

# ABOUT US

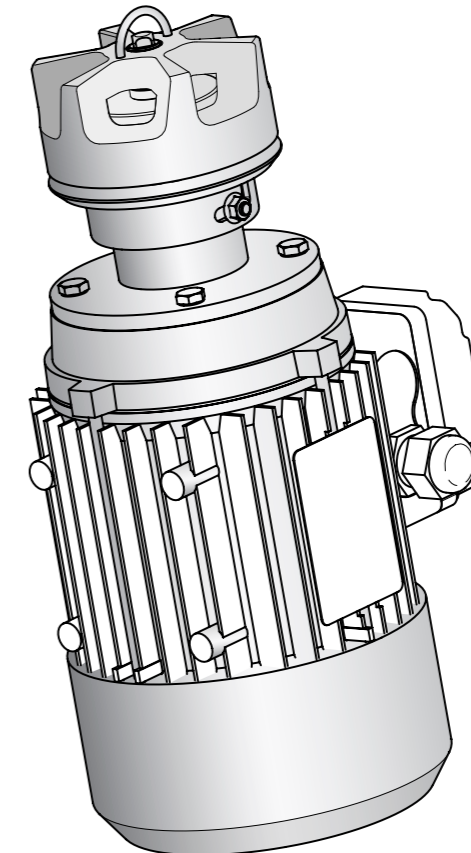
Steridose is a Swedish company highly specialized in the design, development and manufacturing of Mag-Drive mixers, radial diaphragm valves, aseptic connectors and sampling systems.

Registered trademarks of Steridose AB include:

- Sterimixer®
- Sterivalve®
- Steriflange®
- Sterisample®

Steridose AB is a part of the Roplan Group, with regional offices in key locations around the world. Our head office is located in Tumba, Sweden with a regional office in Madison WI, USA and global presence through our network of distributors and representatives.

Our products are manufactured according to current bio-pharmaceutical equipment standards, enabling us to maintain superior quality and product traceability. Our fully equipped laboratory provides services for customer mixing studies, as well as enabling verification of product design.



## MEDIUM SHEAR MIXER

Ideal for incorporation of light or hydrophobic solids into solutions

*Providing the perfect mix*



STERIDOSE SALES

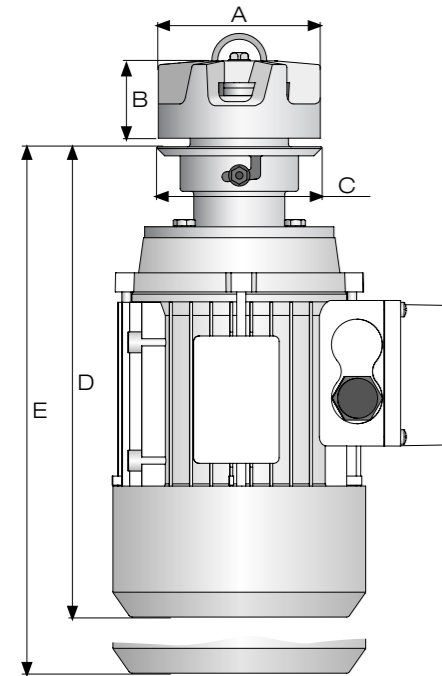
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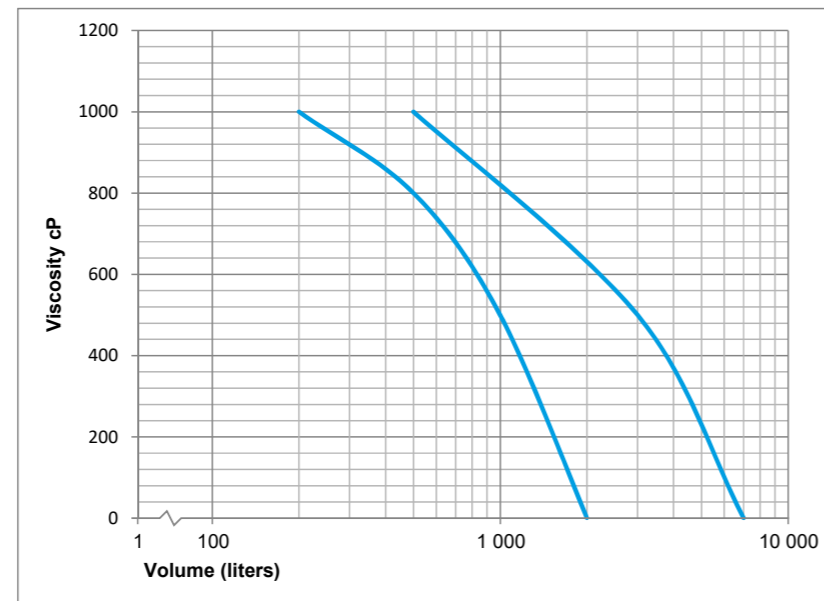
# TECHNICAL DATA

The Steridose Medium Shear Mixer (SMMS) is a magnetically coupled mixer, designed to meet the design guidelines of the current ASME BPE Standard.

