

Dispersing machine MS

Stirrer design

The MS dispersing machine is a high shear rotor-stator disperser primarily designed for tank mounting where energy intensive mixing in batch operation is required. The stirrer shaft is mounted directly on the drive shaft of the electric motor, which ensures a minimal weight and a compact configuration. The stator is mounted on a cage which can be attached directly to the motor or a mounting flange. Specially configured machines are available for operation in potentially explosive atmospheres, according to European ATEX standards.

Drives

3 phase motors are available for numerous voltages, frequencies and tolerances. The motors are IP55 in standard configuration. Machines are available with 3000, 1500 and 1000 rpm at 50 Hz. Continuous speed control is also available with frequency inverters. All machines are designed for continuous industrial application.

Machine mounting, shaft seals

For non-pressurised tanks, the dispersing machine can be mounted using the stator cage flange or a mounting flange. For pressurised or vacuum processes, special seal flanges and seal housings are available tailored to the specific applications. The machine configurations are highly adaptable for a wide range of operating conditions. Rotary lip seals or mechanical seals are chosen to best suit the individual customer needs. The MS dispersing machine is available in top, side or bottom-mounted variants.

Mixing head

The rotor-stator mixing assembly are supported solely on the mounting flange. This means that in the top-mounted configuration, there are no seals or bearings in contact with product. This is especially advantageous with sensitive or abrasive products as the risk of product contamination can be minimised.

Materials

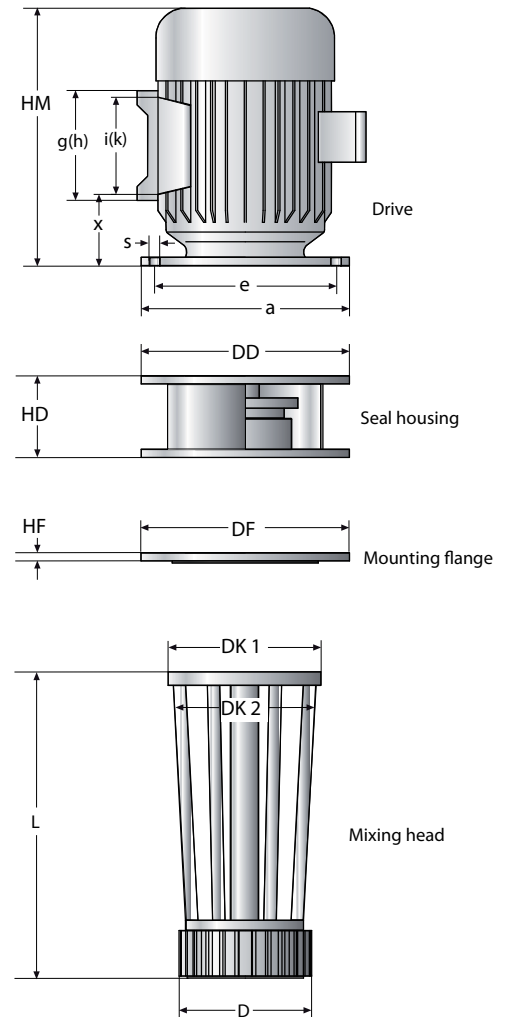
The stirrer shaft, the mixing head and the stator cage are all produced in stainless steel 1.4571 (SS316Ti). Other weldable materials are available on request.

Accessories

Suction or feed pipes, mounting flanges, seal monitoring systems, lifting stands, complete tanks.



Power	Dimensions in mm	Type				
		MS 2	MS 23	MS 3	MS 4	MS 5
HM	326	346	459	582	750	
i	125	140	140	-	-	
k	140	160	216	-	-	
g	149	176	218	-	-	
h	168	196	256	-	-	
x	56	63	89	-	-	
a	200	200	300	350	400	
e	165	165	265	300	350	
4 x S	11	14	14	18	17,5	
HD	130	150	150	175	230	
DD	160	160	230	350	450	
HF	15	15	23	22	22	
Flange**	DF	240	240	395	505	565
	DN	125	125	250	350	400
	PN	6	6	10	10	10
L von	300	500	650	800	1000	
	bis	500	800	800	1000	1250
DK 1	160	160	230	350	450	
DK 2	90	150	150	315	435	
D	120	180	210	270	340	
circulation l/min	200	400	800	1500	2000	
Batch size from - to [l]	10	30	50	250	400	
	40	150	500	1000	2000	
Drive power [kW]	1,0	1,5	5,5	11	15	
Speed [r.p.m.]*	3000	1500	1500	1000	750	



* Measured with water
** Standard dimensions, other dimensions available

Other variants

Type	Configuration
LDF LDI	Laboratory dispersing machine
MSL (MSLD)	Dispersing machine with separate Shaft bearing
DMS (DMSD)	In line dispersing machine