



HYDROMINE™
PRODUCTS (PTY) LTD

Innovators in Valve Technology



About Hydromine™ Products

Hydromine™ Projects cc was established in 1994 and forms part of the economy as a manufacturer of exclusive hi-tech equipment for water reticulation systems and fluid control applications in the mining and other industries. To become a true global, independent supplier, the group had to be restructured and some changes came about in 2018. With over 20 years of experience, expertise and vast knowledge base in valve innovation and technology, as well ongoing research and development over the years, the group went into development of its own range of valve products, which was one of the major changes within the group. These changes have resulted in a much superior range of valve product offerings that is world class. As was part of the group's ultimate vision and mission, which is to be a true independent and global brand, the agreement to manufacture the Hydrocore products range had to come to an end.

Hydromine™ Projects International then became the global manufacturer and supplying company of the LFC™ Range of safety, isolation and control valves. HMP™ Range of Hydraulic, tapered pipe couplings, high pressure piping and related equipment.

Hydromine™ Products (Pty) Ltd was established around the end of 2018 to take over the piping fabrication and valve repairs from Hydromine Projects cc.

Around December 2020 Hydromine™ Products (Pty) Ltd entered in to an agreement with Hydromine™ Projects International, to become a licenced manufacturer of its products

Hydromine™ Products manufactures and fabricates steel piping products, as well as the repairs and service for a vast variety of makes of valves.

Hydromine™ Projects & Marketing (Pty) Ltd a local South African company with a Level 4 BBBEE score and a 51% black ownership represents Hydromine™ Products (Pty) Ltd in the most of South African mining industry, as a sales agent for its products and services.

Hydromine™ Products is a certified member of The South African Capital Equipment Export Council.

Hydromine™ Projects & Marketing (Pty) Ltd is a Level 4 BBBEE contributor & an approved vendor to major mining entities, project houses & consulting companies, such as:

- | | | |
|------------------------------|-----------------------------|---|
| • AngloGold Ashanti | • Harmony Gold Mining | • Petra Diamonds |
| • Anglo Platinum | • Hatch | • Read, Swatman & Voigt (Pty) Ltd (RSV) |
| • ARM Platinum BHP Billiton | • Impala Platinum | • Sibanye Sillwater Siemens Ltd |
| • Bluhm Burton Engineering | • Kimberley Ekapa Mining JV | • Simmer & Jack |
| • De Beers | • Murray & Roberts | • Village Main Reef |
| • DRA International DRD Gold | • Pan African Resources | • WorleyParsons |
| • Goldfields Gold One | | |

Hydromine™ Products manufactures, markets and maintain a variety of equipment, of which the most important products and services are the following:

- LFC™ Range of high pressure isolating, safety & control valves.
- LFC™ Range low pressure safety & control valves.
- LFC™ Range of energy dissipaters & expansion joints.
- HMP™ Range of axial surge reduction check valves.
- HMP™ Range of strainers
- HMP™ Hydraulic coupling range for plain-ended shaft column piping
- HMP™ Range of air-release, ball, butterfly, diaphragm, gate, globe, non-return & pinch valves.
- HMP™_TE ranges of tapered pipe couplings.
- HMP™ Expansion joints and bellows
- HMP™ Pressure gauges
- Pipe fittings, flanges and fabrication
- Spiral wound and ring gaskets
- HMP™ heavy duty fire hose reels
- Valve reconditioning of most brands.
- Piping - Supply and fabrication of piping material & systems.

Our Products

HMP™ Range Of Valves



A full range of valves are available, including air-release, ball, butterfly, diaphragm, globe, knife gate, needle, check, pinch, resilient seal gate and wedge gate valves.

HMP™ Range Of Strainers



A full range of strainers are available to be utilized as filters in various pipelines and systems.

Pipe Fittings, Flanges And Fabrication



A wide variety of pipes, flanges, reducers, bends, tees and other fittings. We also offer a very versatile and diverse fabrication division to meet customer-specific requirements.

HMP™ Pressure Gauges



A range of pressure gauges are available for all ratings and made up to specifications.

HMP™ Expansion Bellows



Hydromine™ offers a full range of expansion bellows that can be used in many applications to absorb movement and vibration.

Spiral Wound And Ring Gaskets



The HMP™ range of spiral wound- and ring gaskets offer superior sealing properties for all types of pipe systems.

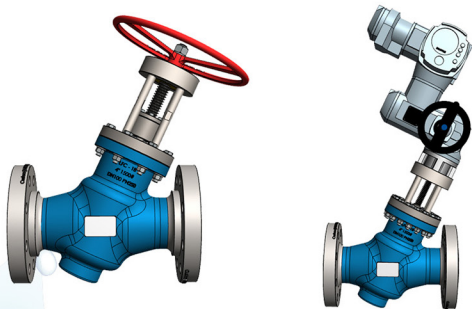
HMP™ Heavy Duty Fire Hose Reels



This durable, heavy duty, stainless steel hose reel offers a guaranteed long-lasting life cycle and is designed and manufactured for mining purposes and underground conditions. Hydromine™ Projects is the sole agent and distributor of this product.

