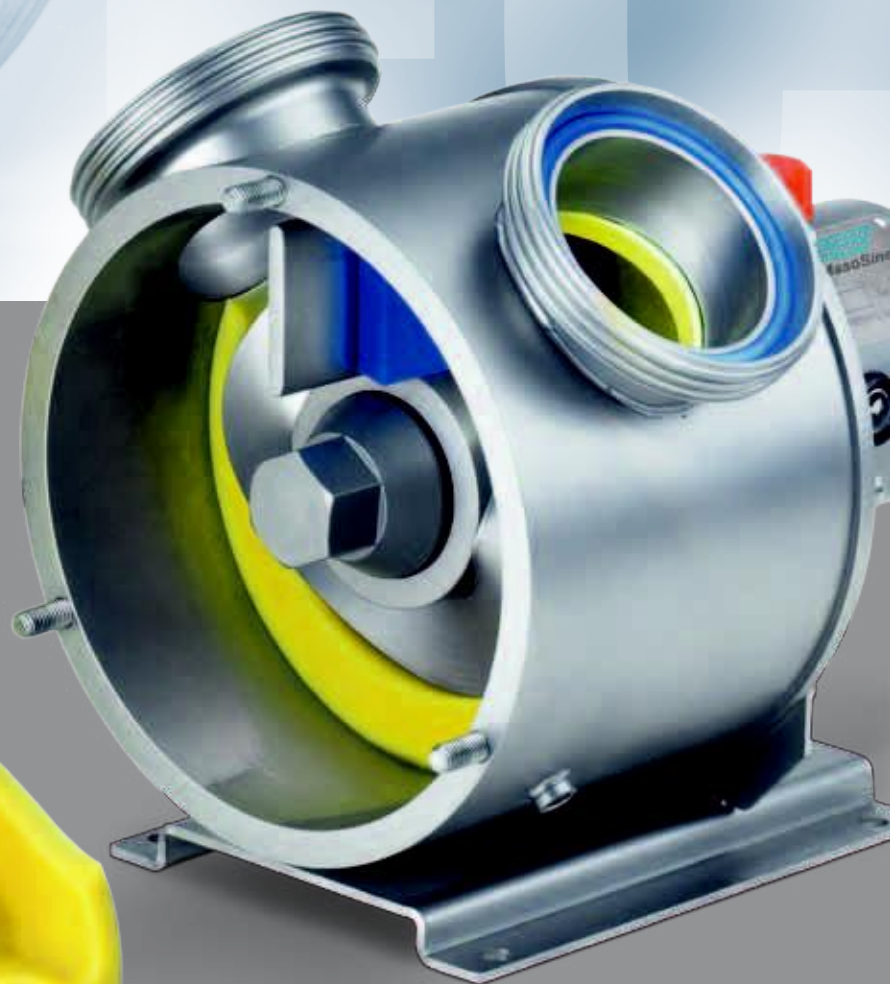
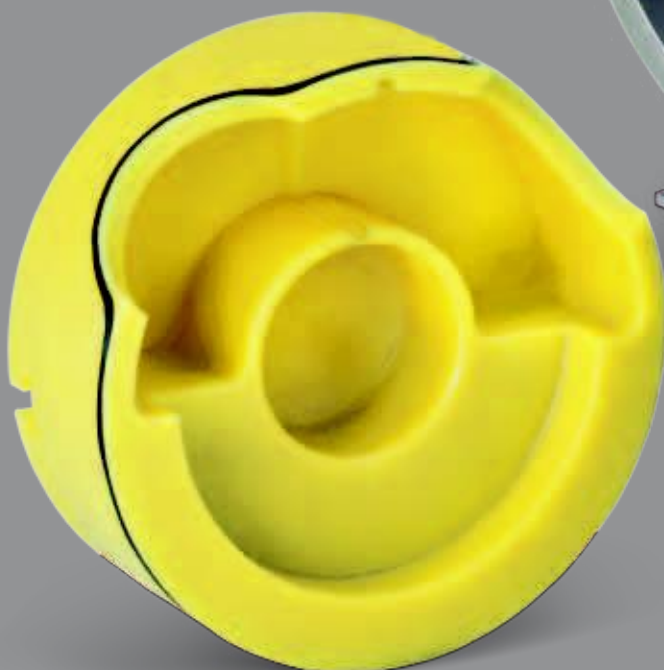


## EcoSine PUMPS

Classically simple – simply classic!



