

## 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.



**FINISH THOMPSON INC.**

## Compare and See

For a more detailed analysis, review the following differences:

| Mechanically Sealed Pumps                                                                                                                                                                                                                                                                                 | Magnetic Drive Pumps                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Seal failure:</b> Mechanical seals will fail. It's not a matter of if. It's a matter of when.                                                                                                                                                                                                          |  <b>Improved reliability:</b> With no seal, there's no opportunity for seal failure.                                                                                                                                                                                                                                                             |
| <b>Leak hazards:</b> 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.                                                                   |  <b>Enhanced safety:</b> By removing the need for a mechanical seal, mag-drive pumps reduce user risk. There are no seal leaks that could cause dangerous injury.                                                                                                                                                                                |
| <b>Lubrication maintenance:</b> Some applications require a constant supply of external lubrication to the pump's seal.                                                                                                                                                                                   |  <b>Efficient operation:</b> Installing and using a mag-drive pump is easy & efficient. Because there is no seal, there is no need for external lubrication.                                                                                                                                                                                     |
| <b>Hidden costs:</b> The initial pump cost may be lower, but the overall cost multiplies quickly once maintenance, downtime, and repairs are factored into the price.                                                                                                                                     |  <b>Lifetime savings:</b> 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.                                                                                    |
| <b>No run-dry ability:</b> The friction created by the mechanical seal generates heat. Without liquid present, the increase in heat will quickly cause seal failure.                                                                                                                                      |  <b>Run-dry capability:</b> 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).                                                                                             |
| <b>Complex pump selection:</b> 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. |  <b>Simple pump selection:</b> 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](http://www.finishthompson.com)



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