

EMT series Top-mounted Magnetic Stirrer

Equipment introduction

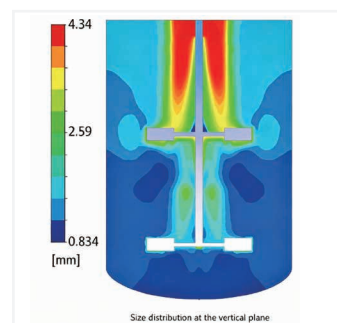
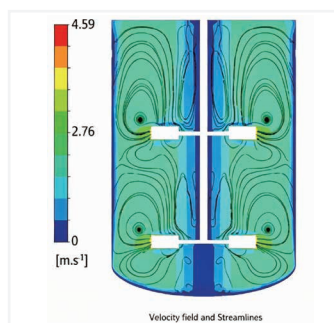
The EMT series top-mounted magnetic coupling agitator is a core process equipment solution designed for the biopharmaceutical and biotechnology industries, dedicated to providing efficient and sterile mixing for bioreactors and fermentation systems. The system adopts a fully enclosed magnetic drive transmission structure, fundamentally eliminating leakage risks, effectively ensuring sterility integrity throughout the process, and significantly reducing the risk of cross-contamination.

In terms of design and material selection, the EMT series strictly complies with international regulations and industry standards such as FDA, ASME BPE, and GMP. Wetted parts are available in highly corrosion-resistant materials including 316L, 904L, SMO 254, Hastelloy, and titanium alloy, fully meeting the stringent requirements of different process media for corrosion resistance and biocompatibility. The system supports Clean-in-Place (CIP) and Sterilization-in-Place (SIP), ensuring efficient equipment turnaround and compliant operation in continuous production.

The EMT series is widely applicable to high-end bioprocessing scenarios, covering various process routes such as microbial fermentation (e.g. *Escherichia coli* and yeast) and mammalian/insect cell culture (e.g. Vero, CHO, Marc145, ST, and SF9 cell lines). It can be used in conjunction with critical process units such as seed reactors, production fermenters, media preparation systems, buffer preparation tanks, and intermediate product blending tanks, providing reliable agitation and mixing assurance throughout the entire biopharmaceutical production process.



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Model	Mixing volume (L)	Speed (rpm)	Power (kW)
EMT1	10	800	0.12
EMT2	20	600	0.25
EMT5	50	600	0.37
EMT10	100	500	0.55
EMT20	200	500	0.75
EMT50	500	450	1.5
EMT100	1000	400	2.2
EMT200	2000	350	4
EMT300	3000	300	5.5

Advantages of the magnetic mixer

Assured Sterility Integrity:

The non-contact magnetic coupling drive eliminates the risk of seal leakage and prevents microbial ingress pathways, thereby ensuring sterility barrier integrity throughout the entire process.

High-Efficiency Mixing Performance:

With an optimized impeller configuration and speed control strategy, the system achieves rapid and homogeneous mixing under low energy consumption, effectively improving mass transfer and heat transfer efficiency.

Multiple Impeller Options:

Impeller design and selection can be tailored to specific applications, ensuring both a compact and stable structure and the required process performance.

High Maintainability:

The modular design allows quick assembly and disassembly, eliminates hygienic dead zones, and is fully compatible with online CIP/SIP, significantly reducing turnaround time between batches.

Biology
Pharmacy



Food



Daily Care



Chemical
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New
Material



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