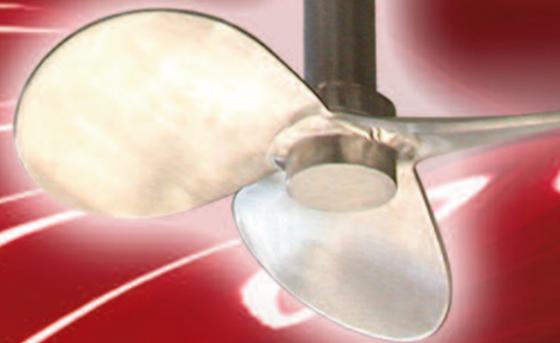




MagnaSafe[®]
INTERNATIONAL

*Safe, Sealless, 100% Leakproof Mixing
for the Chemical & Sanitary Industries*



Environmentally Safe – No Emissions



MagnaSafe[®]
INTERNATIONAL

Safe Mixing for the Chemical & Sanitary Industries

Sealless Makes Sense

Magnetic Drives offer the safest, most cost effective solution...

Think **Magna-Safe** when you want to prevent hazardous vapor emissions

Think **Magna-Safe** when you want to prevent product contamination

Sealless Design, 100% Leakproof

The primary advantages of our sealless design are to eliminate vapor leakage and prevent product contamination, and enhance operator safety.

Our magnetic drive eliminates the need for mechanical seals, resulting in less costly maintenance, fewer spare parts, and decreased downtime.

Environmentally safe

No emissions mean you are doing your part to protect your environment.

Sealless Mag-Drive Mixing

- Top Entering Mixers
- Bottom Entering Mixers
- Side Entering Mixers
- Inline Mixers
- Small Scale Mixers
- Replace Existing Sealed Mixers
- Impellers & Speed Sensors
- Support & Documentation

Mixers for Demanding Process Applications

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MST Sealless Top Entering Mixers

High Torque Mag-drive Mixers for Plant Production

- Torques to 50,000 in-lb.
- Temperature -100°C to 350° C
- Flange, Tri-clamp, or Threaded Connection
- Impellers for any process application
- Motors can be electric, variable speed, air, or hydraulic
- Available with speed sensors tachometers, and power monitors
- Available in most alloys, glass lining and coatings
- Several bearing designs to suit most conditions
 - Stainless steel lubricated and shielded
 - Hybrid ceramic/stainless dry running
 - All ceramic dry running
- Sanitary features include:
 - 15Ra Polish
 - All stainless drive
 - Triclamp ferrule
- Pressures to 3000 PSI, including double wall containment shells
- ATEX certified

100% Leakproof

A sealless, leakproof mag-drive design that eliminates a mechanical seal and lubrication system.

Zero leakage means no product contamination, while providing operator safety.



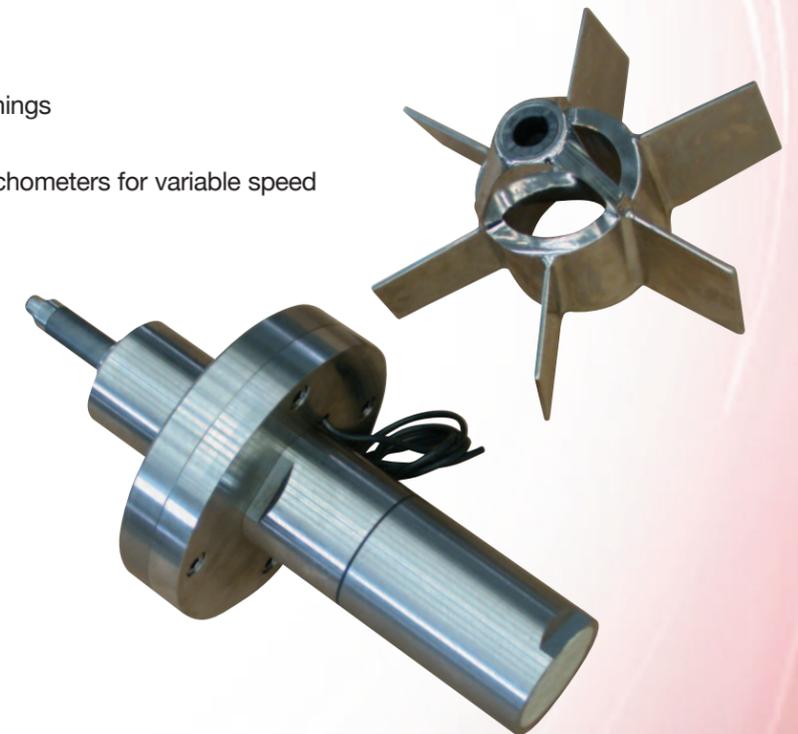
MSB Sealless Bottom Entering Mixers

Sanitary Mag-drive mixers

- Free draining, open impeller with high flow, low shear blades
- Highly polished wetted parts in 316L SS
- All stainless drives and motors available
- Electric and air motors to 5 Hp
- All FDA, USDA, and USP approval materials
- Independently tested for cleanability and particle shedding
- Able to mix volumes to 30,000 liters
- Validatable using documents provided
- No maintenance design
- CIP/SIP sterilizable
- Magnets cannot decouple
- Pure silicon carbide and PEEK bushings
- Robust, one piece weld plate
- Available with speed sensor and tachometers for variable speed
- Dry running option

Sterile Mixing Technology

We have eliminated all seals. The mounting flanges are welded to the tank forming a 100% leakproof design. The Magna-Safe mixer is cleaned in place (CIP) with the vessel.



