

WORLD PUMPS

HMD KONTRO'S NEXT-LEVEL PROTECTION

By Honeywell/Sundyne's Hannah Verrall & Todd Keefe, March/April 2026



HOW SECONDARY CONTROL AND CONTAINMENT OPTIONS ENHANCE ROI FOR SEALLESS MAGNETIC DRIVE PUMPS.

Thousands of companies around the globe use chemicals to manufacture products that industries and households use every day. In each of these manufacturing processes, chemicals are extracted, distilled, absorbed and filtered through a wide range of applications. The pumps that handle chemicals must be corrosion resistant. They must be able to withstand elevated temperatures and they must be able to safely protect people and the environment.

There are many reasons to choose sealless magnetic drive pumps for chemical applications. Typical criteria include compatibility with an application's flow & pressure requirements, flexibility to upgrade as requirements evolve, aftermarket support and total cost of ownership.

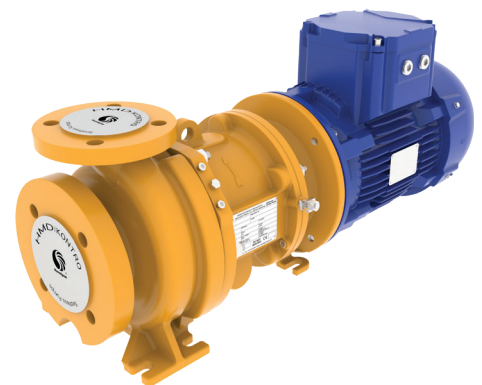
But for some chemical processing applications, one requirement stands above all others – **Safety**.

For applications that involve volatile, toxic or aggressive chemicals, HMD sealless magnetic drive pumps are a preferred alternative to traditional sealed pumps. With no seals to maintain or replace, HMD sealless pumps eliminate potential leak paths and mitigate the risk of fugitive emissions that can harm productivity, employees and the environment.

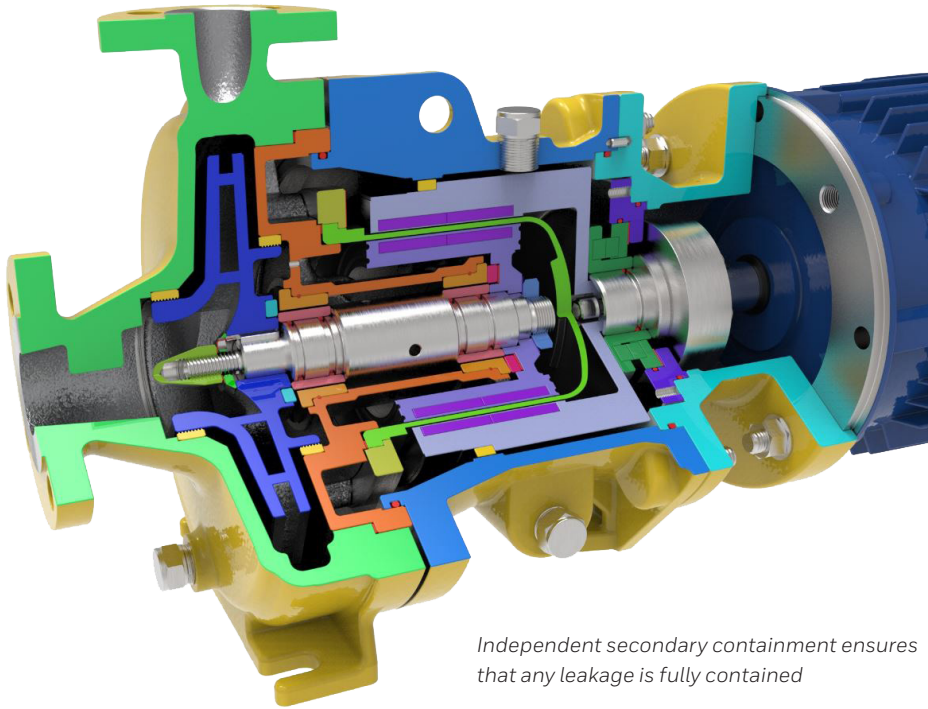
PUMP PIONEER:

HMD Kontro pioneered and patented sealless magnetic drive pump technology in the 1940's. Since then, HMD has remained at the forefront of the liquid handling industry. HMD

was one of the first sealless mag drive pump manufacturers to introduce secondary sealing options, more than two decades ago. Today, HMD pumps are known for high-performance, superior reliability, unmatched safety



HMD pumps have been used in chemical applications since the late 1940s



Independent secondary containment ensures that any leakage is fully contained

and full industry-compliance with many of the world's most demanding chemical processing applications.

SECONDARY PROTECTION:

Despite the inherent safety provided by sealless magnetic drive pump designs, some applications (involving especially hazardous chemicals) require even greater protection. To address these requirements, HMD offers secondary control and containment options that are in full compliance with industry standards, including ASME B73.3, ISO 15783 and API 685.

HMD Kontro's Secondary Control provides an intermediate level of protection to ensure that any potential leakage through the primary shell is restricted. HMD's Secondary Containment provides the highest level of security and safety, by ensuring that any leakage is fully contained within the confines of the pump.

HMD's Secondary Control features a leak restriction device between the rotating drive shaft and the coupling housing. This fully independent secondary control system also features leak detection capabilities from liquid or pressure sensors.

HMD's Secondary Containment features a dry-running mechanical seal between the rotating drive shaft and static coupling housing. This forms a secondary pressure boundary, and it provides a fully independent secondary containment system. In the unlikely event of a primary containment breach, the pump is shut down and secondary containment is achieved. Any leaked fluid is fully contained within the secondary containment area. This prevents escape to the atmosphere and it allows for safe removal via the secondary drain and vent connections.

The advantages of these Secondary Control & Containment solutions include:

- Fully independent secondary system that ensures separation of failure modes between primary and secondary containment.
- No risk of overheating between the primary and secondary pressure boundaries.
- Leakage monitoring within the secondary casing area to detect a breach of primary containment.
- Compact design with minimal impact on the overall pump footprint.
- A simple process to decontaminate the secondary casing in the event of primary containment failure.

WHAT IT ALL MEANS?

Health and safety are everyone's responsibility. From the production and maintenance staff on site, to executive teams and members of the board, safety should always be a top priority. Minimizing the impact of manufacturing and other operations on the environment is an essential, legal and moral obligation.

Since inventing and patenting sealless magnetic drive pump technology in the 1940's, HMD has continued to innovate and improve its Secondary Control & Containment solutions. These capabilities bring confidence to operators, delivering peace-of-mind that aggressive & dangerous chemicals are handled safely and efficiently. Beyond safety, HMD Kontro sealless pumps also save time and resources required for maintenance. Over the life of the pump, these savings add up, producing a significant enhancement to an operator's bottom line. To learn more, visit: sundyne.com/products/hmd-mag-drive-pumps.