Process contact components are traceable and in conformance with relevant industry requirements, such as USP <87> and <88> Class VI.



Viscosity factors



Technical data

	SMMS 85	SMMS 120
Max Working Volume	2000 L	7000 L
Max RPM (assume waterlike media)	1200	1800
Tip speed at max RPM	5.6 m/s (18.4 ft/s)	12.1 m/s (39.7 ft/s)
Torque coupling	2.6 Nm (23 in-lb)	14 Nm (124 in-lb)
Transferred power at max RPM	0.33 kW (0.44 HP)	2.64 kW (3.54 HP)
Motor Size	0.55 kW (3/4 HP)	3 kW (4 HP)
Dimension A: Impeller diameter	89 mm (3.5")	128 mm (5.0")
Dimension B: Impeller height	42 mm (1.7")	65 mm (2.6")
Dimension C: Weld plate diameter	90 mm (3.5")	149 mm (5.9")
Dimension D: Weld plate - bottom of drive unit	259 mm (10.2")	403 mm (15.9")
Dimension E: Minimum distance to remove drive unit	301 mm (11.9")	460 mm (18.1")

# MEDIUM SHEAR MIXER

## Two mixers in One

The medium shear mixer (model SMMS), based on the well proven design of Sterimixer®, is ideal for incorporation of light or hydrophobic solids into solutions (e.g. yeast). Features of the new model include a direct coupled motor without gear reducer and an interchangeable impeller that fits in the same weld-plate and male bearing of the standard low shear Sterimixer.

The open design of the impeller allows the SMMS mixer to be used in CIP/SIP applications without the need of being submerged during the cleaning process.

The new SMMS can be used for solid incorporation and general blending, therefore performing the duty of two mixers in one.

Once the solids are incorporated into solution (where the mixer would be running at higher rpm), the mixer can be slowed down and would still create sufficient pumping to keep homogeneity.

The design of the SMMS mixer follows the design guidelines of the current ASME BPE Standard.

Process contact components are traceable and in conformance with relevant industry requirements, such as USP <87> and <88> Class VI.

## Total quality concept

Sterimixer manufacturing is quality assured and certified to be in accordance with ISO 9001 by Lloyds Register Quality Assurance.

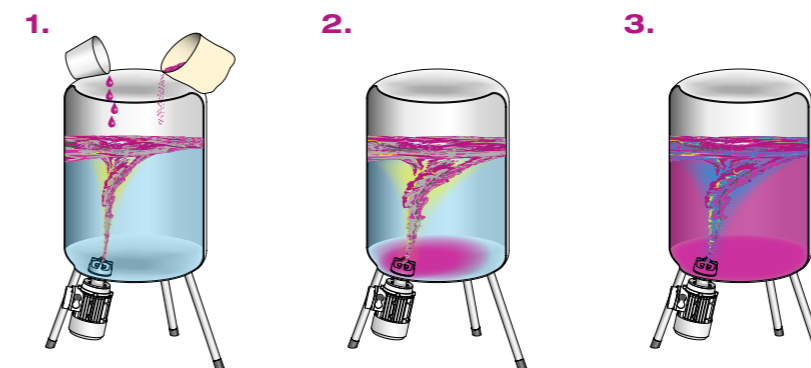
## References

Worldwide references for the Sterimixer include the manufacture of blood protein fractions, cell suspensions, insulin, LVPs, vaccines, buffer solutions, etc.

Our Test lab is available for confidential customer product testing.



## The mixing principle



1. Liquid or soluble powder is added into the vortex. It is then rapidly transported downwards to the impeller.
2. After reaching the impeller, the fluid flows in a radial direction towards the vessel wall.
3. After reaching the vessel wall, the fluid travels upwards and then circulates down to the impeller again. The overall bulk movement and the mixing action around the agitator ensure that a homogeneous concentration distribution is achieved.