

BOTTOM MOUNTED MAGNETIC AGITATOR

THE PRINCIPLE

MagMix comprises an in-tank stainless steel mixing head containing high power rare earth magnets. The mixing head is magnetically coupled to a matching external driving magnet powered by Electric or Air Motor and Gearbox assembly. The Mixing Head can be fitted with a range of Impellers to suit many applications

MagMix is mounted on a custom designed bearing and vessel pad which can be welded or bolted versions can be offered so this can fit into the base of virtually any process vessel

THE BENEFITS OF USING MAGMIX

- •No drive shaft through the vessel wall, eliminating the need for complicated mechanical seals which are liable to leak and can lead to product contamination
- Simple hygienic design. The compact mixing head is the only moving part inside the vessel, offering reliable and virtually maintenance free operation
- Easy to use and can be cleaned and sterilised inplace(CIP,SIP)
- •MagMix can be supplied with its own unique Control Panel to control the speed of the mixer or it can be integrated to existing PLC's
- Transferable drive unit, the external drive unit is attached to the mixing vessel by a quick release fitting so a single drive unit can be fitted sequentially to several mixing vessels, each equipped with vessel pads and mixing heads
- We can offer the mixing system for environments requiring full explosion proof and ATEX environments.

OUR QUALITY STANDARDS

MagMix products and manufacturing is quality assured and is certified to ISO9001-2015 standards

Our MagMix ATEX option mixing system is also assured and Certified to Standard EN13980:2002 ATEX Directive annex VI

MagMix is also manufactured in accordance with industry requirements such as ASME and applicable pressure vessel codes worldwide and is the EU Machine Directive 89/392/EEC

Magmix Flexibility

From Stock . There is a range of 'standard' mixing heads to suit most applications

Custom Made. We can design and manufacture missing heads to meet specific requirements on request The standard stainless steel (316L) heads are hygienic with minimal contact surfaces which are crevice free. They are compatible with Pharmaceutical, healthcare and food to name a few and the mixing system meets all criteria and standards required.

We can supply Adaptor Kits for our Mixers that enables the Magmix Mixing system to be interchangeable with some other magnetic mixers of the same size these can be used in many ways

- To drive impellers of another system
- Drive Units of another make can drive one of the MagMix mixing heads
- Magmix can be retro fitted to most vessels containing a weld plate of another make, negating the need to modify the vessel

We also keep an extensive stock of spares so our mixer parts are on the shelf ready to ship to our customers globally

MIXER DATA SHEET

BEARING OPTIONS	Standard	Tungsten Carbide		
	Optional	Silicon Carbide		
		Zircionium Oxide		
Mixer Material Option	Standard	1.4435(316LSt.St)		
	Optional	C22 (Hastelloy)		
		1.4539 (904L St. St.)		
		1.4529 (926L)		
PTFE SEALS	Standard	FDA 177.1550		
	Optional	USP<88> Class VI 121°C		
		TSE EMA/410/01 rev.3		
		other materials available on request		
SURFACE FINISH	Standard	≤0.4 Ra (μm)		
	Optional	min : ≤0.2 Ra (μm)		
		Electropolish		
Drive Unit	Standard	AC IP55		
	Optional	AC IP65		
		DC		
		Air		
		ATEX AC		
		ATEX Air		
		Stainless Steel		
Drive Unit Finish	Standard	RAL 1028		
		FDA Painting & Other Colours if Required		
Vessel Pad Options	Standard	Weld in Flange		
		Bolted Vessel Pad		
SPEED CALCULATION	Option	Impeller Mounted		
		DriveShaft Mounted		
MAXIMUM VISCOSITY		800 cp		
MAXIMUM OPERATING TEMPERATURE		135°C		

MIXER CAPABILITIES

MODEL _,î	VIGOUROUS MIXING	GENTLE MIXING
MM4	10 LITRES	30 LITRES
MM6	50 LITRES	150 LITRES
MM8	150 LITRES	500 LITRES
MM12	300 LITRES	2000 LITRES
MM20	1000 LITRES	3000 LITRES
MM32	2000 LITRES	6000 LITRES
MM64D	3000 LITRES	30000 LITRES +

MIXER INFORMATION									
MODELt	MM4 MIXER	MM6 MIXER _	MM8 MIXER	MM12 MIXER	MM20 MIXER	MM32 MIXER	MM64D MIXER		
IMPELLER SIZE	102 (DIA) X 90 (H)	122 (DIA) X 100 (H)	154 (DIA) X 120 (H)	176 (DIA) X 120 (H)	220 (DIA) X 140 (H)	252 DIA X 190 (H)	252 DIA X 220 (H)		
WELD IN VESSEL PAD SIZE	72 (DIA)	85 (DIA)	125 (DIA)	150 (DIA)	190 (DIA)	228 (DIA)	228 (DIA)		
STANDARD AC MOTOR RATING	0.18 KW	0.18 KW	0.55 KW	0.75 KW	1.5 KW	2.2 KW	5.5 KW		
MIXER TOTAL WEIGHT	5 KG	7 KG	12 KG	26 KG	45 KG	52 KG	114 KG		
DC GEARUNIT & MAX SPEED (RPM)	✓ 500 RPM	✓ 500 RPM	Х	X	X	Х	Х		
AC GEARUNIT & MAX SPEED (RPM)	✓ 500 RPM	✓ 500 RPM	✓ 500 RPM	✓ 500 RPM	✓ 500 RPM	✓ 500 RPM	✓ 450 RPM		
ATEX AC GEARUNIT & MAX SPEED (RPM)	✓ 500 RPM	✓ 500 RPM	✓ 500 RPM	✓ 500 RPM	✓ 500 RPM	✓ 500 RPM	✓ 450 RPM		
AIR GEARUNIT & MAX SPEED (RPM)	✓ 450 RPM	✓ 450 RPM	✓ 450 RPM	✓ 400 RPM	✓ 333 RPM	X	X		
ATEX AIR GEARUNIT & MAX SPEED (RPM)	✓ 450 RPM	✓ 450 RPM	✓ 450 RPM	✓ 400 RPM	✓ 333 RPM	X	X		
<u>OPTIONS</u>									
BOLTED VESSEL PAD	~	~	~	~	~	~	~		
50MM EXTENDED DRIVE	~	~	~	~	~	~	~		
100MM EXTENDED DRIVE	~	~	~	~	~	~	~		
SHAFT MOUNTED SPEED SENSOR	~	~	~	~	~	~	~		
IMPELLER MOUNTED SPEED SENSOR	~	~	✓	~	~	✓	~		

ALL DIMENSIONS IN MM

Magmix Engineering is constantly developing the MagMix System and we would be happy to discuss and special application where the MagMix concept could be used



