



**MASO  
SPS  
pumps**

# MASO SPS pumps

The gentle way to efficiency!

When they were launched, experts described the MASO SPS pump as a "stroke of genius in pump technology". Because this technology practically reinvented the displacement pump and created a powerful, extraordinarily effective pump (for various products) with a delivery output of up to 90,000 litres per hour.

## The functional principle

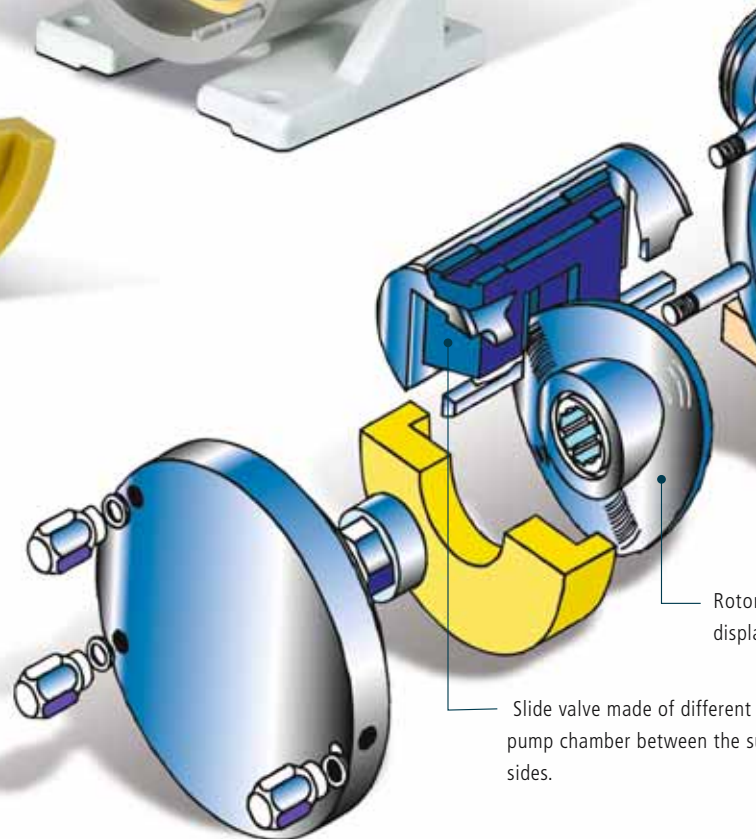
The sinusoidal design of the rotor creates four "chambers" in rotation with which the medium is "pushed through" or "displaced".

The slide valve prevents the undesirable equalization of pressure between the pressure and suction sides.



### The sine functional principle:

Gentle and low-pulsation delivery of fluids is generated through the interaction of the moving slide valve and the stationary stators. The material is transported through the special CNC-milled stainless steel disc.



The MASO SPS pump is a technological (r)evolution which practically reinvented the displacement pump!

Slide valve made of different pump chamber between the sides.

# MASO SPS pumps Advantages

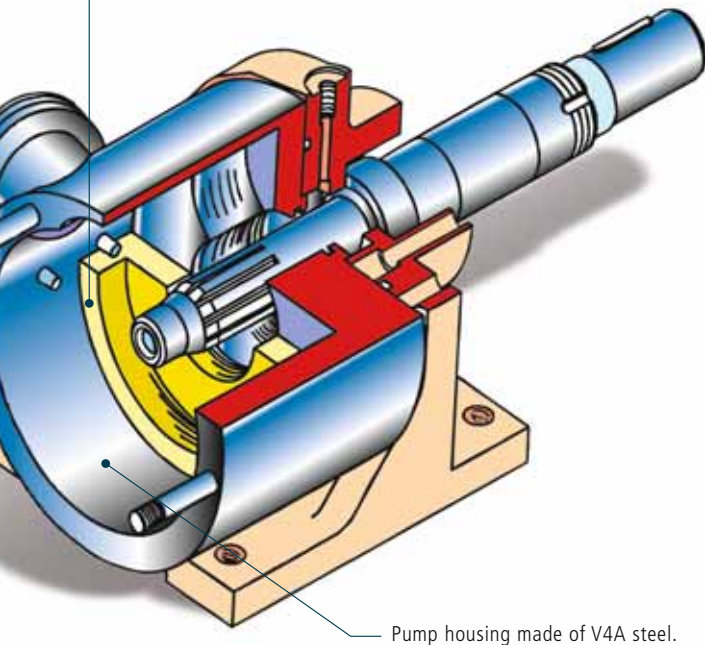
## Made and designed in Germany!



