



**ON-SITE MILLING / MACHINING
LINEBORING, WELDING
AND UNDERCARRIAGE
MAINTENANCE**





FIXED PRICE
On-site milling,
boring, testing
& repair

Reduce
costly
downtime

Optimise
performance
of spares

No hidden
costs


Quality
solutions

Vision

The team at Berg get out of bed every morning to achieve the vision of giving Mobile fleet managers certainty in optimising the life of the fleet and the best ROI on repairs of rotables.

Mission

By working in a transparent reporting style with both the on-site project and on the spares in our workshop, our partner clients achieve an end to end build up of costs and repair level reporting that achieves the certainty with no hidden variations or costs

Mobile Machining and Welding Repairs

Berg can mobilise to site and perform repairs to any type of mining, mobile equipment or fixed plant and work in-situ without the need for costly removal of large components, saving you time and money.

24 Hour Response

Our clients receive unparalleled service through our network of highly skilled machinists, the availability of our 24-hour response service / quick response facilities and our full range of portable machining, welding and testing capabilities.

Lineboring

Our portable line boring facilities offer a comprehensive service for inside diameter welding and on-site precision machining up to 1500mm in diameter.

On-site machining and rapid response breakdown service





Welding Capabilities:

- AICIP Certified inspectors
- CSWIP & WTIA Cert 10 Qualified Welding supervisor
- ASME (BPVC) IX and AS3992
- AINDT Level II & Level III Technicians
- NATA Accredited NDT facility
- NATA Accredited pressure testing facility

Milling and Machining Capabilities Include:

- Lineboring - 35 to 1500mm
- Lathing - 95 to 285mm
- Milling
- Circular Milling - 1866.9 – 5054.6 mm
- Keyway Milling - 3 to 50mm keys
- Flange Facing - 0 to 5000mm
- Clamshell Cutting - 25.4 to 1800mm
- Laser coupling alignment

Trucks:

- Lateral links (dog bones)
- Diff housings
- Trays (full rebuilds)

Bull Dozers:

- Equaliser bars
- Ripper box
- Rippers
- Ripper frames
- Track frame assembly's
- Push arms
- Links
- Blades
- Hard facing all rippers & blades

Graders:

- Mould box
- Blade
- "A" Frame
- Grader circle
- Final drive assembly's
- Rippers
- Ripper box
- Ripper frames
- Hard facing

Excavators:

- Full assembly
- Stick
- Boom
- Bucket
- "H" Links
- Tipping links
- Track pads
- Track frames
- Hard facing



a) Track Pad Refurbishment:

Heavy mobile equipment track pad refurbishment featuring boring and also bush and pin supply.

b) Redesign and Refurbishment:

Convert improvement ideas into reality with a co-engineered solution for your heavy mobile equipment components. Examples such as bucket pin bush design, track roller bushing designs, lubrication protection are able to be manufactured and trailed in collaboration with our engineers.

c) Bucket Pin:

These can be re-machined and ground several times or new ones manufactured inhouse normally at a fraction of the price quoted by the OEM.



Workshop Rotables and Spares

In line with our vision, all components meet or exceed existing design standards. These are proven through our own NATA endorsed Lab for testing and our metallurgical analysts.

Re-engineering

Berg can re-engineer and produce components for equipment that is obsolete or where the original equipment manufacturer is unable to assist or cannot meet the operating demands of your business.

Quality Assurance

Berg have been ISO 9001 endorsed since July 2000. We offer a range of quality assurance services including a series of high quality non-destructive testing methods to measure material composition such as LPI, MPI and UT. We also have the capability to provide mechanical and chemical analysis by using methods such as XRF technology. This allows for higher quality control checks of all incoming raw materials ensuring compliance with national and international standards and client specification. Furthermore, Berg has a NATA endorsed laboratory in the Gladstone facility that offers further quality assurance for your asset.

Supervision and Project Management

With today's lean staffing, plants often do not have sufficient resources in-house to oversee activities necessary to keep complex equipment and systems in peak operational service.

Our experienced team of engineers and senior inspectors can work on-site with plant personnel or independently to provide solutions to problematic equipment and components issues. By reviewing operating data, performing non-destructive examinations and conducting performance tests, we can identify the root causes and recommend and implement corrective actions.

Troubleshooting Solutions

To avoid break downs or maintenance issues, Berg can provide various troubleshooting solutions including risk based inspections to help minimise machine down time, thus saving valuable resources.





Brisbane machining capabilities include:

Machining Centres

- Okuma MCM20 5 Axis, Double Column, twin pallet (1.3m X 2.2m) 69 station ATC.
- SNK, Rb-2N Double Column, travel 2.85m x 1.7m x 1.3m, 5,000 kg table capacity, 40 station ATC.
- Mori Seiki MV 80C, travel 2.56m x 0.82m x 0.95m, 40 station ATC.

