

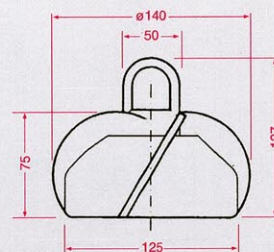
STERILE MIXERS
PARTICLE RELEASE FREE
TOTAL FLUSHING / STERILIZATION IN PLACE



STE.M.®

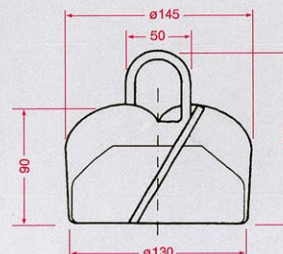
Model: **STE.M.LAB** ®

Ø Impeller: 125 ↔ 140 mm
Power: 0,1 ↔ 0,25 HP
Agitable volume: 2 ↔ 50 litres
Ø Support flange: 61 ↔ 140 mm



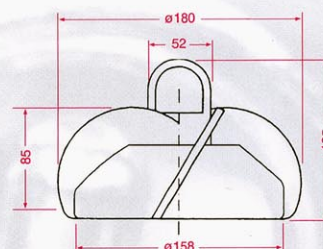
Model: **STE.M.A** ®

Ø Impeller 130 ↔ 145 mm
Power: 0,1 ↔ 0,25 HP
Agitable volume: 5 ↔ 200 litres
Ø Support flange: 90 ↔ 130 mm



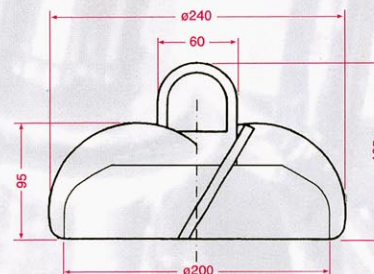
Model: **STE.M.B** ®

Ø Impeller 160 ↔ 190 mm
Power: 0,5 ↔ 0,75 HP
Agitable volume: 8 ↔ 500 litres
Ø Support flange: 114 ↔ 160 mm



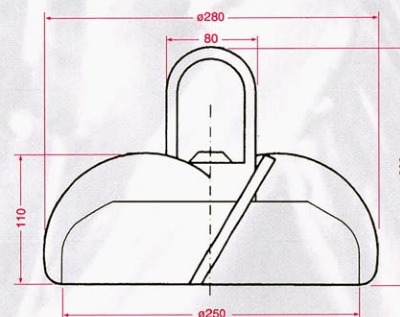
Model: **STE.M.C** ®

Ø Impeller 200 ↔ 240 mm
Power: 0,5 ↔ 1 HP
Agitable volume: 12 ↔ 750 litres
Ø Support flange: 120 ↔ 200 mm



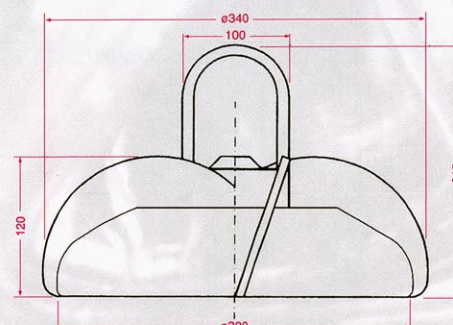
Model: **STE.M.D** ®

Ø Impeller 250 ↔ 290 mm
Power: 1 ↔ 2,5 HP
Agitable volume: 20 ↔ 3000 litres
Ø Support flange: 220 ↔ 250 mm



Model: **STE.M.E** ®

Ø Impeller 300 ↔ 350 mm
Power: 2,5 ↔ 5 HP
Agitable volume: 50 ↔ 10.000 litres
Ø Support flange: 250 ↔ 300 mm



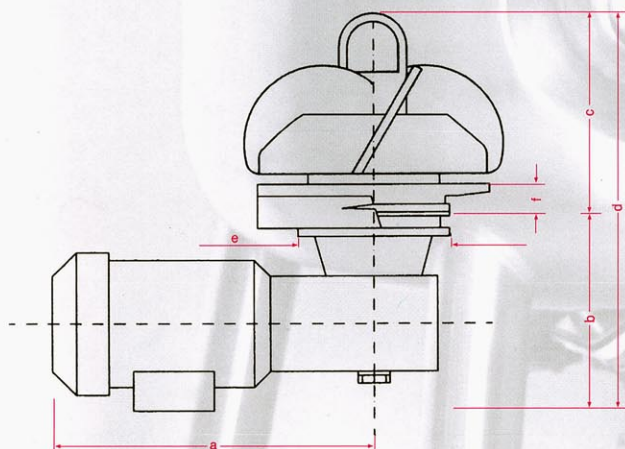
IMPELLER SHAPES AND FUNCTIONS

The standard helical impellers represented here are the best choice for most frequent applications; other shapes available are:

- vertical blade impellers, applied when increased centrifugal effect is specified;
- Rushton type impellers, applied for fermenters;
- Turboemulsifiers, special design magnetic high speed turbines, applied in conjunction with multibored stators to realize the required shear effect for homogenizers: **STE.M.H.®**
- Other special shapes can be provided upon request starting from the magnetic bell of all basic impellers.

MATERIALS

For impellers and support flanges: AISI 316/316L
 For axial bushings: Tungsten Carbide hardened by TiN or TiCN



GENERAL CHARACTERISTICS

All Sterile Mixers **LAB,A,B,C,D,E** are:

- **SEALLESS** and **CONTAMINATION FREE**, butt welding flanges are provided for internal and external magnetic couplings,
- with **RADIAL MAGNETIC COUPLINGS**, providing lift and torque to the impellers and avoid axial thrust bearing contact,
- **WASHABLE** and **STERILIZABLE IN PLACE**,
- **SELF FLUSHING** on the rear of the impellers and through the axial guide bearings,
- **PARTICLE RELEASE FREE**. According to **USP** prescriptions, and **GMP**.
- **HYDRAULICALLY OPTIMIZED**, with totally turbulent flow all over the tank, obtained even at low speeds, with **ZERO DEAD LEG**,
- **FULLY EQUIPPED** with impeller, welding flange, magnetic rotor, gearbox, electric motor, inverter, electrical control board,
- **FULLY MONITORED** with main parameters and safeguard procedures indicated on front panel board,
- **EASY TO USE** and easily dismantable for inspection,
- **FOAM FREE**, due to fluid lift on the impeller,
- Fully **CERTIFIED** and easy to **VALIDATE**, as generally not on the critical path during sterilization.

APPLICATIONS

- Final sterile pharmaceutical injectable preparations before vials fillings,
- Plasma fraction processes,
- Biofermentation, cell cultures,
- Antibiotic bio-productions and synthesis,
- Pharmaceutical synthesis,
- Vaccine productions,
- Extraction and purification by chemical processes and membrane separations,
- Perfusions, ayewash topic fluids, syrups,
- Granulation and tablet coating,
- Injectable contrast fluids for vascular radiographies.

Models	Standard Dimesions (mm)							
STE.M.	a	b	c	d	e	f	g	h
LAB	240	175	160	335	78*	33	-	-
A	240	175	180	355	110*	45	-	-
B	285	205	180	385	130*	50	-	-
C	285	260	190	450	130*	55	-	-
D	360	230	245	475	250	30	200**	4M20**
E	400	235	270	505	290	50	220**	4M20**

(*) DIN 11851 flange/ring coupling

(**) Bolting diameter and bolt size

STERILE MIXERS



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