



Providing fully integrated hydraulic service and supply solutions to Perth's industrial, mining, transport, and agricultural industries for over 20 years

Berendsen's Perth branch is proud to specialise in hydraulic solutions across mobile equipment and fixed plant. Our capabilities include:

Cylinder repair
 Pump and motor repair
 On-site preventative maintenance
 Lubrication system manufacture
 Partnerships with all major hydraulic brands
 In-house engineering team and manufacturing facility





# **IN-HOUSE REPAIRS**

Berendsen Perth has a team of qualified fitters who specialise in the repair of cylinders, pumps and motors commonly found on mobile equipment and fixed plant across the industrial, mining, transport and agriculture.

We regularly invest in new equipment and have designed the flow of our custom built 1500m<sup>2</sup> workshop to ensure we repair cylinders, pumps and motors effectively and efficiently.

## **Cylinder Repair**

We repair all brands and types of cylinders including: **Major types -**

- ✓ Suspension Strut Cylinders ✓ Steering Cylinders
- ✓ Hoist Cylinders
  ✓ Crusher Tramp and Clamp Cylinders
   ✓ Stacker Boom Cylinders

#### Major brands -

✓ Caterpillar ✓ Komatsu ✓ Hitachi ✓ Liebherr



## Our cylinder repair process:

#### Cylinder disassembly

Our modern and fully integrated nut torque and cylinder stripping bench has torque capability of over 60KNm and push - pull force of 6 tonne. It also has a capability of accommodating 0.5m flat-flat nuts and 10m stroke cylinders.

#### **Cylinder inspection**

All cylinder elements including the cylinder's rod, bore, piston, gland, seal housing, rod clevis and/or piston thread and all seals and valves are cleaned and inspected.

#### Machining of cylinder parts

Machining of cylinder components is undertaken in-house using our dedicated machining equipment:

- Milling: Our milling machine enables us to reclaim parts in-house, including clevises and clevis eyes. Our milling machine has a table size of: 700mm x 300mm x 300mm
- *Turning:* Our lathes enable us to custom manufacture parts including barrels, rods and pistons and are capable of:
  - Up to 450mm swing and 3000mm between centres
  - Up to 300mm swing and 1500mm between centres

#### Cylinder welding

Our welding facility is capable of performing high quality welding repairs in line with appropriate welding procedures.

#### **Cylinder testing**

Berendsen Perth conducts leakage tests to ensure that there are no rod or piston leaks in our resealed hydraulic cylinders. It is built to manage cylinders with fluids in excess of 225 litres.





## **Pump and Motor Repair**

We repair all brands and types of pumps and motors including:

#### Major types -

✓ Piston – Open and Closed Loop
 ✓ Vane
 ✓ Gear
 ✓ All Types of Lubpumps

#### Major brands -

- ✓ Eaton ✓ Danfoss ✓ Parker ✓ Rexroth
- ✓ Kawasaki ✓ Ebsray

## Our pump & motor repair process:

#### Basic failure analysis and scope of works

First we disassemble the pump or motor and conduct a hotwash to clean all parts. This is followed by a complete inspection of the unit against OEM specifications. A scope of works and failure diagnosis is then provided along with a quote and lead time.

#### Manufacturing & sourcing parts

In order to keep your costs down, we aim to rework components wherever possible.

Should new parts be required, we have a large network of local and overseas suppliers to ensure we can source parts for the best possible price.

#### Custom built test rig

Berendsen Perth has a hydraulic test centre with two individual test rigs. The larger of the two rigs provides the branch with modern machinery dedicated to testing hydraulic components and valves. The test rig supplies digital readings using pressure transducers, ensuring high accuracy in the results.

Features of our test rig include:

- Up to 75kw power
- Tests open and closed loop systems under varying speeds from 10 to 1800rpm
- 700 bar max pressure
- 480 l/min maximum flow



# **ON-SITE MAINTENANCE**

## **Field Service**

Berendsen Perth offer 24 hour on-site service and maintenance 7 days a week. We have a team of experienced and qualified service technicians with fully equipped service vehicles on standby to provide all types of onsite hydraulic repairs and service. Our field service vans are fitted with all the tools, spares and equipment necessary for troubleshooting and diagnostics, on-site emergency repairs, component extractions, installations and commissioning, system flushing and dehydration, oil change-out and hose and pipe assembly and installation.

#### Focus on Preventative Maintenance

Our branch places a strong focus on preventative maintenance and risk management – identifying and rectifying problems before they result in a catastrophic failure.

We develop suitable maintenance plans for our customers which can vary by frequency or the level of maintenance. Our on-site maintenance service is also fully supported by our workshop at Perth Airport.

#### **Oil Cleanliness**

When completing on-site maintenance of hydraulic equipment, we focus on the condition of your oil as contaminated oil can lead to around 80% of hydraulic system failures.

Our service technicians conduct tests to get an on-thespot understanding of the cleanliness of the oil relative to ISO 4406:1999.

Depending on the results of the oil testing, the oil may be disposed of and replaced or where possible cleaned via our portable filtration unit.

# LUBRICATION SYSTEM MANUFACTURE

We manufacture and service a range of lubrication systems in-house at our Perth manufacturing facility in accordance with stringent quality standards. The lubrication systems we produce and service are suitable for a range of fixed plant applications including ball mills, jaw crushers, cone mills, SAG mills, rotary filters, calcinators and thickeners. We also custom design and manufacture lubrication units to your specifications and deliver in the shortest lead times possible.

# PRODUCT SUPPLY

Berendsen Fluid Power Perth has long-standing relationships with some of the world's most recognisable brands. We stock and supply a comprehensive range of premium brands at competitive prices, and are always willing to go the extra mile to satisfy the immediate needs of our customers. Some of our leading suppliers which continue to help cement our brand in the marketplace are:



# CUSTOM DESIGN AND MANUFACTURE

As part of our nationwide branch network, Berendsen Perth has access to a range of resources including a specialist in-house Engineering and Design team and an ISO 9001 certified manufacturing facility.

With the support of a national Engineering and Design team, Berendsen Perth is able to offer specialised assistance including:

- Application engineering and re-engineering for optimum performance
- Installation and commissioning of complete systems
- Project management of small to large hydraulic projects
- Process improvement
- Reference and resource compilation
- Quality process maintenance
- Product research and development

Located in Newcastle, NSW, our 3200m<sup>2</sup> manufacturing workshop is fully equipped with the latest technology and machinery to handle the most complex hydraulic system design developments. From hydraulic products such as cylinders or manifolds, to complete system solutions such as power units or filtration systems.

## Cylinder Manufacture

We Manufacture our own comprehensive range of cylinders in-house including Medium Duty Roundline Cylinders, Heavy Duty Roundline Cylinders, AM1 Mill Cylinders and Telescopic Cylinders from 25mm to 600mm diameter bore, up to 12,000mm in length and stroke sizes up to 8000mm.We can also design and manufacture custom cylinders to meet individual application and dimensional requirements.





