





# PUMPNSEAL - Finding a Way Since 2000

PUMPNSEAL is a West Australian owned and operated company offering specialised expertise in pump and sealing technology.

PUMPNSEAL leads the way in:

- Packaged pump systems
- Fluid sealing solutions for pumps, valves and rotating equipment
- Complete pump and mechanical seal refurbishment
- First class maintenance workshop facilities
- On-site, client technical support
- Training in pump and fluid sealing reliability

PUMPNSEAL has been committed to providing quality process pumps, pumping systems and sealing solutions since our company was founded in 2000. Today we are a specialised supplier for a variety of industries including mining, municipal, utilities and marine.

We supply, deliver and commission world-class equipment and it is essential to retain the highest quality control. Our technical specialists are trained in the latest engineering and maintenance practices and are always ready to assist your operations. We do whatever it takes to ensure our clients receive the best solution, along with the trademark PUMPNSEAL service, expertise and quality workmanship.

# We Find a Way...

That's our philosophy, plain and simple.

"We always find a way to ensure our clients receive the highest quality equipment and workmanship, along with expert service and advice from our entire team."

- Gavin Taylor MANAGING DIRECTOR



# P.R.I.M.E.D. and Always Ready

The PUMPNSEAL team is a group of passionate specialists whose strong values illustrate the strength of our training and development systems.

We make it our business to understand yours. Our highly trained technical and customer service specialists work together with you to deliver customised advice, products and services. We will find a way to ensure you receive a service that is tailored to your specific needs.

#### Our values

People: We believe in respectful and highly personalised relationships

**Reliability:** Consistent at all times in the delivery of our products and services.

**Innovation:** We are always striving for excellence and continual improvement across the board.

**Motivation:** Our actions and energy demonstrate a highly motivated and driven team at all times.

**Engagement:** We are always fully engaged with our clients, our people and our process.

**Dedication:** We are dedicated to results and we are accountable for our actions and our recommendations.





# Design and Engineering Solutions

At PUMPNSEAL, our business goes far beyond simply supplying world-class products and systems – we're committed to find a way to deliver the best solution for your requirements.

Our specialised pump and seal business units work closely together to devise a unique solution for your business. We are committed to continuous improvement and a consistent standard of excellence.

### Considerable capabilities

Our team of highly trained technical and customer service specialists are in constant collaboration. We're dedicated to the most efficient, responsive and reliable outcome for your situation, backed with ongoing after sales support.

We have extensive in-house services led by our specialist divisions.

## Alison Taylor

#### **General Manager**

T: 9302 8400 E: ataylor@pumpnseal.com

# Gavin Taylor

# Managing Director Fluid Sealing Division

T: 0419 938 095 E: gtaylor@pumpnseal.com

# - Staytor C pampiloda.

### Anthony Paul Director Pump Division

**Rob Wouters** 

T: 0417 188 230 E: apaul@pumpnseal.com

### Service Centre Manager

T: 0407 384 216

E: rwouters@pumpnseal.com

# Gavin Brown Operations Manager

**Customer Service** 

T: 0407 155 108 E: gbrown@pumpnseal.com

# Alesha Erceg

Customer Service T: 9302 8400

E: aerceg@pumpnseal.com

# Andrew Baines Technical Sales

# Kalgoorlie

T: 0438 932 304

E: abaines@pumpnseal.com

### Ian Crawford

Technical Sales Alumina, Power

and South West T: 0407 471 007

E: icrawford@pumpnseal.com

### Matt Wood Technical Sales

#### rechnical Sale

Kwinana and Pilbara

T: 0438 921 028

E: mwood@pumpnseal.com

# Matt Prestage Pump Application Engineer

T: 9302 8400

E: mprestage@pumpnseal.com

#### Peter Freeland

### Pump Application Engineer

T: 9302 8400

E: pfreeland@pumpnseal.com

### Aaron Hunter EPS/Hydraulic Sealing Specialist

T: 0477 221 255

E: ahunter@pumpnseal.com

# We have a proven track record for:

- Fast and effective response to enquiries
- Extending your equipment MTBR
- Reliable delivery
- Competitive pricing
- Superior workmanship
- Efficient after sales service





**AUTHORISED REPAIR CENTRE** 







# **Projects**



PROJECT: Condensate Pump Upgrades. Alumina Industry, Western Australia

CHALLENGE: The existing ISO standard pumps MTBF was far too frequent. It was determined that the prime cause of the poor pump life was that they were expected to operate at two duty points. As the pumps were working in a high head condition and away from BEP, overloading of bearings and shaft deflection was a contributing factor to the failures.

