

# 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-17211-2022 EN



LIFESCIENCE



FOOD



ANIMAL CARE



DETERGENTS



CERAMICS



POLY

## 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

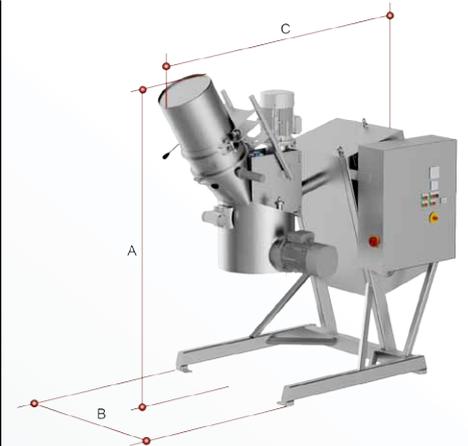
## Piloting

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

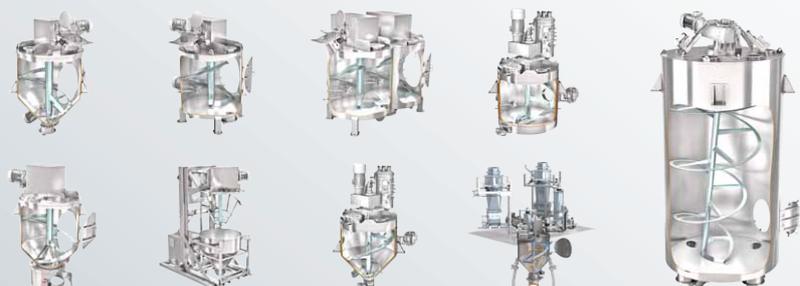
Vertical twin-shaft mixer <b>Type HM</b> The type designation is equal to the batch size in liters. Ideal mixing even at low filling levels.	Approximate gross volume of the mixer	Approximate dimensions of the standard version. Please ask for detailed dimension sheets!					The drive power required can 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	D	E	from	to	
		[liters]	[mm]					[kW]	
100	130	300	480	800	825	145	1	5	900
200	270	350	580	1000	1000	145	3	11	1000
400	530	420	745	1200	1250	145	6	25	1300
4000	5180	700	1560	2300	2700	145	38	133	6500
5000	6470	750	1670	2400	2900	145	46	160	6800
20000	25700	900	2600	3800	5600	145	101	346	32000



- 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.



amixon GmbH  
Halberstädter Straße 55  
33106 Paderborn  
Germany  
+49 (0) 52 51 / 68 88 88-0  
sales@amixon.com  
www.amixon.com



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.

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