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MSS Sealless Side Entering Mixers



Capable of mixing volumes to 1,000,000 gallons

Prevent Product Contamination and Emissions

The Magna-Safe mixer is designed to be Cleaned In Place (CIP) and can run dry. No other company provides a side entering design that is both 100% leak proof and sealless.

Magna-Gard™ Sealless Inline Mixers

For Continuous Flow Applications

100% Leakproof

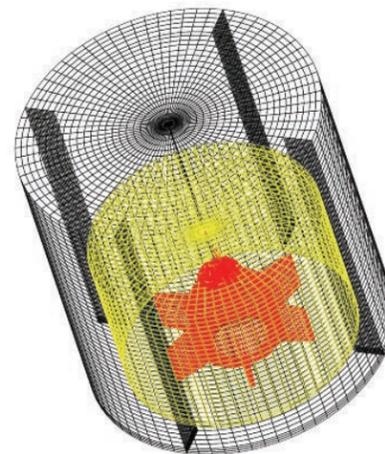
Sealless technology for continuous processes requiring inline blending or high shear, with all the features of the MST top entering mixer.



Magna-Gard Sealless Small Scale Mixers

Laboratory & Pilot Scale Mag-drive Top Entering Mixers

- Small Mounting Connections
- Can be fitted to Glass vessels
- Electric, variable speed, and air motors
- Several impeller styles to suit most applications
- High pressure capability to 3000 PSI
- Available in most alloys, glass lining, and coatings
- Suitable for volumes to 50 gallons
- Sanitary features available including
 - 15 Ra Polish
 - Triclamp ferrule connection
 - All-stainless drives and motors
- ATEX Certified



Impellers

Speed Sensors for MSTs & MSBs

Axial Impellers for Flow



45° Pitch



Hydrofoil



Propeller



Intermig

Radial Impellers for Shear



90°



Rushton



Gas



Disperser



Shear

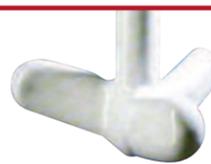
Special Impellers



Anchor

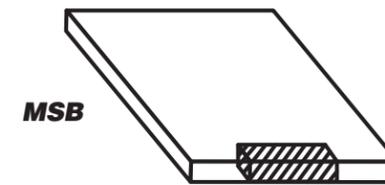


Ribbon

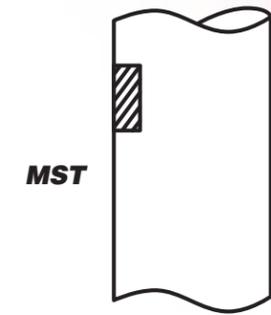


Retreat

A. Embedded Magnet in Shaft or Impeller

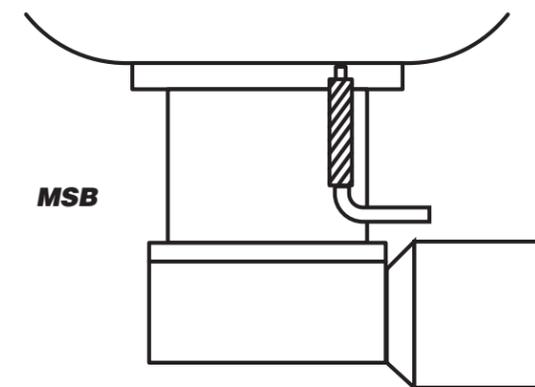


MSB

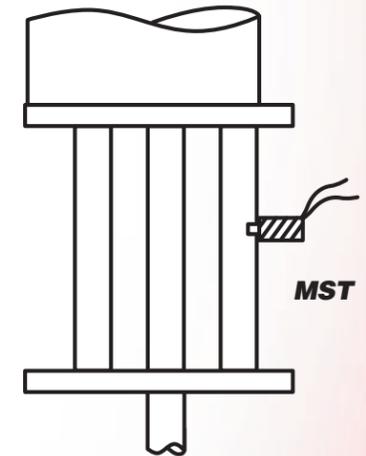


MST

B. Mag Pick-Up Speed Sensors - NEMA, Intrinsically Safe

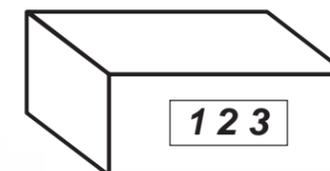


MSB



MST

C. Barrier Box and/or Tachometer NEMA 1, 4X, 7/9



1 2 3

MSB and MST

Applications

Sealless MST Top Entering

- Glass Lined
- Biotech
- Cryogenic
- High Pressure
- Extreme Temperature
- Biofuel
- Nuclear
- Explosive
- Fermentors
- Kilolabs
- Reactors
- Toxic
- Hydrogenators
- Flammable
- High Viscosity