CNC Lathes

- Doosan S670L, 670mm swing, 1800mm between centres.
- Mazak Powermaster. 750mm swing, 4000mm between centres.
- Daewoo Puma 12C, 490mm swing, 600mm between centres.
- Daewoo Puma 15C, 490 swing, 600mm between centres.
- Puma 700, 870mm swing, 12 station tooling turret, 1800mm between centres.

CNC Borers

- OM-TDC-20N turning centre, 2.0m dia. table, 2.6m swing x 1.8m high, live tooling
- Union horizontal Borer, 3.0m x 3.0m x 2.4m high travel, CNC drilling 1.8m x 1.6m table

Borers

- Webster & Bennet vertical borer, 1.8m table - Digital readout.
- Webster & Bennet vertical borer, 1.5m table – Digital readout.
- TOS Horizontal borer, 1.6m x 1.1m table, 1.2m table Centre Lathes (6 off).
- 6 off, 1250mm swing x 5000mm (max. capacity). Milling Machines (2 off).
- Comprehensive range of vertical, horizontal & universal machines.

Cylindrical Grinding

- 420mm swing x 2000mm between centres.
- 240mm swing x 2500mm between centres.

Drilling

- Radial drilling capacity 50mm.

Lifting and Manipulation Equipment

- Several overhead cranes to 20 tonne lifting capacity.

Gladstone machining capabilities includes:

Borers

- Webster And Bennett Large Vertical Borer – Chuck dia 2700mm.
- Kearns Richard Large Horizontal Borer – Cross travel 1600mm, Long travel 1200mm ; Vertical – 1500mm, Table 1200mm X 1200mm.
- Defum Large Horizontal Borer - Cross Travel –.2000mm; Long Travel – 2000mm;Table – 1400mm 1600mm.
- Webster and Bennett Small Vertical Borer - Chuck dia. 900mm.
- Small Horizontal Borer.

Centre Lathes

- Ryasan Centre Lathe - 800mm swing; 3 mtr bed.
- Zc 530 Centre Lathe - 500mm swing; 3 mtr bed.
- Macson Centre Lathe - 600mm swing; 3.5 mtr bed.
- Tarnow Centre Lathe - 600mm swing; 2 mtr bed.

Fabrication

- Lincoln Power Wave S500 550 amp 5th Generation Pulse Welding Machines.
- Lincoln SST (Surface Tension Transfer) Modules for pipe welding.
- Castolin Eutectic GAP 3002 AC/DC Plasma Welder (PTAW).
- 1200 amp Submerged Arc (SAW).
- Multiple Manipulating Tables up to 5 tonne, 2m Diameter swing.
- Bug-O Oscillating Track Welding System.
- Kemppi 350amp AC/DC water cooled Tig Machines.

Miscellaneous

- Elliot Milling M/C.
- Large Radial Drill.
- 150 Tonne Horizontal Press.
- 60 Tonne Vertical Press.
- 10 and 16 Tonne Overhead Crane.
- Ravenberg Slotter.

Testing Equipment

- Hydro Test Machine 0 – 15000 Kpa.
- 2 off Pump Test Benches for Vibration Analysis.
- Balancing Machine.
- Pressurised Clean Room – 12.5 mtrs x 6.5 mtrs.
- Vibration – Data Collection and Analysis software.



References:

Client: Anglo
Contact: Kerry Masters
Email: kmasters@cqfms.com.au
Location: Lake Lindsay
Scope of works: Milling of both upper and lower slew bearing mounting surfaces

Client: Goldings
Contact: Allan Lucas
Email: allan.lucas@golding.com.au
Location: Isaac Plains
Scope of works: EX5600 slew survey and machining the carbody

Client: Middle Mount Coal
Contact: Pat Hurley
Email: phurley@middlemountsouth.com
Location: Middle Mount South (Ex Floxleigh)
Scope of works: RH340 (CAT6060) slew survey and machining of carbody

Scott Mackie capabilities and credentials

Reference: Darryl Lindsay
Email: darryl.lindsay@viecl.com.au

- 4100 sheer ledge and carbody trackframe mounting faces Blackwater/ Goonyella
- 4100 shipper shaft bores and saddle block bores Dawson
- 4100 slew survey, machine upper and lower surface Lake Lindsay and Rolleston
- Dragline new tub builds, tub milling Blackwater X 2
- Dragline propel bores machining overseas in Morocco
- Various dragline bore machining
- All makes of mobile equipment on-site machining
- Development of laser guided circular milling equipment
- Various dragline bore machining
- Dragline boom cord machining and boom point bores at Bucyrus Mackay
- 4100 tumbler gearbox machining Goonyella
- 4100 various bores at multiple sites
- All makes of mobile equipment on-site machining
- 3 x new build stacker reclaimer bore for Hay Point Mackay