MasoSine Pumps APPLICATION BRIEF



Confectionery

Hygienic, Undamaged Product, High Reliability

The challenge

MasoSine MR and SPS series positive displacement pumps are being used by specialist chocolate and confectionery manufacturers to overcome difficult production challenges including:

- Removing instances of product damage - a frequent problem with alternative pump technologies - and particularly gear pumps
- Providing easy, hygienic cleaning and maintenance characteristics
- Ensuring easy handling of viscous products such as caramel



Confectionery



The story of success

Watson-Marlow MasoSine MR and SPS series positive displacement pumps have been installed at the confectionery production plant of Kinnerton, part of Zetar Plc. The first MR125 MasoSine pump was introduced to replace a gear pump that was damaging product on an Easter egg production line, with SPS 2 pumps acquired recently to support a newly installed caramel production line.

"We have three SPS 2 pumps on site, and not only do these handle the pumping requirements without a problem, they are incredibly easy to clean," says Kinnerton's engineering supervisor, Phil Barwick. "Even after pumping glucose, a simple flush-through with water is all that is required."

The solution

The gentle, low shear product handling capability of MasoSine pumps is key to the success of this pump technology in confectionery applications. At the



heart of this positive displacement pump is the exclusive sinusoidal rotor which gives a wave-like action. The single rotor design offers very low propulsion, while large pumping chambers help preserve and maintain product integrity.

The MR125 is delivering a solution to the challenge of reducing product damage. The MR series is a range of medium duty sanitary pumps offering flow rates up to 91,000 litres per hour and pressures up to 10.3 bar. The inherent characteristics of the MasoSine MR series pump not only ensures there is no damage to the product – it is also exceptionally easy to maintain and clean.

The MasoSine SPS 2 sanitary/industrial pump is the answer to the challenge of handling highly viscous liquids. The SPS2 has capacity up to 4 m³ per hour and pressures up to 15 bar, and is designed to meet the tough demands of viscous applications such as caramel, gelatine and glucose – all of which cause a problem for most types of alternative pump technology.

Customer success

When a quick fire solution was needed at the confectionery production plant of Kinnerton, part of Zetar Plc, a MasoSine MR125 pump was installed to replace a gear pump that was damaging product on an Easter egg production line. It has operated trouble-free for the past four years.

On the back of this success, Kinnerton have now acquired several MasoSine SPS 2 sanitary/industrial pumps to support a newly installed caramel production line. With a capacity up to 4 m³ per hour and pressures up to 15 bar, the SPS is ideal for viscous applications such as caramel, gelatine and glucose.

