WATSON MARLOW MasoSine

ECOSINE PUMPS

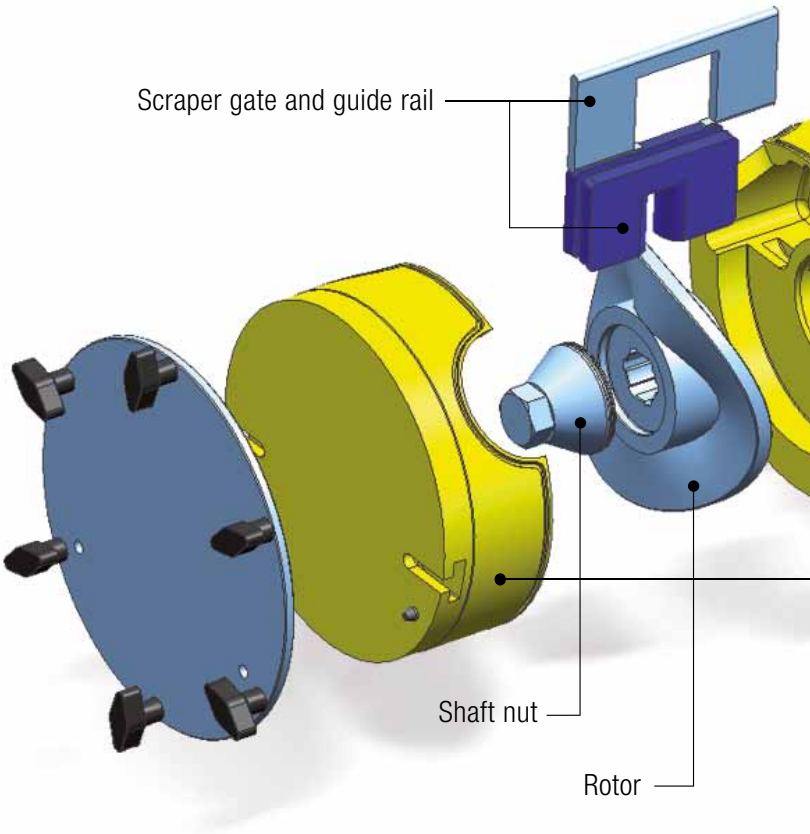
Sanitary pumps for pressures to 6 bar and bi-directional operation

Watson-Marlow...Innovation in Full Flow

MasoSine's EcoSine pump satisfies demanding processing requirements cost-effectively, using the unique MasoSine pumping principle. This model is a sanitary pump for pressures to 6 bar and bi-directional operation.

The sine-wave-shaped rotor creates four moving chambers which gently convey the duty fluid from the inlet port to the higher-pressure discharge port. The scraper gate prevents any fluid passing back from the discharge side to the lower-pressure suction side of the pump.

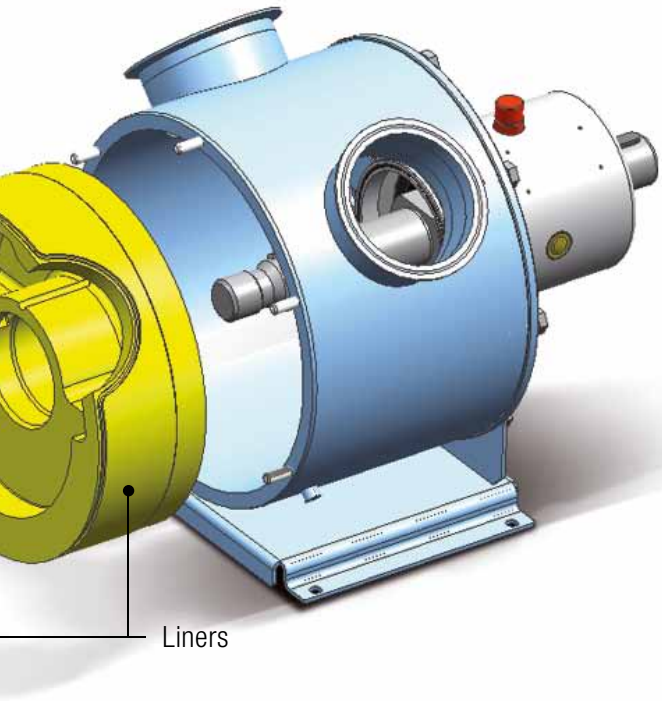
The EcoSine functional principle:
Like peristaltic pumping, the MasoSine pumping principle requires no valves. The four chambers are sealed. The system is ideal for fluids carrying soft solids such as fruit, and viscous media such as sauces and silicones.



