

HMD Aftermarket Services and Genuine OEM Parts for Sealless Magnetic Drive Pumps

Global Service with Local Support

A full range of aftermarket technical services extend the longevity of HMD Kontro pump investments, reduce downtime and deliver a trouble-free sealless experience. Field service support available from both HMD and the global network of Authorised Service Centres includes:

- Pre-commissioning, commissioning and start-up assistance
- Overhauls and repairs
- Magnetic drive pump operation and maintenance training
- Troubleshooting and failure analysis
- Upgrades, retrofits and re-rates
- Instrumentation
- Site surveys

HMD KONTRO ASME / ISO
MAGNETIC DRIVE PUMPS



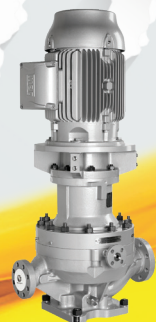
HMD KONTRO HORIZONTAL
API 685 MAGNETIC DRIVE
PUMPS



HMD KONTRO VERTICAL
IN-LINE MAGNETIC DRIVE
PUMPS



HMD KONTRO VERTICAL
IN-LINE LOW-FLOW
MAGNETIC DRIVE PUMPS



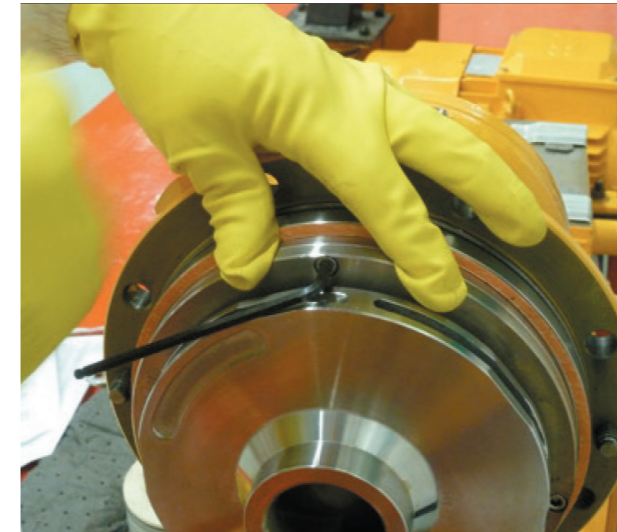
Lifecycle Support for Sealless Magnetic Drive Pumps

HMD Kontro sealless magnetic drive pumps are supported by a full range of aftermarket technical engineering services that are designed to reduce downtime, provide a trouble-free sealless experience, and maximise the longevity of pump investments. Services include:

Training & Familiarisation:

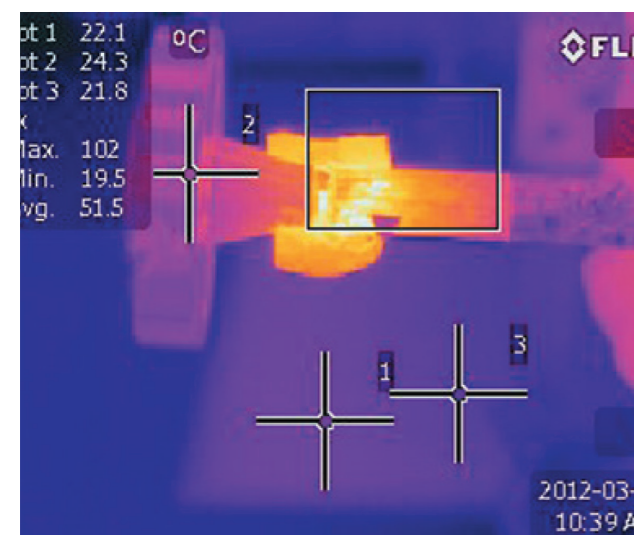
A full range of commissioning and maintenance training programmes are available to help ensure the long-term, successful operation of sealless pumps.

- All training is tailored to individual client or personnel requirements.
- Courses can be held onsite at an operational facility or at an Authorized HMD service centre.
- Familiarisation courses for new operators of sealless technology deliver the best practices that have been codified from more than 70 years of experience running and maintaining sealless mag-drive pumps.



Upgrades, Retrofits & Re-Rates:

Today, thousands of HMD Kontro pumps are installed worldwide and they have been operating effectively for decades. Throughout the course of a pump's lifecycle, it is highly likely that process conditions and operational environments change, which can require modifications to rotating equipment. When this occurs, HMD Kontro can advise on suitable upgrades, re-rates and retrofits that boost pump performance, optimise efficiency and power consumption, and ensure ongoing safety and compliance.