SOLUTION: PUMPNSEAL recommended the Blackmer System One ANSI Process Pump. LD17. These pumps were selected because of the short shaft overhang (SLENDERNESS RATIO: the relationship between shaft thickness and the distance between the radial bearing and the centreline of the impeller). With this feature, the lowest slenderness ratio available in a process pump gives the pump the ability to work at different points on the curve without causing shaft deflection, which in turn reduces bearing loading and premature seal failure.



PROJECT: Boiler Feed Water Pump Sealing Upgrade. Nickel Industry, Kalgoorlie, Western Australia.

CHALLENGE: The existing boiler feed pump seals (2.500") were difficult to install and only lasted 18-24 months. Like all of our clients, they were looking for a longer service life.

SOLUTION: PUMPNSEAL installed Chesterton 180H Cartridge Single seals using an advanced hydro-pad geometry sealing face that improves film formation between the mechanical seal faces and significantly enhances face lubricity. Sealing hot water can be very difficult. The increased film formation between the faces reduced the heat generation common in standard seal face arrangements and has increased the seal life in this application and extended the MTBR dramatically.





PROJECT: Slurry Pump Split Mechanical Seal installation. Gold Mineral Processing, Kalgoorlie, Western Australia.

CHALLENGE: The client's cyclone feed pumps, Warman model 16/14TUAH, were not achieving the desired seal life from gland packing and conventional slurry cartridge mechanical seals. Excessive pump sleeve wear and their replacement was causing issues with pump availability and the premature replacement of other pump components.

SOLUTION: PUMPNSEAL specialists installed Chesterton 442 split cartridge mechanical seals (220mm) without dismantling the pump. MTBR of the sealing area has dramatically increased to 20,000+ hours. With this solution, sleeve wear has been eliminated along with gland water contamination into the bearing barrels. The client has since applied this sealing method to all of their critical slurry pumps.

PROJECT: Hypersaline Decant Return Water System. Gold Mining, Kambalda, Western Australia.

CHALLENGE: Our client was frustrated with the reliability of submersible pumps and the logistics of moving them to different areas of their open pit operations. They were also requiring more corrosion resistant materials and a reduction in the total cost of maintenance.

SOLUTION: PUMPNSEAL offered compact pump dewatering pontoons featuring full duplex SS ANSI process pumps. Fitted with 75kw two pole motors these pumps provided flows of over 25L/sec at 120m TDH. As the motors and wet ends were not submersed, and more resistant to corrosion, maintenance requirements have decreased and the pontoon configuration allows for safer ease of access.



# **Products**

Access to a diverse range of high quality products and systems is crucial to finding the best solutions for our valued clients. We are the WA distributor for a range of quality, international brands including AW Chesterton Company, Blackmer, Iwaki, Summit, Seepex and Inpro. This enables us to provide high quality, unique and tailored pump and seal solutions and packages.

- Sealing solutions for end centrifugal and positive displacement pumps
- Sealing systems for process control, block, rotary valves and flanges
- Process pumps for corrosive and high head applications
- Dosing pumps for hazardous and difficult to seal liquids
- Seal-less Positive-Displacement pumps for viscous liquids
- Bearing Protection devices for rotary equipment including pumps and gearboxes
- Contractor and Mine De-Watering pump sets
- Hydraulic, Pneumatic & Rotary seals



### Yamada AOD Pumps

If you need to move product in a hurry and installation time is critical, consider the air operated diaphragm pump. Yamada have been making pumps for over 70 years. Numerous material configurations are available to suit all ranges of chemicals.

### Magnetic Drive Pumps

For total containment, nothing beats a magnetic drive pump. Since 1956, Iwaki has been the pioneer in innovative pumping systems. With production exceeding 600,000 units annually Iwaki has the reputation to deliver. Every pump is built with full traceability and documented performance records. Pumps are locally assembled in Australia, enabling us to customise equipment to suit local operating conditions and requirements. Iwaki's magnetic drive pumps are recognised as world leaders in their field.

# ANSI Process Pumps & Replacement Parts

Since 1982 Summit have been manufacturing quality pumps and parts.
We offer the full range of Summit ANSI pumps which also directly interchange with the Goulds, Peerless, Griswold & Durco ANSI pumps. Summit offer an extensive range

# construction at competitive pricing. Mechanical Seals

in duplex stainless steels and exotic alloy

PUMPNSEAL is proud to offer and service the full range of Chesterton mechanical seals for pumps, agitators, mixers, and other rotating equipment. Our proven component, gas, cartridge, cassette, split, and mixer seals are specifically designed to simplify installation, improve the reliability, and extend the performance of your fluid handling equipment. Our most popular are the innovative 442 split mechanical seals which have sealed up to 915mm shafts! PUMPNSEAL offer full seal refurbishment for all manufacturers and are a Chesterton Certified Seal Repair Facility.