Our Products

LFC™_1B High Pressure Range Isolating, Safety And Control Valves



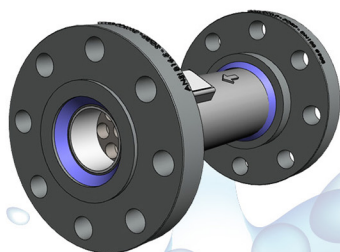
The LFC™ Range high pressure valves were designed to be energy efficient and a very good flow co-efficient (Cv), comparing to other competing globe valves, with a simple and a robust construction. They are used for liquid and gas with low content of suspended solids and ideal to be used in the Hydropower and deep mines. The range comprises of the following applications: Manual isolation valves, electrically actuated isolation valves, water hydraulic actuated valves, oil hydraulic actuated valves, pump discharge control valves, level control valves, pneumatic actuated valves with smart positioner, pressure control valves, pressure regulating (reducing) valves, flow control valves, surge relief (safety or pressure relief) valves, surge anticipation valves, pressure sustaining valves, safety isolation valves and excess flow shutdown valves.

HMP™_TE Range Of Tapered Pipe Couplings



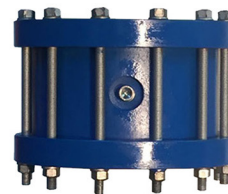
The couplings are supplied with hubs prepared for standard butt welding to all pipes. The hubs create the pipes' engagement when brought together by the clamps. The taper angle, combined with smoothed taper surfaces, enable a powerful engagement force with minimum required bolting torque. The HMP™_TE tapered coupling idea comes from the T&E (Trucking and Engineering / Robor) T&E coupling, that was re-engineered and improved upon. The coupling is fully interchangeable with the T&E coupling

LFC_7™ Range Of Energy Dissipaters



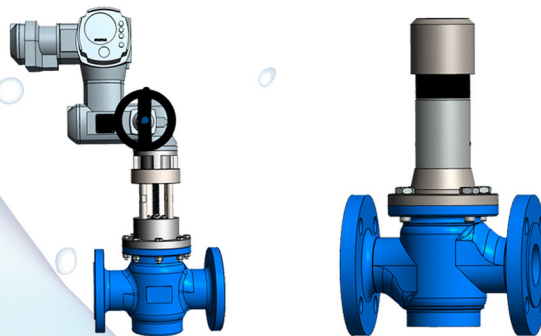
The LFC™ energy dissipaters are tailor made devices, used in open ended applications, designed to reduce the upstream pressure to a set pressure at a predetermined flow rate.

HMP™ Range Of Hydraulic Pipe Couplings



The hydraulic couplings are designed to join plain ended pipes in a vertical shaft. This coupling acts as an expansion joint, installation is much quicker, as there is no welding and much less and smaller bolts to tighten than with flanges. The HMP™ Hydraulic coupling idea comes from the T&E (Trucking and Engineering / Robor) VJ coupling, that was re-engineered and improved upon. The coupling is fully interchangeable with the VJ coupling.

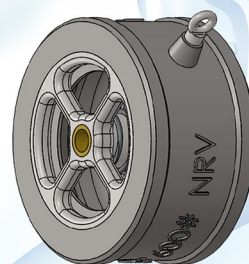
LFC™_3B Low Pressure Range Isolating, Safety And Control Valves



The LFC™ low pressure range isolating, safety and control valves were designed with a simple and robust construction that can compete with other low pressure control valves in the market place.

The range comprises of the following applications: Electrically actuated isolation valves, water hydraulic actuated valves, oil hydraulic actuated valves, pump discharge control valves, level control valves, pneumatic actuated valves with smart positioner, pressure control valves, pressure regulating (reducing) valves, flow control valves, surge relief (safety or pressure relief) valves, surge anticipation valves, pressure sustaining valves, safety isolation valves and excess flow shutdown valves.

HMP™_6A Axial Range Surge Reduction Check Valves



A full range of surge reduction (non slam or nozzle) check valves reduces the effect of water hammer in a pumping system.

Our Services

Piping Design & Fabrication

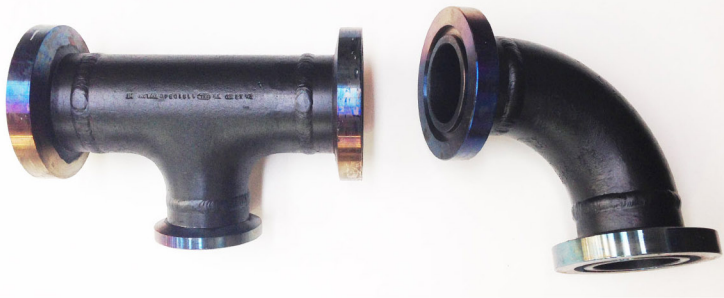
The supply and fabrication of various piping installations and any special piping requirements. Some projects completed are Underground Pump Stations, Underground Haulage Pipe Installations, Compressor Plant Piping Installations, Ice Plant Installations and Fridge Plant Installations.