Innovation in Full Flow



# MasoSine EcoSine Pumps Classically simple – simply classic!

MasoSine have designed the EcoSine pump to satisfy high processing standards whilst also operating on a cost-effective basis. Based on the tried and tested Sine pump principle, a pump was created to fully satisfy these pre-requisites for the lower duty and lower price market segment.

## The principle of Operation

Thanks to the sinewave-shaped design of the rotor, four 'chambers' are created through which the medium is 'pushed' or 'gently - massaged'.

The scrapergate prevents any medium passing back from the discharge side to the lower pressure suction side of the pump.

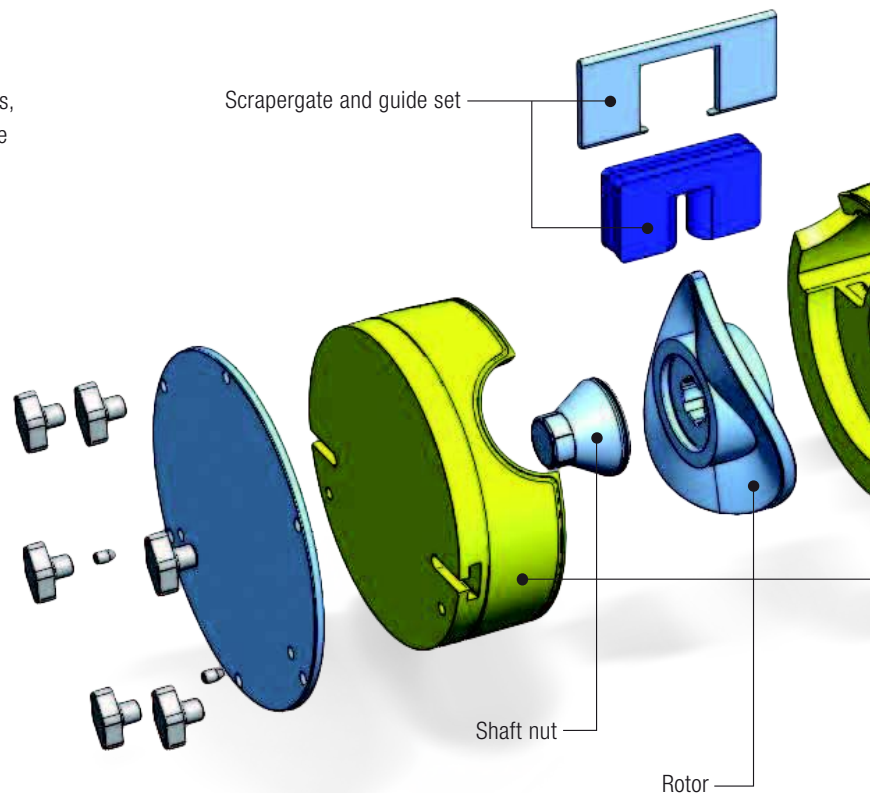


## The EcoSine working principle

Thanks to the interaction of the sliding scrapergate and the static stators, the medium is transported in a gentle, low-pulsation manner through the MasoSine exclusively designed sinusoidal rotor.