Anything that is really good and functional usually comprises only a few parts – just like the MasoSine EcoSine pump.

MasoSine EcoSine Pumps Features and benefits

MasoSine EcoSine mobile unit
The MasoSine EcoSine pump is available on a static, stainless steel base with adjustable feet. The drive can be in-line or offset, as dictated by the application. Units can be mounted on castors, making the pump a very flexible piece of process equipment.



Hygienic construction
The EcoSine pump is built from stainless steel and high-performance plastics. The motor and gearbox is cast iron and is finished with polyurethane coating.

Gentle product handling
The gentle pumping action does not damage shear-sensitive fluids.

High suction
The EcoSine pump can achieve 0.85 bar suction.

Low pulsation
The EcoSine's low-pulsation performance prevents vibration in pipelines and ensures rapid, smooth discharge. Flow meter readings are more accurate and heat exchanger performance is more efficient.

Space saving
The EcoSine is a compact, space-saving design, ideal for space-critical installations.

Energy saving
The EcoSine's low torque requirement makes it far more economical to run than air-operated diaphragm pumps. It needs less power than rotary lobe pumps.

Bi–directional
The EcoSine is truly bi-directional and can run clockwise or counter-clockwise without modification.

No aeration or foaming
The low-shear, gentle pumping action causes no aeration or foaming during product transfer.

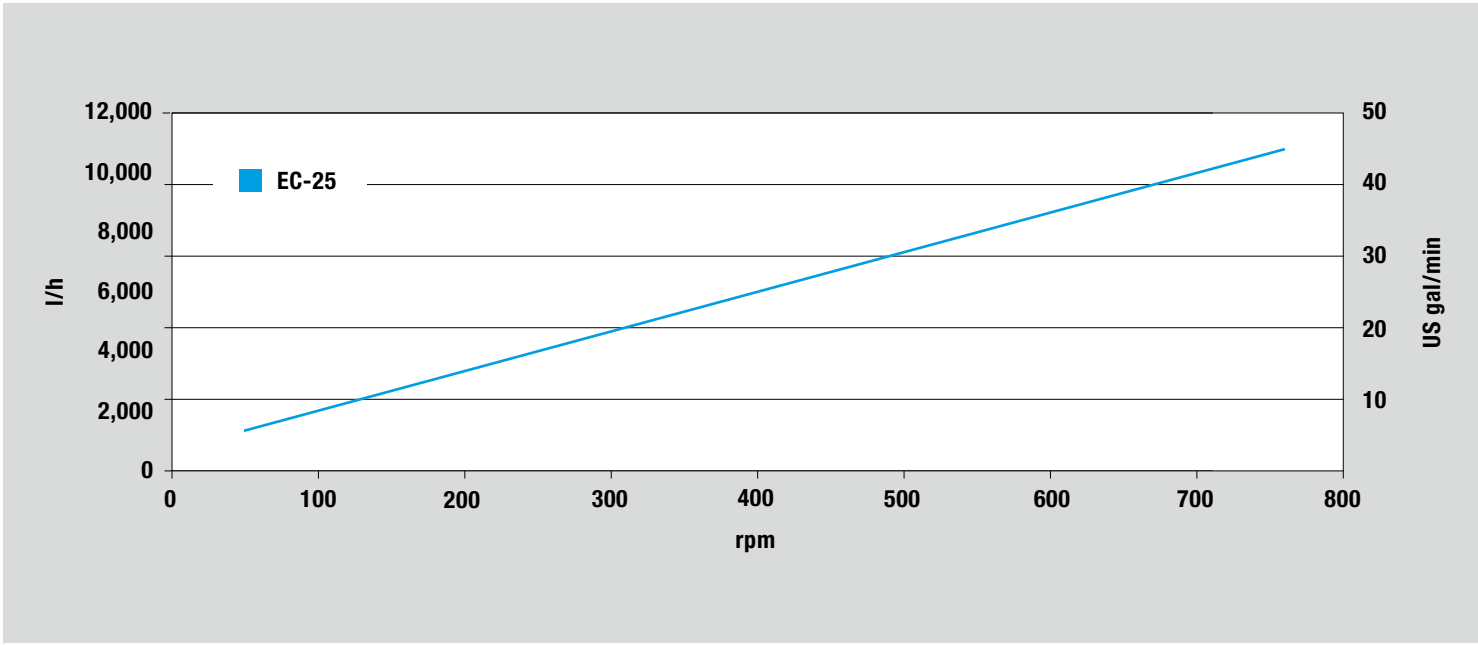
Quick and easy maintenance
Stripping the pump for inspection or to change a part takes less than 10 minutes and needs no special skills or training: a short briefing is sufficient. The EcoSine minimises downtime.