Piping Design:

Hydromine™ Products is able to offer piping design. More specifically, we offer:

- The hydraulic design of water pipe reticulation systems, including water hammer and surge analysis, utilizing the Flowmaster transient analysis software.
- The design of high lift pump dewatering columns.
- Capability of conducting pipe stress analysis to ASME B31.3, incorporating allowable pipe stress, pipe support and anchor loading, utilizing the Caesar II pipe stress analysis software.
- The design of tailings pipelines, tailings, paste and backfill piping systems.
- Detailed drawings utilizing Solidworks software.
- CFD (Computational fluid dynamics) and FEA (Finite Element Analysis) modeling utilizing Solidworks software.

Hydropower Fittings



Underground Piping



Drinking Water Cooling Jacket



Ice Plant Piping



Fridge Plant Piping



Hydropower & Backfill Piping



About Our Team & Services

Hydromine™ Products includes a 1000m2 factory and 400m2 of office space areas and is centrally located in Longmeadow Business Park, where the following services are provided:

- Project management
- Design services
- Document handling
- Account services (creditors and debtors)
- Procurement
- Valve reconditioning
- Valve manufacturing
- All project-related administration
- Management of on-site commissioning, maintenance and repair services
- Storage /stock holding
- Fabrication
- Assemblies
- Deliveries

Our factory always carries approximately R5M worth of stock, which ensures far shorter delivery periods.



Hydromine™ Products is now Green @ Work

We have installed a Solar Power System to cater for all our internal electrical requirements. We are dedicated to contributing to a sustainable future for not only our business but also our country and our planet through:

Commitment to the 3 "R's"

- Reduce consumption, waste and pollution
- Re-use what we have
- Re-cycle everything we can

Conserving energy, water and other natural resources. Compliance with all environmental regulations. Striving to buy, sell and use only environmentally friendly products. Educating employees, customers and other businesses.

Consulting And Turnkey Projects

Hydromine™ Products offers a variety of services such as design, manufacturing and commissioning of:

- Mine water reticulation systems
- Pressure reducing systems
- Pump stations
- Air cooling plants
- Energy recovery plants
- Hydro-power systems

Projects Completed Milestones

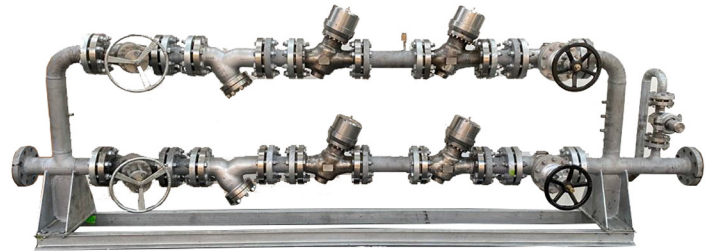
Ivanhoe Kamo Project - DRC

Hydromine™ Products manufactured the mine's service water 4" and 6" 150lbs LFC™ _3B Pilot operated pressure regulating valves. The valves pressure rating is 19 bar / 275 psi and the maximum reduction ratio is 5:1. These valves are design for a robust underground service water application and can be adjusted to deliver the required pressure irrespective of upstream pressure changes.



Hindustan Zinc, Rajpura-Dariba Mine - India

Hydromine™ Products manufactured a 4" 600lbs pressure regulating station for the mine's underground service water. The system is designed to reduce the upstream pressure from 55 bar / 798 psi to a downstream pressure of 6 bar / 87 psi at a maximum flow of 50 l/sec / 793 gal/min. Because of its dual streams design, the system can be used 24 hours a day / 7 days a week / 365 days a year without shutting the water down for maintenance. All the valves in this system are fully stainless steel and the piping system is hot dipped galvanized, with a thickness of 120 microns, to provide corrosion protection against the highly corrosive condition of the mine.



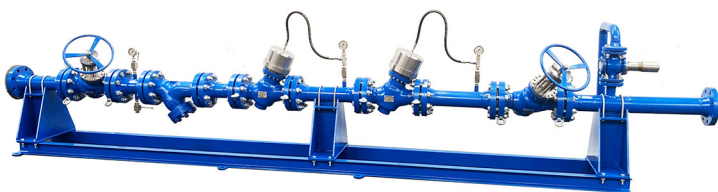
AngloGold Ashanti, Obuasi Gold Mine - Ghana

Hydromine™ Products manufactured some high-pressure isolation valves for the mine's dewatering system.



Newcrest Mining Telfer Project - Western Australia

Hydromine™ Products manufactured the service water pressure reducing stations for the underground mine.



Projects Completed Milestones

Examples of Hydromine™ Products' piping fabrication work while in progress.



Projects Completed Milestones



Projects Completed Milestones





HYDROMINETM
PRODUCTS (PTY) LTD

Innovators in Valve Technology

Distributors & Contacts

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PROJECTS** (Pty) Ltd

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