### The SPS performance package:

So you have performance all the time everywhere it is required.

"Inlaid" or "fixed" stators from different materials, depending on the transport medium.



Pump housing made of V4A steel.

constructed as a sinusoidal  
acer made of V4A steel.

plastics to seal the  
uction and pressure

### High delivery output

A delivery output up to 90,000 l/h can be achieved even with viscous products.

### Enormous flexibility

MASO SPS pumps are modular matched to the product processed depending on requirements, thereby attaining maximum efficiency. Materials suited to the processing product, drives for specific applications, various base plates and outer casing designs or entirely individual solutions round off the SPS pump programme.

### Gentle delivery

Gentle delivery reduces vibrations and, above all, maintains the integrity of the product.

### Suction capacity

The permanently opened suction chamber ensures a high suction power of at least 0.8 bar.

### Low pulsation delivery

Low pulsation delivery prevents vibrations in the piping system and ensures even delivery, which in practice yields significantly faster discharge or filling.

### Space-saving

This type of pump gives rise to a compact construction therefore saving space.

### No foaming

Gentle delivery avoids foaming and so failure of many filling level measurements.

### Highly viscous power

SPS pumps go to the limits of flowability. High and low viscosity media can be transported with one and the same pump configuration.

### Low downtime

Inline maintenance minimizes downtime. Simple cleaning, also manually as required, takes just a few minutes.

### Maintenance without waiting

Preventative maintenance is possible in the shortest possible time. The time invested for inspecting the wearing parts is 10 minutes maximum. No special knowledge is required for disassembly and repair. A short briefing is sufficient for performing all important tasks.

### 24-hour service

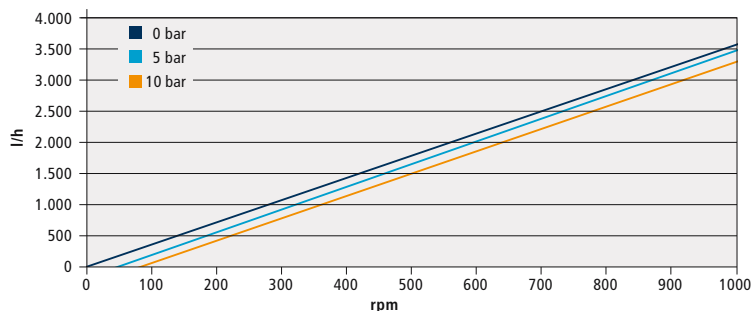
Essential spare parts and wearing parts can be delivered the same day. Standard pumps can also be dispatched within 24 hours if necessary.

### 10-year warranty

We are convinced of our product and offer a 10-year warranty on the main body of the pump.

# MASO SPS pumps Performance tables

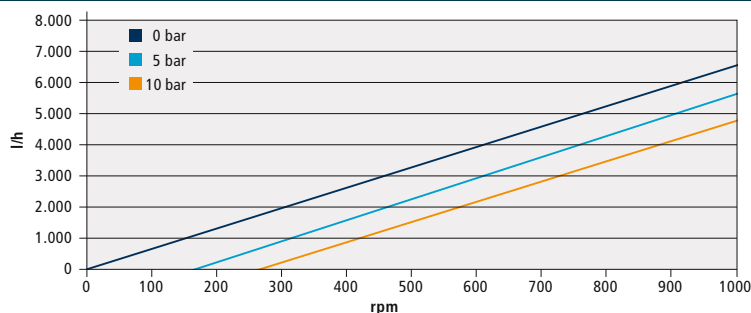
## MASO SPS 1" Output curve at 1,000 mPa