Anything that is really good and functional, usually only comprises a few parts

– as in the case of the MasoSine EcoSine pump –

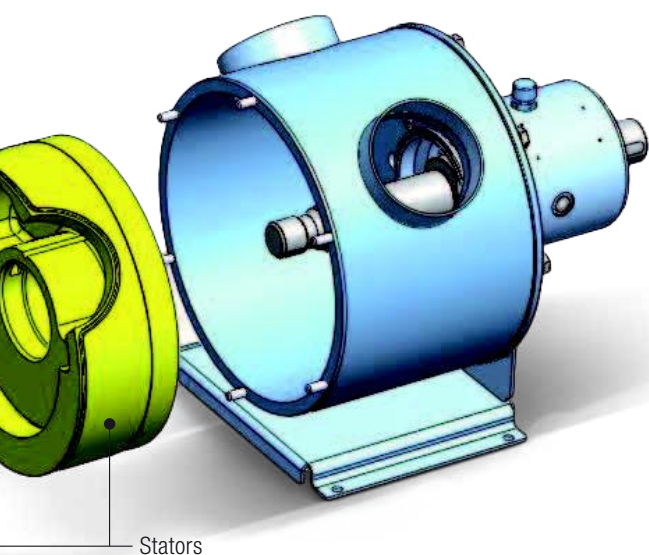


# MasoSine EcoSine Pumps Major features and benefits



## MasoSine EcoSine mobile unit

The MasoSine EcoSine pump is available on a static stainless steel base with adjustable feet and can be supplied with the drive unit either in line or offset as dictated by the application. Mobile units are also available making the unit a highly flexible piece of process equipment which could be used on a variety of different applications. A minimal number of contact internal components make up the unique EcoSine pump, namely.



## Hygienic construction

The EcoSine, apart from the software components is constructed entirely from stainless steel, including the power frame...NO PAINTED SURFACES!!!

## Gentle product handling

The gentle pumping action means no damage to shear sensitive products during the pumping part of the process.

## High Suction

The EcoSine is capable of creating 0.85 bar suction pressure thanks to its continuously open suction cavity.

## Low-pulsation product flow

The low-pulsation product flow prevents vibration in pipelines and ensures a rock-steady discharge flow which in turn means quicker emptying and/or filling, more accurate readings from flow meters and more efficient heat transfer from heat exchanger units.

## Space-saving

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

## Energy Saving

The EcoSine requires a minimum amount of torque, far more ECO-nomical to run than any air operated diaphragm pump, with smaller power requirements than any rotary lobe type pump.

## Bi – Directional

The EcoSine is bi-rotational, so can be operated in either the clockwise or counter-clockwise direction without modifying any of the pump internal components.

## No aeration or creation of foam

Thanks to the low shear gentle pumping action, no aeration is created during product transfer.

## Quick and easy Maintenance

A maximum of 10 minutes is required to strip the pump and inspect or change the wear parts. No special technical skills are required to open and repair the pump. After a brief training session even the production operators, will be able to perform all necessary repairs or inspections on the pump.

## High Viscosity

As with the higher duty Sine pump the EcoSine is also able to transport a wide range of viscosities up to 1.000.000 CPS.

## 24-hour service and back up

Most important spare parts can be shipped on the same day. Even standard pumps can be shipped within 24 hours if required. With the simple design very little difficulties will be experienced in working with the pump, if needed MasoSine assistance is readily available.

## Minimal downtime

Thanks to its inline maintenance system, downtimes are kept to an absolute minimum. Simple maintenance and manual cleaning can be completed in just a few minutes.

# MasoSine EcoSine Pumps Performance tables

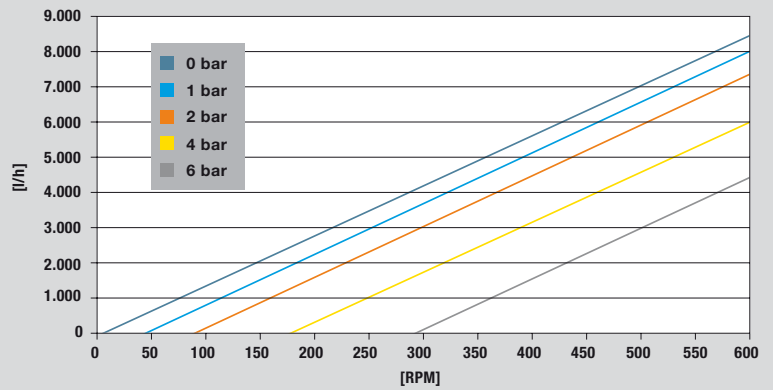
## MasoSine EcoSine 25 Performance Chart at 1.000 m Pas