### Pump & Valve Sealing

With Chesterton's continuous research and state-of-the-art advancement, PUMPNSEAL offer a full-line of packing and gasketing technology that delivers the highest performing sealing systems for a wide range of applications. Our packings and gaskets offer maximum reliability and low leakage rates for maximum impact. Chesterton offers mechanical packings for a variety of equipment, including but not limited to pumps, mixers, blowers, fans etc. performing under a wide range of operating conditions. Chesterton sealing systems are the leaders for leakfree performance. If you are planning repacking valves, and want to get the job done in a fraction of the time, consider utilising our Water Jet Packing Extractor.

### End Centrifugal Process Pumps

PUMPNSEAL carry a large inventory of end centrifugal ANSI & ISO process pumps for a broad range of duties and budgets.

Our Blackmer premium System

One pumps are an innovative line of high-strength, low maintenance process pumps designed specifically for the toughest, most extreme environments and have set the industry standard for high quality and durability.



# **Products**

# Hydraulic, Pneumatic & Rotary Seals

If you are looking for sealing solutions for hydraulic cylinders, pneumatic or rotary equipment, PUMPNSEAL can respond quickly. With local Chesterton Speedseal manufacturing capabilities we can provide the fast service you are looking for along with superior materials and technical support.

### **Bearing Protection**

The Inpro/Seal Company manufactures a Bearing Isolator that will provide the highest level of bearing protection available. Inpro/Seal Bearing Isolators are made of high quality bronze and are designed to last for at least 100,000 hours compared to the common lip seals which usually fail after only 3,000 hours. With the latest engineering and manufacturing technology Inpro/Seal can meet your reliability requirements with seals designed specifically for your equipment with quick, timely deliveries.

# Enviroseal The SpiralTrac™

Environmental

requirements.

Controller is a unique, patented throat bushing specially engineered to transform and control the internal stuffing box environment in rotating process equipment. With unique versions designed to work with both mechanical seals and packing, SpiralTrac™ has set the standard in industrial process applications worldwide for increasing equipment reliability, decreasing housekeeping cost and reducing flush

### Dosing & Metering Pumps

Iwaki Hydraulic Diaphragm metering pumps are typically used for chemical metering in industrial process and agricultural industries. Chemical metering pumps are available for high and low pressure applications with manual and electronic stroke control.

### **Eccentric Disc Pumps**

Blackmer's eccentric disc pump —
Mouvex Technology, is used in an array
of applications across the globe. It has
many unique features, including lowshear. There are no mechanical seals
thus eliminating leaks and reducing
maintenance time. The
eccentric disc pumps are
direct coupled to the gear
reduction unit or motor
therefore eliminating the
need for magnets. With its
clean-in-place capability,
flushing and cleaning take place without
disassembly.

### Positive Displacement Vane Pumps

The Blackmer Positive Displacement Vane pumps offer more efficiency than the typical centrifugal pump. Leading the way in pump technology, Blackmer offers seal-less options too. This eliminates leaks when handling high-value chemicals, hazardous or corrosive liquids to yield substantial cost savings whilst maximising safety. The sliding vane technology of these pumps is second to none on nonlubricating liquids, both thick and thin. The technology is also exceptional on thin and low-lubricity fluids such as LPG, Refrigerants, Solvents, Fuel Oils, Gasoline and Liquid Carbon Dioxide.

#### Peristaltic Pumps

Verderflex pumps.

Abaque Series pumps feature a seal-less design that eliminates leaks and product contamination, and have the ability to run dry continuously without adversely affecting the pump's performance.

PUMPNSEAL stock a large range of the long wearing Abaque replacement hoses that will also fit Bredel &

### **Specialty Gaskets**

The Chesterton Steel Trap Metal/Graphite Gasket is manufactured with concentric, isolated convolutions in sheet stainless steel that trap pure graphite against the flange face. As the flange is tightened, the convolutions are progressively flattened, thus trapping the graphite sealing media. Not only is a highly effective seal effected against both faces of the flange, but the graphite is protected against oxidizing atmospheres and corrosives. Steel Trap gaskets can remain in place and will continue to seal effectively until removal is necessary for equipment servicing or repair. These seals pay for themselves many times over in reduced maintenance and downtime. The unique, self-locating design allows the same size gasket to be used in the vast majority of flange pressure classes. This results in unmatched time savings in locating the right gasket, while reducing inventory and virtually eliminating the

chance of incorrect gasket selection.





PUMPNSEAL Australia | 5 Innovation Circuit, Wangara, WA, 6065 PO Box 1766, Wangara, WA, 6947 | www.pumpnseal.com