**Technical data:**

**Dimensions W x H x D:**  
approx. 290 x 175 x 180 mm  
**Delivery volume:**  
0,06 litres per revolution  
3,600 litres per hour max.  
**Delivery pressure:**  
up to 10,0 bar  
**Temperature range:**  
up to +130 °C

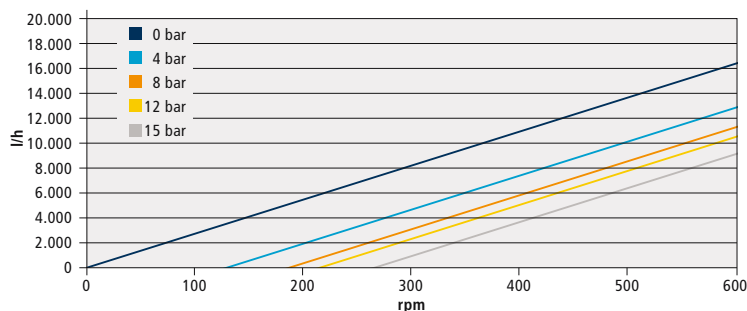
## MASO SPS 2" Output curve at 1,000 mPa



**Technical data:**

**Dimensions W x H x D:**  
approx. 350 x 190 x 230 mm  
**Delivery volume:**  
0,11 litres per revolution  
6,600 litres per hour max.  
**Delivery pressure:**  
up to 10,0 bar  
**Temperature range:**  
up to +130 °C

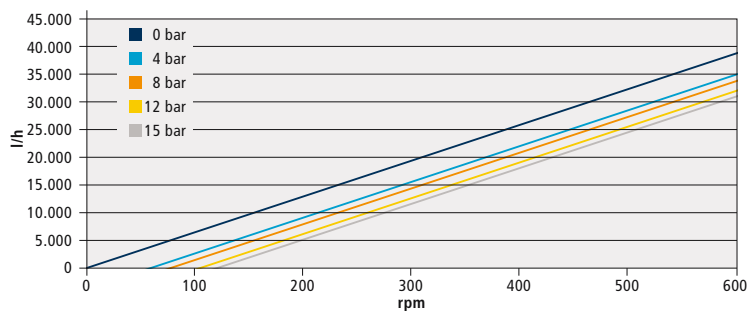
## MASO SPS 2,5" Output curve at 1,000 mPa



**Technical data:**

**Dimensions W x H x D:**  
approx. 500 x 270 x 320 mm  
**Delivery volume:**  
0,45 litres per revolution  
16,200 litres per hour max.  
**Delivery pressure:**  
up to 15,0 bar  
**Temperature range:**  
up to +130 °C

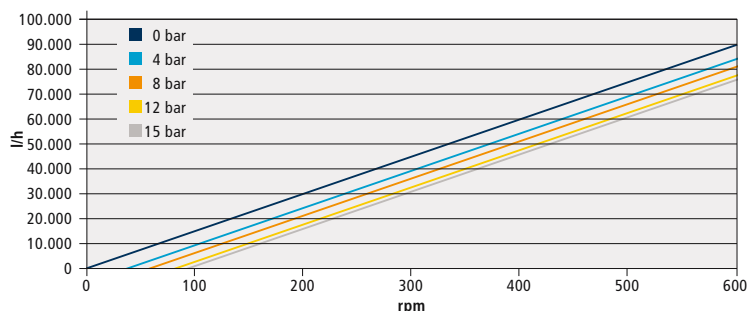
## MASO SPS 4" Output curve at 1,000 mPa



**Technical data:**

**Dimensions W x H x D:**  
approx. 620 x 370 x 380 mm  
**Delivery volume:**  
1,05 litres per revolution  
37,800 litres per hour max.  
**Delivery pressure:**  
up to 15,0 bar  
**Temperature range:**  
up to +130 °C

## MASO SPS 6" Output curve at 1,000 mPa



**Technical data:**

**Dimensions W x H x D:**  
approx. 770 x 530 x 590 mm  
**Delivery volume:**  
2,50 litres per revolution  
90,000 litres per hour max.  
**Delivery pressure:**  
up to 15,0 bar  
**Temperature range:**  
up to +130 °C

# MASO SPS PUMPS Application areas



## Food products

The SPS 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 MASO speciality.