**Dimensions W x H x D:** approx. 340 x 180 x 250 mm

**Flowrate:** 0.224 litre per revolution  
10.750 litre per hour

**Discharge pressure:** up to 6.0 bar

**Temperature range:** up to + 100 °C



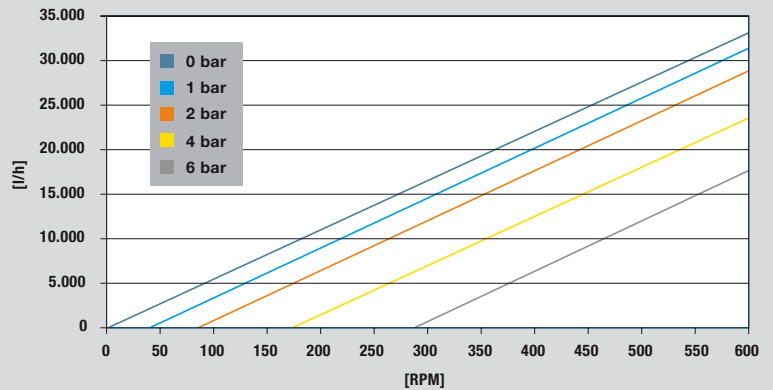
## MasoSine EcoSine 40 Performance Chart at 1.000 m Pas

**Dimensions W x H x D:** approx. 430 x 360 x 320 mm

**Flowrate:** 0.875 litre per revolution  
31.500 litre per hour

**Discharge pressure:** up to 6.0 bar

**Temperature range:** up to + 100 °C



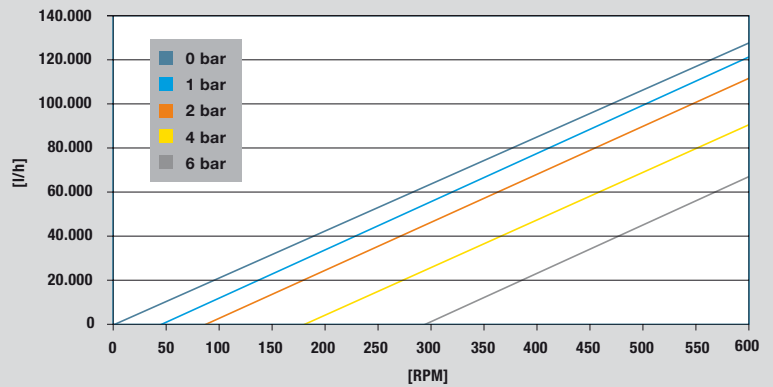
## MasoSine EcoSine 60 Performance Chart at 1.000 m Pas

**Dimensions W x H x D:** approx. 650 x 550 x 450 mm

**Flowrate:** 3.4 litre per revolution  
122.400 litre per hour

**Discharge pressure:** up to 6.0 bar

**Temperature range:** up to + 100 °C



# MasoSine EcoSine Pumps Application areas



## Food products

The EcoSine pump is well-established in the food industry for transporting media with large or lumpy constituents. Typical applications include ready meals, soups, sauces, frozen foods, salads and sausage meat. Loading filling machines with diverse products is a MasoSine speciality.



## Beverage industry

The exemplary suction capacity of the EcoSine pump pays off in the beverage industry. Orange juice concentrates with temperatures down to  $-10^{\circ}\text{C}$  or also fluid juices are transported without difficulties or compromising the product.



## Dairies

Transportation of highly sensitive cheese curd, yogurt, cream cheese, quark and cream are the priorities in the dairy industry. EcoSine pumps are similarly outstanding for admixture of fruit preparations, as well as for butter.



## Cosmetic & pharmaceuticals

EcoSine pumps have been successfully deployed in the cosmetics and pharmaceutical industries over many years for gentle transportation of shampoos, cremes, pastes, lotions, etc.



