensure chemical compatibility with your fluid. Reliability and longer life give significant production benefits and reduce maintenance costs.

Total fluid containment

Fluid containment and control of emissions are vital. Dry-running, abrasives or solids can cause failure in mechanical seals even with expensive flush systems, or magnetic drive couplings. Watson-Marlow Bredel pumps have no seals and the fluid is totally contained within the tube, ensuring maximum uptime and improved operational safety.

Continuous dry-running and self-priming

Watson-Marlow Bredel pumps have a clear flow path, can run dry indefinitely, and self prime up to 9.5 metres. The risk of gas locking or blockage is eliminated, and pump flexibility allows easy, low cost installation and guaranteed performance.

Greater accuracy

Watson-Marlow Bredel pumps provide high accuracy in dosing, metering and transfer applications. They are true positive displacement pumps with no siphoning or slip, providing accuracy and repeatability up to $\pm 0.5\%$, regardless of fluid viscosity changes. Accurate dosing ensures economical use of expensive chemicals and correct system performance.

Extended pump life and reduced maintenance

Pump failure during production can be costly and hazardous. Watson-Marlow Bredel pumps have no seals, valves, diaphragms, glands, immersed rotors or pistons to leak, clog, corrode and replace. They are virtually maintenance free.



In a treatment plant designed to process legacy intermediate level radioactive waste, four high pressure hose pumps are used to dewater the sludge prior its cement encapsulation and packaging into drums.

... using a design to meet chemical users specifications ...

Watson-Marlow Bredel pumps are designed for the chemical industry. The low shear peristaltic action is created by compressing the tube element between rotating rollers. In between each pass of a roller, the element recovers to create a vacuum and draws in fluid. This means the pump is self-priming and dry-running. This simple dynamic effect requires no seals or valves and the fluid is totally contained within the tube element, separated from the pump. No other positive displacement pump offers this unique separation of pump and fluid. Watson-Marlow Bredel pumps clearly outperform other pump types, such as centrifugal, gear, diaphragm, progressive cavity or lobe, which rely on seals and valves for their operation.

The Watson-Marlow Bredel pump range provides flow rates from microlitres per minute to 80 cubic metres per hour and pressures up to 16 bar with fixed, variable, flameproof, and air operated drives, and comprehensive control options, enable pumps to be configured to your requirements.



... and expert advice to give the best system and installation ...

For perfect results, experienced selection and installation advice is essential. A Watson-Marlow Bredel engineer based close to you will carry out a full consultation to ensure we understand your precise needs, and select a suitable pump with clear benefits and payback. That same engineer will be there to support your installation and ensure you are completely satisfied.

Projects Engineer

"I like the fitness for the job. The pumps are excellent; they perform very well with very little maintenance"

Works Engineer

"You can rely on them from the pumps to the technical backup. It's an overall package I know I can rely on"

Technical Support Manager

"They're very reliable, hard wearing, consistent and accurate. A very good industrial pump"

... to deliver the promised results.

Confidence in your pumps' performance is paramount. Watson-Marlow Bredel pumps have gained the markets confidence and provided the operational and cost benefits required.



The pumped material in this application meant that its safe containment was of upmost importance, as was the need to keep pump maintenance to an absolute minimum. The fact that the SPX pumps can cope with solids laden and process streams made them ideal for the harsh nuclear environment.



Pump Series

Flow Rates

Put a peristaltic in your process Improve your performance

- 100
- 200
- 300
- 400
- 500
- 600
- 700
- 800
- SPX
- Tubing
Hoses

- 101F/R
- 205S/CA
- 323E/D
- 401U/D1
- 505S/R
- 620S/R
- 704U/R
- 825
- SPX40
- Tubing



At Watson-Marlow Bredel ...

We engineer our winning performance – we don't just turn up the speed. 60% fewer occlusions than our competitors for the same flow means 2½ times the tube life.

- Pumps, pumpheads and tubing last longer
- There's less downtime, fewer failures – and less maintenance
- In the unlikely event of a problem, next-day delivery keeps your production rolling
- Our products are recognised for quality, reliability and performance, backed by a three-year guarantee

So the best pump really does cost less. Call us for the proof. It all adds up to – *Value for life*