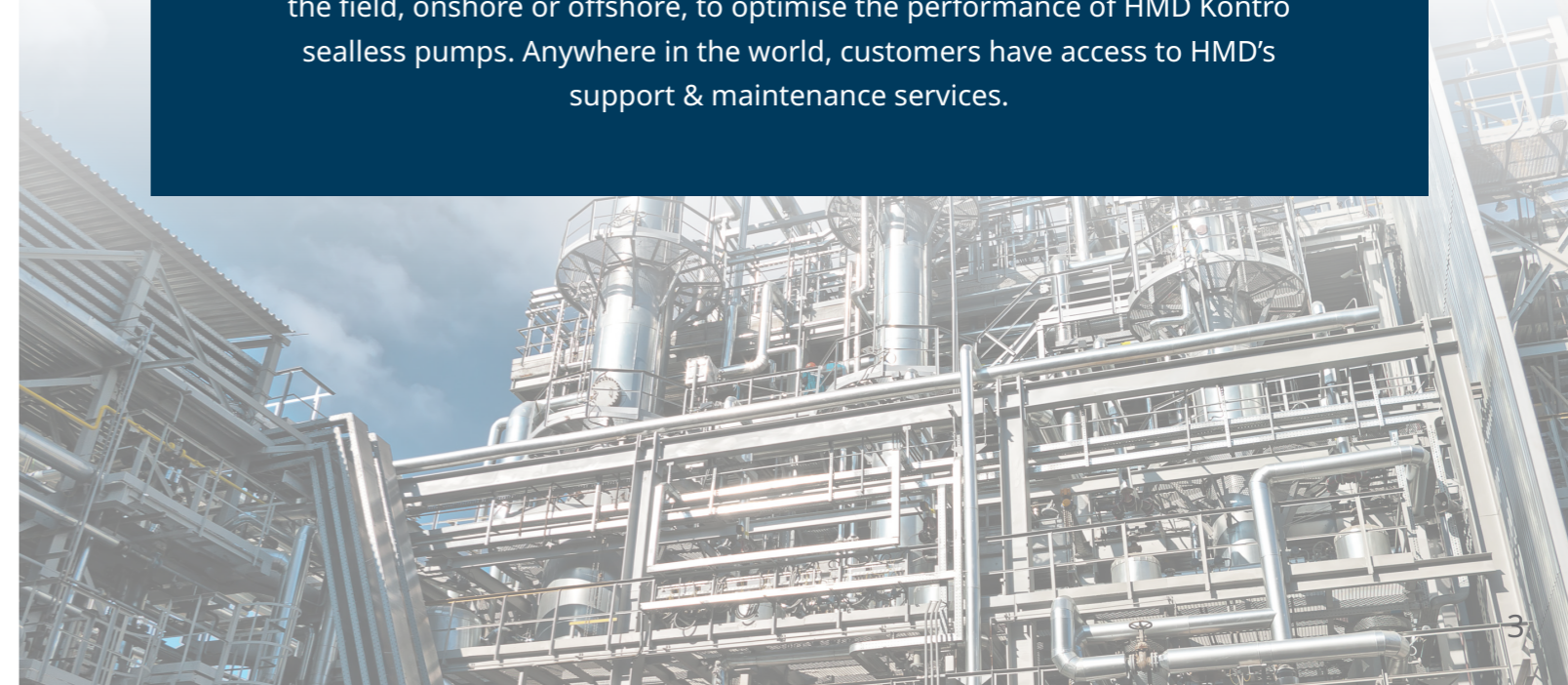


Troubleshooting & Failure Analysis:

HMD's experienced team of Field Service Engineers are on-hand to provide assistance with failure analysis and to help determine the root cause of operation, performance or reliability issues. Leveraging various diagnostic methods and an extensive background in magnetic drive pump operation and performance optimisation, the HMD service team can make recommendations on remedial and corrective actions to resolve problems and prevent repeat occurrences.

