

Blending & Suspension in Gas & Oil Storage Tanks with **Magna-Safe Seal-less** Side Entry Tank Mixers

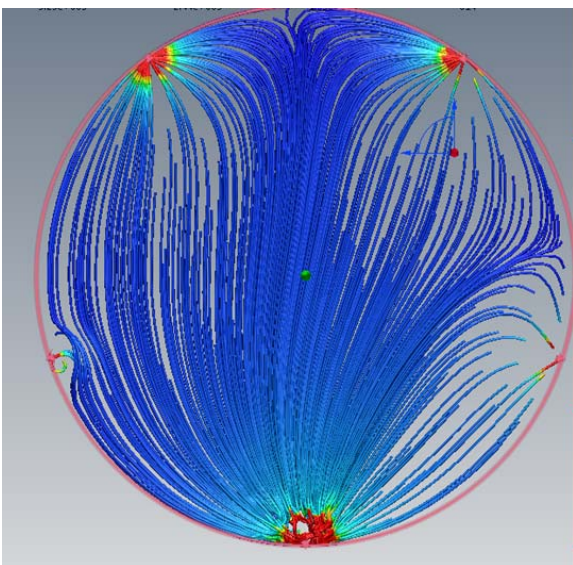
The two main areas in the oil and gas market are upstream operations such as storage, and downstream production such as gasoline blending. Crude oil is problematic as it contains sediments which can settle out if not suspended properly. Side entering tank mixers are used to blend oil and suspend solids.

Proper selection of mixer pumping rates, the number of mixers, and mixer orientation are needed to assure solids suspension. Ordinarily there are 1 to 5 mixers required on vessels up to 200M diameter. The selection is verified using CFD (computational fluid dynamics). In most cases, the power requirement will be 10 HP per million gallons. **Magna-Safe** engineers the highest efficiency impellers, therefore providing the most mixing per HP. The **Magna-Safe seal-less mixers** are installed exactly like a traditional mechanical seal mixer.

Oil leakage in the field cannot be tolerated.

Only **Magna-Safe seal-less** mixers are considered zero leakage. Mixers which use seals will wear and will leak. Replacing a seal is complicated in a full tank. **Magna-Safe seal-less** mixers eliminate any oil leakage, and never require seal replacement.

Only **Magna-Safe seal-less** mixers are able to provide side entering mixing with zero leakage mag-drive technology.



Features and benefits of **Magna-Safe seal-less** mixers

- Seal-less Magnetic Coupling for zero leakage and no seal maintenance. Only Magna-Safe can do this.
- ATEX Zone 0. Only Magna-Safe can do this.
- Gear or Belt Drive for plant preference
- Industry standard installation. No swivel required.
- Highest efficiency Hydrofoil Impeller for greatest pumping and least HP in the industry.
- 3 years operation period without maintenance