Sealless MSS Side Entering

- Food Oils
- Biofuels
- Vitamins
- Chemicals
- Soups
- Citrus Juice
- Beverages

Sealless MSB Bottom Entering

- Biotech
- CIP
- Pharma
- Injectable
- Vaccines
- Cell Cultures
- Protein Fractionations

Magna-Gard Sealless Inline Mixers

- Detergents
- Continuous Flow
- Chemical
- Petrochemicals

Replace Your Existing Mechanical Seal Mixer

- Repair
- Rebuild
- Refurbish
- Retrofit
- Recondition
- Replace

Magna-Safe will retrofit and recondition your existing mechanical seal mixer using mag-drive technology. Reuse your existing wetted parts. or upgrade to new, more efficient, and high productivity impeller technology.

Magna-Safe will replace old, unreliable mechanical seal agitators on existing vessels without the need to modify the vessels. Our capability extends to most alloys, coatings, and glass lining.

Benefits

A thorough analysis of the repair, retrofit, or replacement of your existing mixers Engineered solutions for difficult applications

- Increased sealing safety over conventional mechanical seals
- Reduced downtime means improved process productivity
- Original Magna-Safe OEM parts and factory trained service technicians
- No wearing seal parts means increased mixer life expectancy
- 100% Leakproof design

Magna-Safe will evaluate and optimize your process mixing performance with our unconditional process warranty

All designs are unconditionally warranted for process performance

Customer Service

Support

- Warranty
- Training
- Start-up Assistance
- Demo Tank
- Mechanical Trouble Shooting

Process Support

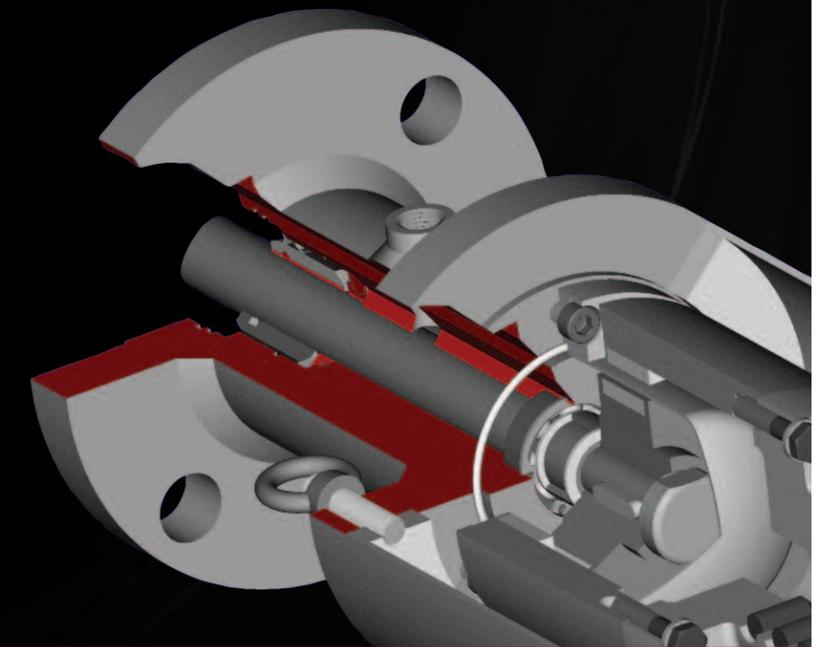
- Process Troubleshooting
- Scale Up/Down
- CAD Drawings
- Applications Engineering
- R&D
- Testing
- Prototype

Control Documentation

- Cleanability Study
- ASME Code Section VIII
- PMI Test
- X-Ray Test
- Hydrotest
- Material Certificates
- QC per ISO 9002
- ATEX Certification
- USP Class VI
- Validation Capable

Aftermarket Support

- Inventory of Parts
- Rebuild as New
- Retrofit Existing Equipment





*The Fusion of Process Mixing
and Mag-Drive Technology*

7 Reasons to Specify Sealless Mixers

- 1** Prevent Product Contamination
- 2** Absolutely Leakproof
- 3** SIP/CIP Sterilization
- 4** Eliminates Costly Mechanical Seal
- 5** Maintenance Free Design
- 6** High Pressure / High Temperature Design
- 7** Environmentally Safe – No Vapor Emissions



Magna-Safe International

Sales & Service Location
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Mechanic Falls, ME
Florence, Italy

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