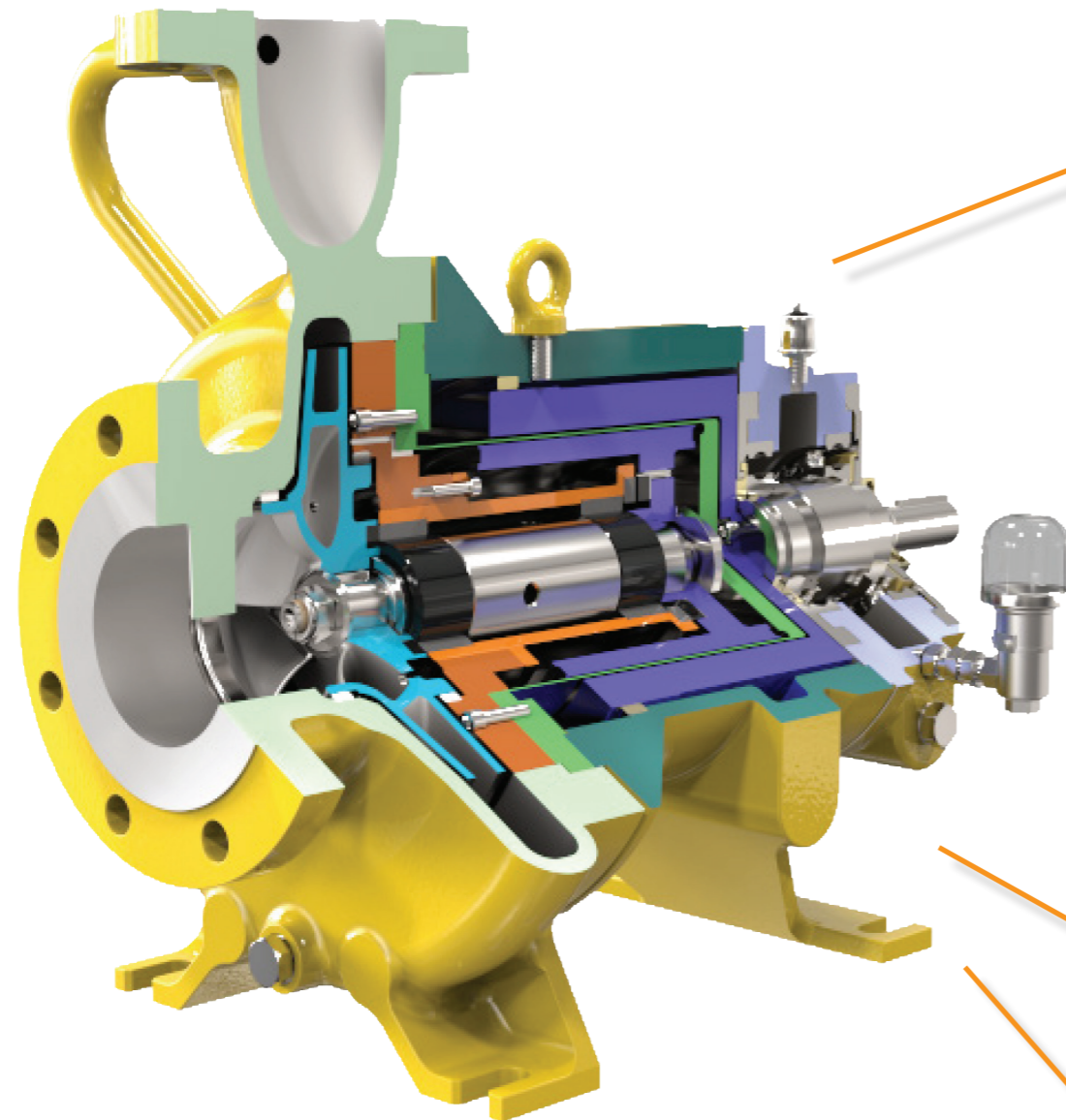
A Global Service with Local Support

HMD's team of engineers can provide any support service in-house or in the field, onshore or offshore, to optimise the performance of HMD Kontro sealless pumps. Anywhere in the world, customers have access to HMD's support & maintenance services.



Spare Parts Kits

Over the last 70+ years, HMD Kontro has analysed the most common repair profiles and typical maintenance requirements. This has resulted in a portfolio of spare part kits that can be held in stock by end users or at HMD's regional hubs. Many HMD Kontro parts are interchangeable between pumps – and these Kits make it easy to deliver a fast, cost-effective response in the unlikely event that a problem occurs.