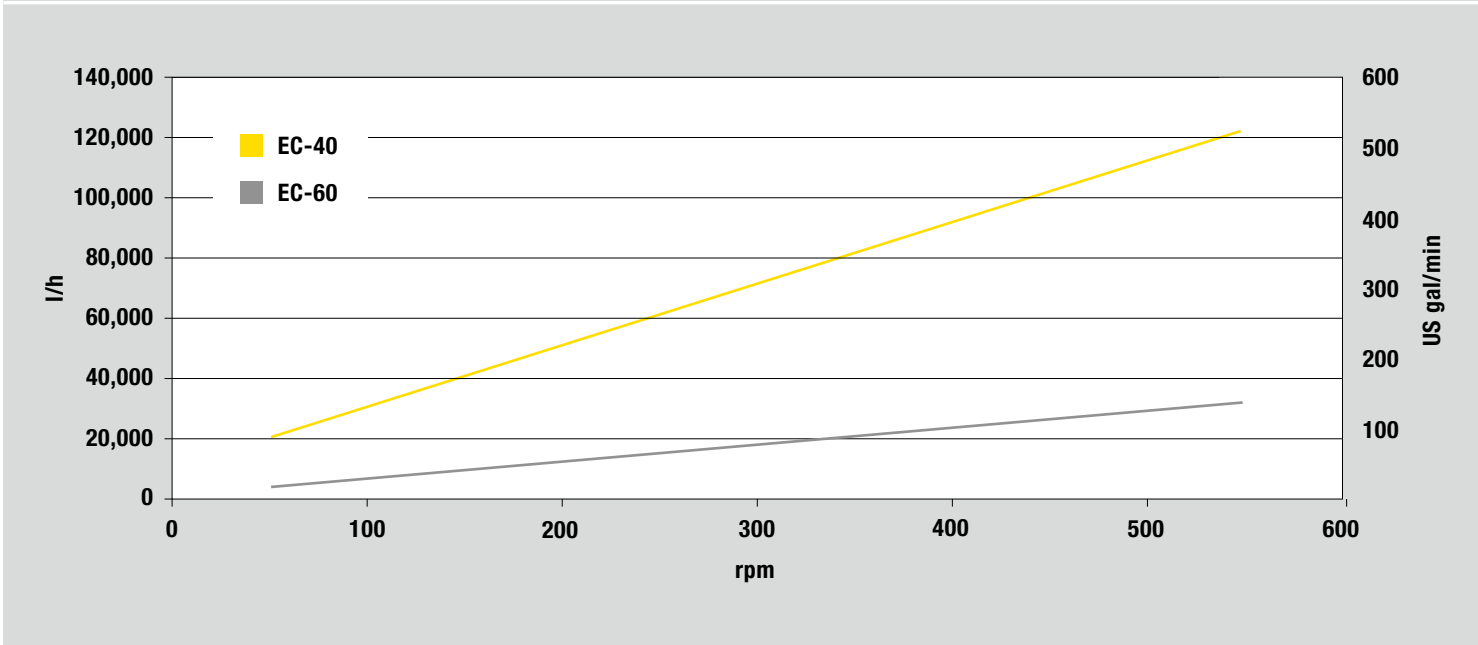
High viscosity
The EcoSine can handle viscosities up to 1,000,000 mPas.

