Single-shaft mixer with or without standard drum Type EM

For dry, moist and suspended goods; extremely gentle or by heavy duty deagglomeration

The mixing chamber rotates to facilitate filling and discharging operations, three-dimensional rearrangement in the tilted mixing chamber.

Function

A spiral mixing tool rearranges the mixing goods. There is an upward movement in the periphery and a downward movement caused by gravity in the center of the mixing vessel. You can improve the cross flow by inclining the mixing vessel up to 25 degrees. This mixing machine achieves technically ideal mixing qualities. Mixing goods can be dry, wet, suspended or pasty.

According to the required processing/ mixing result (either gentle or aggressive and dispersive) you can select the mode of operation: gentle blending/ deagglomeration/ wetting at low energy input/ wetting at high energy input/ agglomeration/ drying/ improving of solubility.

Mixer's fields of application:

- ✓ Small production orders
- ✓ Preparation of master batches
- ✓ "Just-in-time" mixing jobs and product development

EM 100
discharge mode

EM 10 with
HighShearBlades

Three-dimensional
rearrangement

EM-1-7211-2022 EN

User Benefits

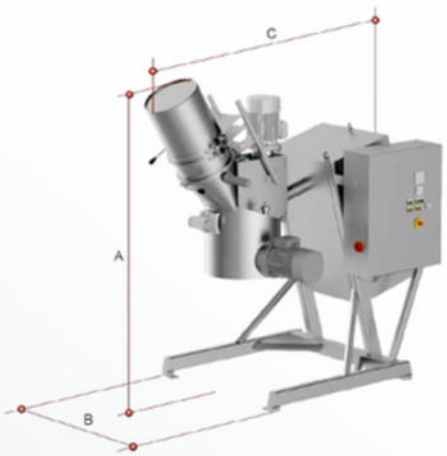
- ✓ Technically ideal mixing quality; adjustable mixing intensity (from gentle homogenisation to intensive deagglomeration)
- ✓ Micro-fine admixture of liquid material; the mixer remains dry and clean
- ✓ Selection of filling level from 10% to 100% of working capacity
- ✓ Ideal discharging of residues; easy cleaning/ sterilisation (GMP Standard)
- ✓ Integration into your ERP System, mixing programs supplied by PLC
- ✓ A bar code scanner can be integrated for online-documentation.
- ✓ You need a limited infrastructure only: manual fork lift, scale and standard drums.
- ✓ Mixing chamber: ATEX Zone 20

Piloting

amixon® places special importance on the pilot phase in the test centre. Your mixing processes are simulated here. This way, we support you in your product development phase. amixon® has a main test center in Paderborn (Germany). Further test centers are situated in Japan, Thailand, India, South Korea and the USA.

Technical Data

Single Shaft Mixer **Type EM** The type designation refers to the batch size in liters. Ideal mixing even at low filling levels. On demand mixers are jacketed for temperature control and vacuum drying.		Approx. gross volume of the mixer	Approximate dimensions, please consider pivoting radius of the rotating mixing chamber. Please ask for detailed dimension sheets!			The drive power required can vary widely depending on the bulk density, flow characteristics, rotational frequency and the processing task (such as deagglomeration).		Weight may vary considerably depending on the size of the drive and the type of design. The additional dynamic loads are very low.
			A	B	C	from	to	
Liter = dm³		Liter	mm	mm	mm	kW		kg
5	Drive down	6,8	1320	790	820+50	0,9	2,6	200
10		13,6	1400	1420	830+60	1,2	3,4	260
20		27,1	1450	1440	850+60	1,6	4,5	340
30		40,6	1500	1450	860+70	1,9	5,4	400
50	Drive up	67	1950	1450+90	1600	2,4	6,6	520
70		94	2310	1460+13	1700	2,7	7,6	620
100		134	2380	1500+30	1760	3,1	8,8	740
150		201	2600	1600+45	2100	3,7	10,3	900
200		268	3090	1700+55	2300	4,2	11,6	1050



- The rotational frequency can vary widely from about 0,8 m/s to about 4 m/s. Usually single-shaft mixers operate at low speed.
- As a welding specialist, amixon® is qualified by European, Japanese and American authorities with regard to different materials. The materials in contact with the mixing goods are either mild steel S355J2Ge, Hardox, austenitic stainless steels 1.4301, 1.4541, 1.4571, 1.4404, 1.4539, 1.4529, Duplex stainless steels 1.4462, 1.4162, 1.4363, and Alloy 59-2.4605, Hastelloy C22 and nickel.
- The mixers meet the highest hygienic requirements and comply with the EHEDG guidelines for dry and wet cleaning. They also meet the FDA hygiene guidelines and the design requirements of 3-A Sanitary Standards.

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amixon® manufactures high precision mixers, vacuum mix-dryers, synthesis reactors and granulators with maximum fabrication depth. All components of the amixon®-mixers are made in Germany. The production of the machines takes place exclusively in the amixon®-factory in Paderborn, Germany.