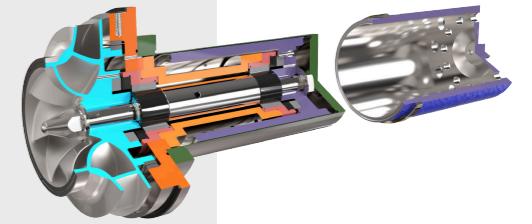
HMD's highly experienced team is on hand to assist with site interchangeability studies, spare parts recommendations and inventory optimisation at any plant worldwide and to facilitate the purchase of replacement parts as required.

For further information or to place an order for a spare parts kit, please call: +44 (0)1323 452000 or email: hmdparts@sundyne.com

Cartridge Assembly

HMD's drop-in cartridge assembly contains all of the wetted pump parts (except the main casing) and offers a simple and quick option for pump repair or parts replacement without a skilled operative being required. The cartridge provides the best option for critical pumps and high value processes that cannot tolerate the expense of downtime. The cartridge assembly includes:

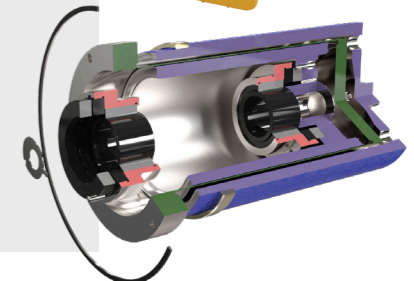
- Containment Shell
- Bush Holder
- Shaft
- Inner Magnet Ring
- Impeller (or Outer Magnet Ring)
- Product Lubricated Bearings
- Gaskets & O'rings



Insurance Kit

As its name suggests, the Insurance Kit is designed to provide uptime continuity and high value. The Insurance Kit forms a convenient package that can be held in stock or ordered as required. The Insurance Kit contains the parts that are needed to address the majority of pump breakdowns. Parts include:

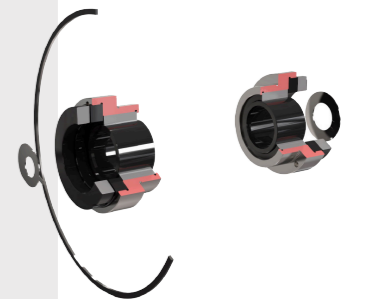
- Containment Shell
- Inner Magnet Ring
- Outer Magnet Ring
- Product Lubricated Bearings
- Gaskets & O'rings



Service Kit

"The Service Kit provides the best value solution for the parts needed for regular service, and should be kept in stock for planned maintenance activities. Service Kit parts include:

- Product Lubricated Bearings
- Gaskets & O'rings"



Commissioning Kit

The Commissioning Kit may be needed during the commissioning of a new installation and includes all applicable gaskets and o'rings.

Pump Upgrades to Enhance Performance & Reliability

HMD Kontro offer a full range of upgrade and retrofit options to accommodate changes in site conditions and requirements or to help improve performance and reliability.

Secondary Control & Containment Upgrades

Sealless magnetic drive pumps offer complete containment and eliminate the need for dynamic seals. Their primary benefit is eliminating the risk of releasing hazardous liquids to the atmosphere. But to further guard against the unlikely occurrence of a primary shell leak and to meet increasing safety and environmental regulations on site, secondary control and containment options are available as upgrades on both new and existing HMD Kontro pumps.

Secondary Containment

- Features a dry-running mechanical seal between the rotating drive shaft and static coupling housing, forming a secondary pressure boundary.
- Combined with a leak detection device (either a liquid or pressure sensor) in the secondary area.
- In the unlikely event of a primary containment breach, the pump is shut down and secondary containment achieved.
- Any leaked fluid is contained within the secondary containment area, preventing escape to atmosphere.
- Allows for safe removal via the secondary drain and vent connections.

Secondary Control

- Consists of a leak restriction device between the rotating shaft and coupling housing.
- Combined with a leak detection device (either a liquid or pressure sensor) in the secondary area.
- If primary containment is breached, the pump shuts down and the sealing device minimises leakage to atmosphere.
- Allows for safe removal via the secondary drain and vent connections.

ZeroLoss™ Containment Shell Upgrade

Heat dissipation can sometimes be an issue with magnetic drive pumps, along with the additional energy loss from the rotating magnetic coupling. The ZeroLoss Containment Shell addresses both of these points by eliminating eddy currents in the containment shell – reducing energy consumption by as much as 20% – and ensuring no additional heat is being transferred to the pumped liquid. The reduced power consumption helps lower both running costs and capital costs by enabling smaller motors to be specified.