## Beverage industry

The exemplary suction capacity of the SPS 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. SPS pumps are similarly outstanding for admixture of fruit preparations, as well as for butter.



## Cosmetics & pharmaceuticals

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



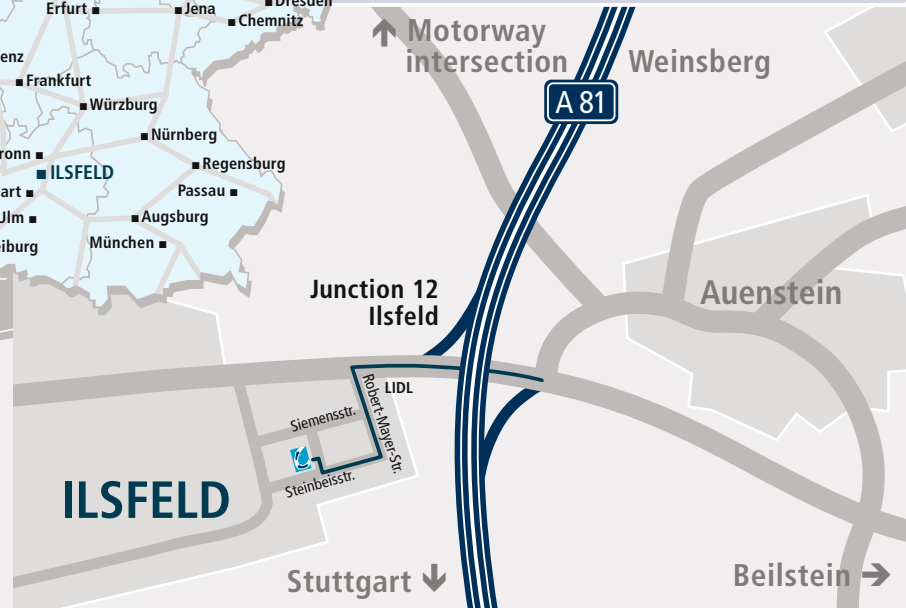
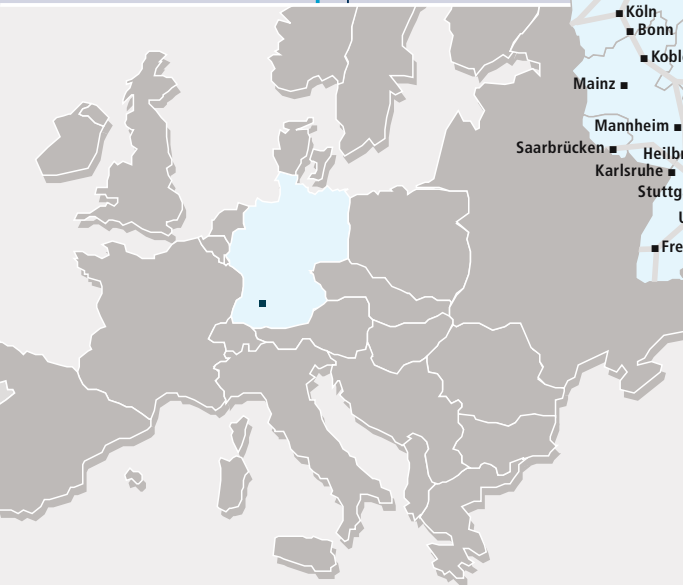
## Fine chemicals

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



With best regards, presented by:

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