

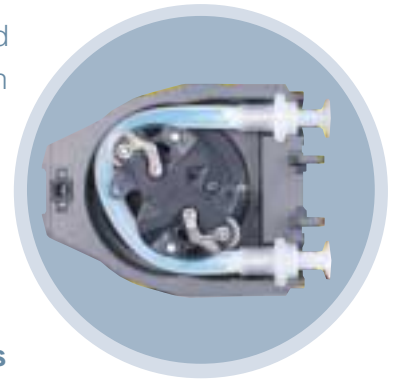
# PAINTS and PIGMENTS

Improve your Process



# Eliminate product waste and downtime ...

Paints and pigments are difficult to handle and can cause premature wear and failure to traditional pumps. Downtime and lost production are not affordable in a competitive market and manufacturers have to reduce costs in these vital areas. Peristaltic pumps from Watson-Marlow Bredel provide the opportunity for cost savings and more reliable processes by:



- **Greater pump life and reliability**
- **Total product containment**
- **Smooth low shear flow**
- **High resistance to abrasive products**
- **Superior accuracy and repeatability**

## ... with total reliability ...

### Greater reliability

Pump failure during production cannot be tolerated. Traditional pump operation relies on seals, valves, diaphragms, rotors, stators or pistons working within the pumped fluid. These components are prone to wear, leakage, clogging and breakdown during production. Watson-Marlow Bredel pumps' robust design uses none of these components. Pump life is long and predictable, dramatically reducing downtime and maintenance costs.

### Wear resistant

Abrasive materials such as pigments can cause high rates of pump wear. Even before failure, a reduction in pump performance will cause rejected product. Watson-Marlow Bredel pumps contain the product within a tube or hose which is resistant to wear. Pump performance is predictable for its entire life, ensuring consistent results.

### Superior accuracy and repeatability

Colour and mixture quality is reliant on pump metering or dosing performance. Watson-Marlow Bredel pumps are true positive displacement pumps with no product backflow or slip, even with varying viscosity. Accuracy and repeatability up to  $\pm 0.5\%$  ensures batch consistency and higher productivity.

### Total containment

It is often necessary for a single pump to transfer more than one colour paint or pigment. The pump must contain the product without leakage and allow quick changeover with easy cleaning. Watson-Marlow Bredel pumps contain the product within the tube or hose, without the need for seals, and allow rapid clean-down with no cross contamination. Pump uptime and plant efficiency is maximised.

### Low shear

Shear caused by arduous flow paths past lobes, vanes or valves in traditional pumps will cause inconsistency of colours, resulting in unacceptable levels of rejection. Watson-Marlow Bredel pumps have a clear flow path with minimal shear, ensuring perfect colour match between batches and the lowest possible production costs.



A leading paints producer suffered production difficulties due to their diaphragm pumps stalling at low flows.

**Tight colour control from batch to batch is critical to maintain product quality.**

## ... using a proven design ...

The low shear peristaltic pump action is created by compressing the hose or tube element between rotating shoes or rollers. In between each pass of a shoe, the hose element recovers to create a vacuum and draw in fluid. This means the pump is self-priming and dry-running. This simple dynamic effect requires no seal or valves and the fluid is totally contained within the hose, separated from the pump. No other positive displacement pump offers this unique separation of pump and fluid. Watson-Marlow Bredel pumps clearly outperform other pumps which rely on seals, valves or vanes for their operation. These components are repeatedly the cause of pump failure and high maintenance.

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. Fixed, variable, flameproof, and air operated drives, with comprehensive control options to enable pumps to be configured to your requirements.



## ... fully supported with expert and experienced advice ...

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.

These quotations were given to an independent marketing organisation by customers who are delighted to have found Watson-Marlow Bredel.

### Project 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 produce results that exceed expectations.



**All our customers have made major improvements in process performance, maintenance and product quality, resulting in cost savings previously thought unattainable.**



Six Watson-Marlow Bredel pumps now meter pigments, solvents and resins

from mixing tanks at carefully controlled rates. Pump accuracy, **repeatability and quick set-up** means improvements in production have exceeded the customers expectations.

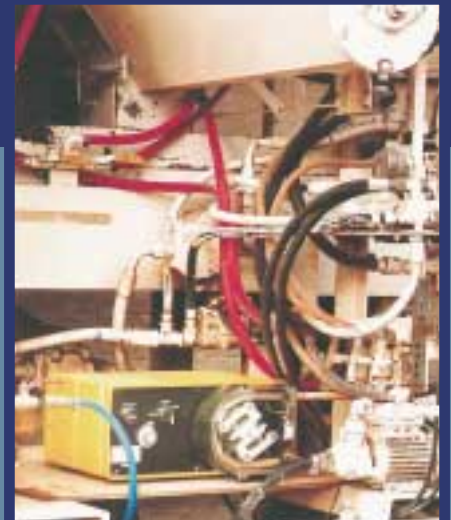


Photo courtesy of Armcom Cemen Tech and Long Eaton Fencing

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Members of the Spirax-Sarco Engineering Group

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HBO123

## Pump Series

## Flow Rates

Put a peristaltic in your process Improve your performance

<b>100</b>	Single channel, low flow pumps. Fixed or variable speed.	1µl/min - 50ml/min	101U
<b>200</b>	Near pulseless, multi-channel pumps with up to 32 channels.	0.5µl/min - 21ml/min	205U
<b>300</b>	Single or multi-channel pumps with manual, remote or dispensing control.	0.07ml/min - 2 litre/min	313U
<b>500</b>	Microprocessor controlled and IP55 process pumps with manual, auto and digital control.	10µl/min - 4.37 litre/min	505S
<b>600</b>	IP55 mid-flow process pumps with full CIP and SIP capability. Fixed or variable speed.	50ml/min - 18.3 litre/min	624U
<b>700</b>	IP55 industrial pumps with manual or auto control, single or twin channel.	1.6 litre/min - 66 litre/min	704U
<b>800</b>	High flow hygienic pumps with full CIP and SIP capability.	2 litre/min - 133 litre/min	840
<b>SPX</b>	Bredel: High flow industrial pumps operating at pressures up to 16 bar (230 psi).	0.3 litre/min - 80m <sup>3</sup> /hr	SPX



For further information on Watson-Marlow Bredel pumps in the Paint and Pigments industry, please request copies of application and technical data sheets.

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