Constructed from a composite material of poly-ether-ether-ketone (PEEK) and carbon fibre, the ZeroLoss Containment Shell facilitates better handling of volatile and heat sensitive fluids and helps improve reliability.

ZeroLoss Containment is Suitable for:

- Volatile liquids with high vapour pressures
- Heat sensitive liquids with low specific heat
- Sub-zero liquid handling is improved
- Low viscosity and low density hydrocarbons
- Low flow limit near thermo-mechanical minimums

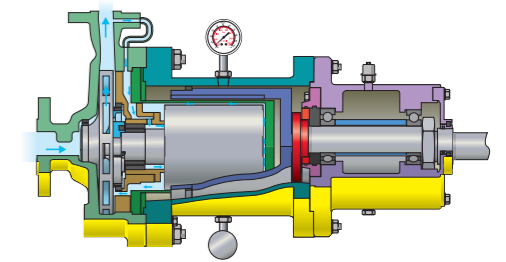


Benefits of ZeroLoss:

- Energy efficiency reduces electricity costs
- Environmentally friendly handling of liquefied gases and heat sensitive liquids
- Safety – gives operators more time for intervention during system upsets
- Conformance to applicable standards and regulations
- Can be retrofitted to HMD pumps already deployed in the field

Modular Bearing Housing Upgrade

HMD's updated modular bearing housing is a simple upgrade option for all GSP pumps. It is available in a standard configuration and also in a pressure-tested version for applications that require secondary containment.



Improved Lubrication:

A larger sump capacity ensures that the bearings run at lower temperatures. The new modular design allows a greater number of different lubrication systems to be installed, such as:

- Oil Bath & Vent (Standard)
- Closed Loop Oiler
- Pure Oil Mist
- Purge Oil Mist
- Provision For Pure Oil Mist
- Provision For Purge Oil Mist

No Overfilling:

A new angled position for the oil fill port prevents the risk of mass overfilling of oil. The housing also has an overflow port for increased overfill protection. A constant level oiler can also be used

Oil Seal Options:

Oil Bath options include Labyrinth (As standard), Labtecta OP66, and Inpro VB45S. Oil Mist options include Inpro VB45U and IsoMag (both of which are also suitable for oil bath).

Integrated Sensor Ports:

A range of ports are built into the bearing housing to allow for a range of instruments to be installed, including vibration monitoring, oil mist and temperature measurement devices.

Benefits of the Modular Bearing Housing:

- Modular design for maximum interchangeability of parts.
- Provision for bearing temperature monitoring included.
- Reduced pump downtime thanks to maintenance time savings.
- Upgrade is completed quickly and easily on-site.
- No special tools required for upgrade or maintenance.

Other Engineered Solutions

HMD Kontro can offer tailored solutions to meet specific customer requirements, such as:

- Duty re-rates
- Temperature up-rates
- Filtration systems
- Instrumentation
- And many more.



Backed By Global Support

Sundyne is more than just a manufacturer of high quality pumps, compressors and genuine aftermarket parts. Sundyne's highly-engineered solutions are backed with a full range of global aftermarket services that extend the value of Sundyne equipment far beyond the point of sale. The Sundyne service team is here to provide a trouble-free customer experience at every turn. That's **RELIABILITY REALIZED.**

Sundyne's Aftermarket Programs Include:

- 24 X 7 Global Support
- Gearbox Exchanges & Upgrades
- Maintenance Kits
- Conversion Programs
- On-Site SundSCHOOL
- Field Service Support
- Overhaul and Repair Services
- Site Surveys
- Emergency Expedite Services

Benefits of Using Genuine HMD Kontro Parts	HMD Kontro Genuine Parts	3rd Party Parts
Latest Engineered Parts & Upgrades for Maximum Reliability	✓	✗
Advanced Manufacturing Processes, Tolerances with Certified Materials	✓	✗
Parts Made to OEM Specs which Equal or Exceed Industry Standards	✓	✗
Direct Manufacturer's Service Support	✓	✗
Retain Existing Sundyne Warranty	✓	✗



For more information please visit www.sundyne.com and fill out the Contact Me form. A Sundyne representative will contact you.



HMD Kontro Sealless Pumps

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