

Mag-Drive Pump Advantages

Mechanically Sealed Pump

Mechanical Seal
(aggressive liquids attack the seal and eventually penetrate into the back of the pump)

Product
crystallizes on
back of seal,
requiring it to
be flushed

Sealless Pump

Powerful magnets
transmit drive force

Barrier
contains
liquid and
prevents
leaking

Sealless, magnetically driven pumps are ideal for handling extreme fluids:

- *Reliable, leak-free operation*
- *No mechanical seal to replace*
- *No environmental emissions*
- *No need for regular PM schedules*

In contrast, **pumps with mechanical seals frequently experience seal failures** – resulting in potentially hazardous leaks.

Finish Thompson mag-drive pumps eliminate the mechanical seal – improving reliability and preventing leaks. These mag-drive pumps are engineered to handle the most aggressive liquids.

Cost of Ownership

- Mechanically sealed pumps typically offer a lower initial unit cost – but a much higher lifetime cost.
- Mag-drive pumps significantly reduce service cost – providing trouble-free operation for years.

The bottom line: A mag-drive pump can deliver lower overall running cost and trouble-free operation for decades. To take advantage of these savings, many pump users are retiring their sealed pumps and replacing them with sealless, mag-drive pumps.



Compare and See

For a more detailed analysis, review the following differences:

Mechanically Sealed Pumps	Magnetic Drive Pumps
Seal failure: Mechanical seals will fail. It's not a matter of if. It's a matter of when.	 Improved reliability: With no seal, there's no opportunity for seal failure.
Leak hazards: When the seal fails, the pump leaks. This is expensive...and can be dangerous. Maintenance downtime can cost money & potential customers. Leaks can put employees at risk – due to vapors or direct fluid contact.	 Enhanced safety: By removing the need for a mechanical seal, mag-drive pumps reduce user risk. There are no seal leaks that could cause dangerous injury.
Lubrication maintenance: Some applications require a constant supply of external lubrication to the pump's seal.	 Efficient operation: Installing and using a mag-drive pump is easy & efficient. Because there is no seal, there is no need for external lubrication.
Hidden costs: The initial pump cost may be lower, but the overall cost multiplies quickly once maintenance, downtime, and repairs are factored into the price.	 Lifetime savings: Finish Thompson mag-drive pumps are highly engineered to perform consistently & reliably, long-term. They are competitively priced, and deliver significant value once pump owners factor in their increased efficiency and safety.
No run-dry ability: The friction created by the mechanical seal generates heat. Without liquid present, the increase in heat will quickly cause seal failure.	 Run-dry capability: When equipped with carbon bushings or silicon carbide with our diamond-like coating option, Finish Thompson mag-drive pumps can run dry for an extended time (making it difficult for a Finish Thompson pump to fail).
Complex pump selection: Because seals come in contact with the liquid, additional material considerations are required when selecting a pump – and multiple seal types and seal face/elastomer choices further increase the challenges of selecting and pricing a pump for a specific application.	 Simple pump selection: With no seal, there is no need to determine the correct seal combination or use an expensive, specialized seal. Featuring the industry's most chemically-resistant materials, Finish Thompson pumps are compatible with most corrosive chemicals. This makes Finish Thompson mag-drive pumps easier to specify.

Learn More

Contact your authorized Finish Thompson distributor or visit www.finishthompson.com



Finish Thompson Inc.

921 Greengarden Road
Erie, PA 16501 USA
Tel: (800) 934-9384
Fax: (814) 459-3460

FINISHTHOMPSON.COM