

Tank Bottom Mixer - ME-6100



Application

The **ME-6100** series of the high shear bottom of the tank mixers present a highly hygienic solution for the processes of dispersion, emulsifying, homogenisation and disintegration of solids in the food-processing, cosmetics, pharmaceutical and fine chemistry industries.

These mixers can be used either in open or closed tanks at atmospheric pressure or under pressure/vacuum.

The bottom of the tank mixers are designed for the applications of the highly viscous media and intended for work with anchor type agitators.

Operating principle

The high speed and adjusted tolerances between the rotor and the stator result in high suction potential, the product is suctioned and driven to the centre of the head.

The product is suctioned from the upper part of the head and the rotor thrusts it radially.

Passing through the opening of the stator the product is mechanically sheared, the particles are sheared by the rotor at 20 m/s. And finally this flow is hydraulically sheared leaving the stator through the slots at a high speed.

Design and features

High shear, particle size reduction to less than 100 microns.

Access to the mechanical seal from the inside of the tank.

Single sanitary mechanical seal.

Possibility to replace the stator without disassembling the mixer.

The circulation is promoted as the stator is geometrically higher than the rotor .

Motors: IEC B5, IP 55, F-class insulation.

Easy cleaning and sterilisation (CIP/SIP).

Various easily interchangeable head models.

Slotted head.

Materials

Parts in contact with the product : AISI 316L

Other stainless steel parts : AISI 304

Mechanical seal : C / SiC / EPDM

Gaskets : EPDM according to FDA 177.2600

Surface finish : electropolished, : Ra ≤ 0.8 µm

Options

Flushed mechanical seal.

Pressurised mechanical seal by means of a lip seal or double mechanical seal.

Disintegrating head.

Fine screen head.

Bare shaft construction for big size models, transmission by pulleys and belts.

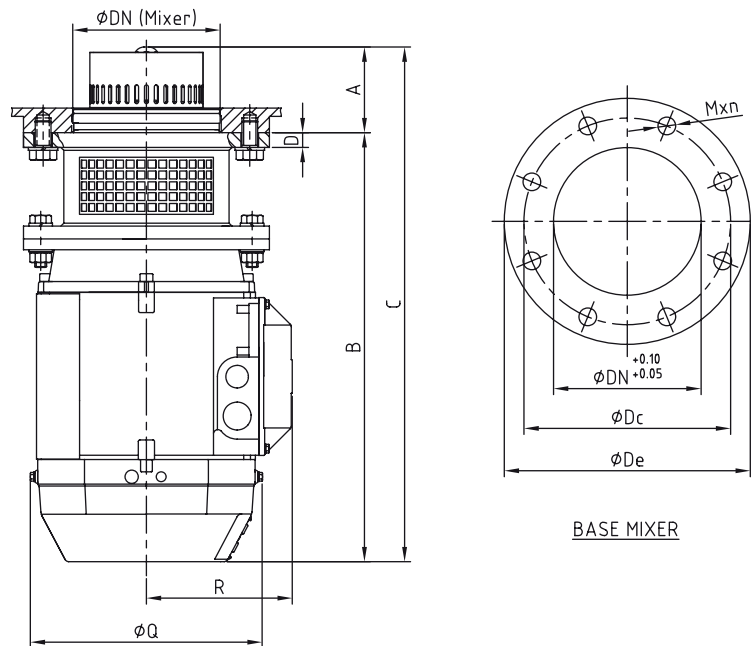
Assembly of cutters and propeller on the upper part of the rotor.

Surface finish: Ra ≤ 0,5 µm for the pharmaceutical applications.

Other motor protections.



General dimensions and fast selection table



Model	Type	A	B	C	D	Q	R	Flange dimensions			
								ØDe	ØDc	ØDn	Mxn
ME-6103	T-90L	82	355	437	18	180	122	200	160	131,5	M16x4
ME-6105	T-112M	87	436	523	15	236	148	250	210	150	M16x8
ME-6110	T-132S		492	579		261	163				
ME-6125	T-160L	108	656	764	26	310	208	330	300	175	
	T-180M		730	838		349	223			239	
ME-6130	T-180L	144	733	877							

Model	Motor			Viscosity		Additional agitation 3000 cP
	Type	Power kW	Speed rpm	1 cP	3000 cP	
ME-6103	T-90L	2,2	3000	300 l	100 l	300 l
ME-6105	T-112M	4		750 l	300 l	750 l
ME-6110	T-132S	7,5		1500 l	750 l	1500 l
ME-6125	T-160L	18,5		2000 l	1000 l	2000 l
	T-180M	22	1200 l		2200 l	
ME-6130	T-180L	22	1500	2500 l	1500 l	2500 l

