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

Berendsen's Adelaide branch is proud to specialise in hydraulic solutions across mobile equipment. Our capabilities include: Cylinder, pump and motor repair 🗸 On-site preventative maintenance







IN-HOUSE REPAIRS

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

We regularly invest in new equipment and have designed the flow of our 700m² Regency Park workshop to ensure we repair cylinders, pumps and motors effectively and efficiently.

Cylinder Repair

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

✓ Caterpillar ✓ Komatsu ✓ Volvo ✓ Hitachi
✓ Liebherr

Major types -

✓ Suspension Strut Cylinders ✓ Steering Cylinders

✓ Hoist Cylinders



Our cylinder repair process:

Cylinder disassembly

Our dedicated HSC-40-CE-EX cylinder stripping and assembly bench is capable of:

- Maximum cylinder length of 5.79m and maximum diameter of 406mm
- Maximum available torque of 40,000 ft-lb.
- Rod extraction force of 7 tonne
- Extraction speed of 1219mm/20 sec
- 7RPM hydraulic nut runner produces 4,000 ft-lb torque.

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:

- *Honing:* Our dedicated honer reclaims the inside of the bore to OEM specifications. Our honing machine is capable of honing cylinders up to 400mm in diameter and 2.5m in length.
- *Milling:* Our two milling machines enable us to reclaim parts in-house, including clevises and clevis eyes. Our milling machines have table sizes of:
 - 550mm x 470mm x 1200mm
 - 300mm x 470mm x 2000mm
- *Turning:* Our lathes enable us to custom manufacture parts including barrels, rods and pistons and are capable of:
 - Up to 720mm swing and 2700mm between centres
 - Up to 520mm swing and 1500mm between centres

Cylinder welding

Our MIG welding facility with a welding rotator offers a wider operating range, reduced fumes and splatter, controlled heat input and higher disposition rates as compared to traditional welding.

Cylinder testing

Berendsen Adelaide's HCT-3000-EX hydraulic cylinder tester 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 fluid capacity, up to, and in excess of 225 litres.



Pump and Motor Repair

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

Major brands -

✓ Eaton ✓ Danfoss ✓ Parker ✓ Rexroth
✓ Kawasaki

Major types -

✓ Piston – open and closed loop ✓ Vane ✓ Gear

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. Our in-house lapping table enables us to reclaim surfaces of a variety of parts including valve plates for a more cost efficient service.

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. We have strong relationships with major industry leading OEMs including Eaton, Danfoss, Parker, Rexroth and Kawasaki.

State of the art clean room for reassembly

The pump or motor is reassembled in the clean room to ensure no contamination of the parts.

Custom built test rig

The jewel in Adelaide's workshop is a custom designed test rig that was manufactured and installed in Adelaide's workshop in 2015.

The test rig provides the branch with modern machinery dedicated to testing pumps and motors. The rig has a unique manifold design that allows us to test mains, boost and pilot pressures and flows in one simple step, ensuring faster and more economical testing. The test rig then supplies digital readings using pressure transducers, ensuring high accuracy in the results.

Features of our test rig include:

- Up to 90kw power
- Variable speed drive
- 345 bar max pressure





ON-SITE MAINTENANCE

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 in Regency Park.

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.

Pump & Motor Exchange Program

We understand how critical it is to minimise the down time of your equipment. That is why we offer a range of remanufactured transmission pumps and motors, readily available ex stock for a fraction of the cost of a new unit via our service exchange program. Our field technicians can come out to fit the pump or motor. Alternatively we can dispatch the unit to you immediately.

This means that you can avoid waiting the necessary turnaround time for a repair.

PRODUCT SUPPLY

Berendsen Fluid Power Adelaide 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 Adelaide 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 Adelaide 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 3200m² 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, our manufacturing workshop is equipped to handle any hydraulic project no matter how big or small.

Cylinder Manufacture

Our exposure to a wide variety of industries has allowed us to develop our own comprehensive range of cylinders including Medium Duty Roundline Cylinders, Heavy Duty Roundline Cylinders, AM1 Mill Cylinders and Telescopic Cylinders. In addition to this our team is also able to design and manufacture custom cylinders to meet

> individual application and dimensional requirements. We are able to manufacture from 25mm to 600mm diameter bore, up to 12,000mm in length and stroke sizes up to 8000mm.