24 hour service and back up
Essential spare parts can be delivered on the day the order is received. Standard pumps can be despatched within 24 hours.

MasoSine EcoSine Pumps Performance tables

These curves are theoretical. Actual performance may be affected by pressure and viscosity.





Technical Data					
model	**flow per revolution** cm³ (gallons)	**maximum particle size** mm (inches)	**maximum speed** rpm	**shaft diameter** mm (inches)	**shaft height** mm (inches)
EC-25	224 cm³ (0.06 gal)	22 mm (0.87 in)	800 rpm	28 mm (1.10 in)	119 mm (4.69 in)
EC-40	875 cm³ (0.23 gal)	36 mm (1.42 in)	600 rpm	38 mm (1.50 in)	173 mm (6.81 in)
EC-60	3400 cm³ (0.90 gal)	60 mm (2.36 in)	600 rpm	50 mm (1.97 in)	234 mm (9.21 in)

MasoSine EcoSine Pumps Applications

Food products

The EcoSine pump is well-established in the food industry for transferring fluids containing soft solids. Typical applications include ready meals, soups, sauces, frozen foods, salads and sausage meat. Loading filling machines is a MasoSine speciality.

Beverages

The high suction capacity of the EcoSine pump, 0.85 bar, is valuable to the beverage industry. Orange juice concentrates with temperatures down to –10°C and other fruit juices are transferred without damaging the product.

Dairy products

MasoSine EcoSine pumps are ideal for transferring sensitive cheese curd, yoghurt, cream cheese, cottage cheese and cream. They are also perfect for adding fruit preparations and handling butter.

Cosmetics

EcoSine pumps have been successfully used in the cosmetics industry for many years for gentle transfer of shampoos, creams, pastes and lotions.

Fine chemicals

EcoSine pumps stand out from the competition for handling shear-sensitive suspensions, solutions, washing-up liquid and detergents, as well as very viscous media such as silicones.

Confectionery

In the confectionery industry, EcoSine pumps transfer chocolate glazes and fillings, glucose, fats and many other products. A pump-housing heater is available for this application area.

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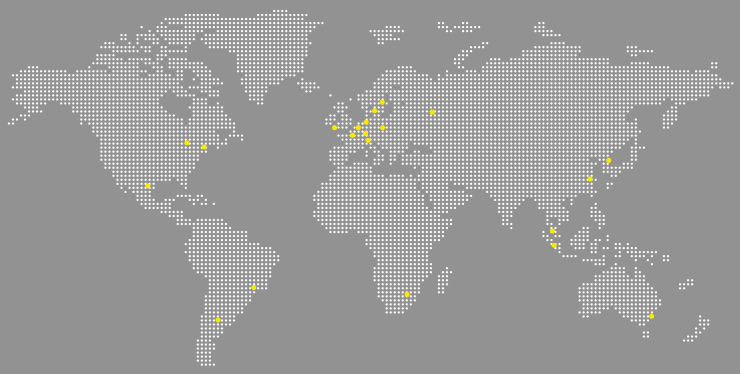
Watson-Marlow Pumps Group

The Watson-Marlow Pumps Group has five world-class factories supported by direct sales operations in 19 countries and distributors in more than 50 countries. For contact details visit our website:
www.wmpg.com



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Watson-Marlow online

Our engineers around the world can help you choose the perfect pump and tubing for your needs.

More information?
Our brochures are on our website:
www.wmpg.com

0310 - HB0319

Watson-Marlow MasoSine
Postfach 100
74360 Ilsfeld · Germany
Tel. +49 (0) 70 62 / 95 60-0
Fax +49 (0) 70 62 / 6 45 93
E-Mail: info@masosine.de
www.masosine.com

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