## Fine chemicals

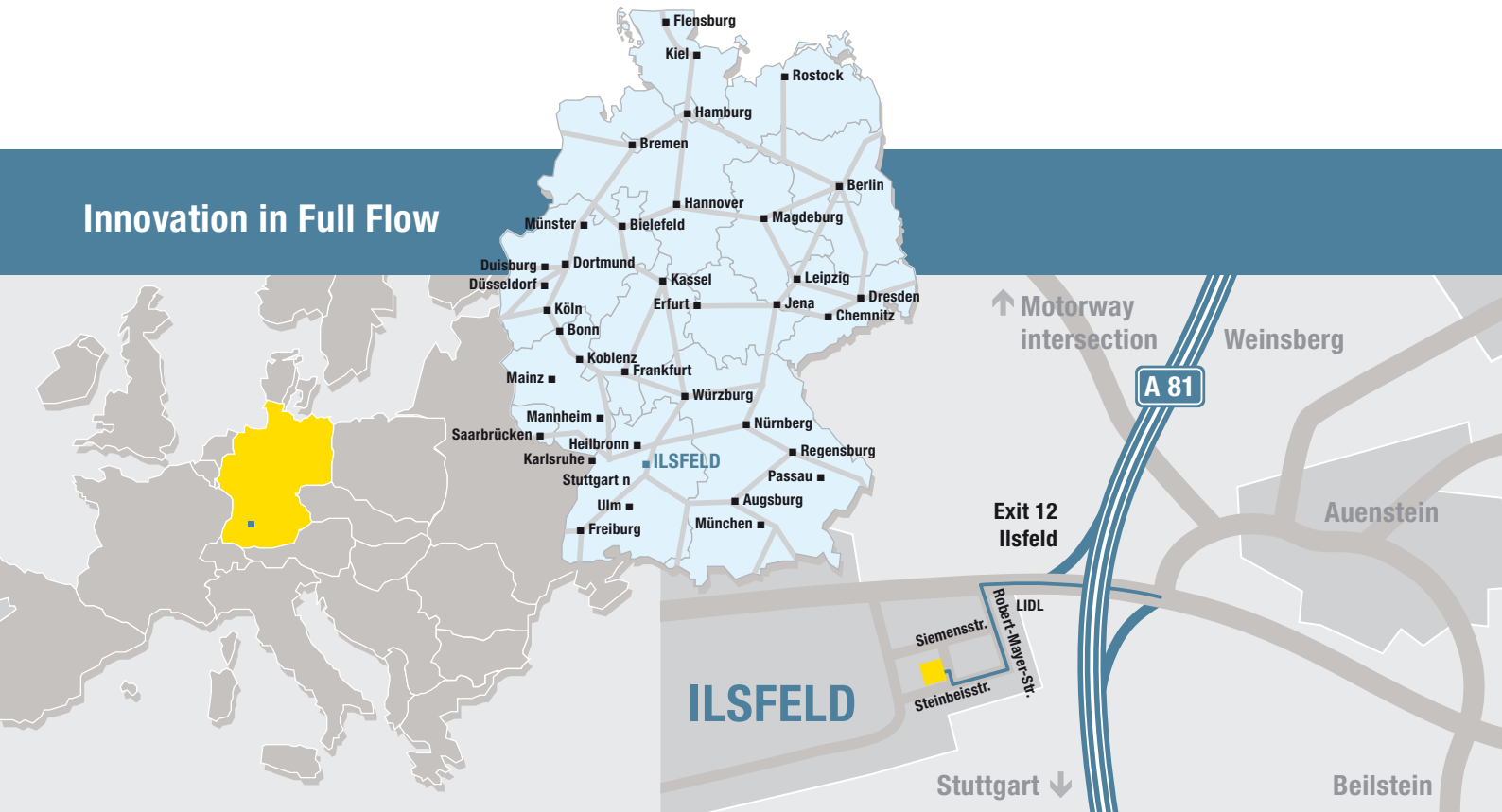
EcoSine pumps stand out from the competition when it comes to shear sensitive suspensions, solutions, washing-up liquid and detergents, as well as highly viscous media, such as silicones.



## Confectionary industry

In the confectionary industry EcoSine pumps transport chocolate glazes, chocolate fillings, glucose, fats and many other products. A pump housings heater is available on request for this application area.

**Innovation in Full Flow**



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With best regards presented by:



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