

Banlaw Manufacturing

Capabilities Brochure



Liquid Asset Intelligence

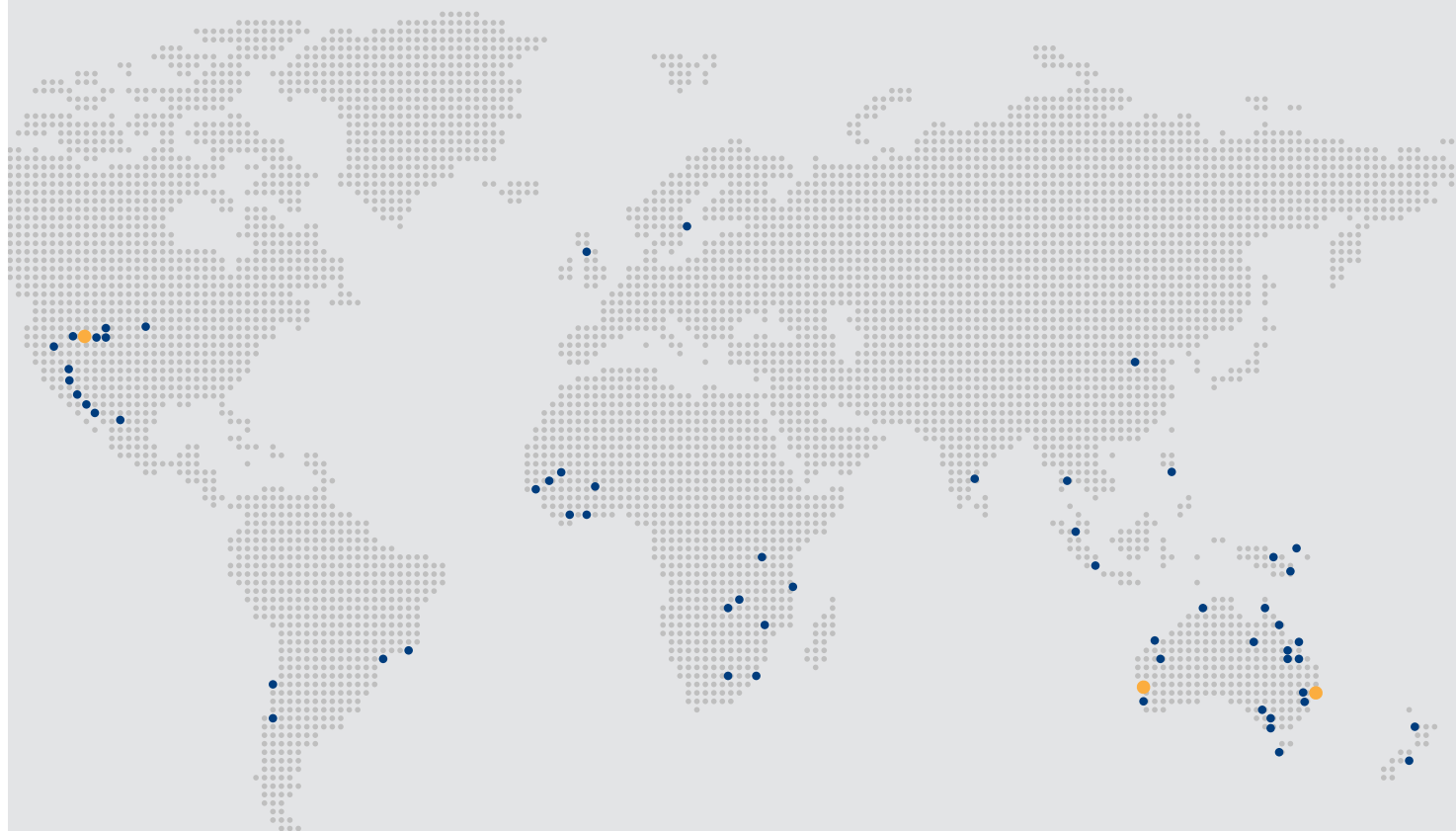
Every drop, delivered where you need it.

Banlaw offers a full portfolio of hardware, software and services for users of industrial fluids. We design and manufacture refuelling, overfill protection and fluid transfer products, along with fuel management systems.

Banlaw has been an Original Equipment Manufacturer (OEM) for 40 years.

Our products are present in 33 countries, and we support our customers from our Advanced Manufacturing Facility and Headquarters in NSW Australia; as well as Queensland and Western Australia, Utah and Nevada USA, and Indonesia. Banlaw works with over 60 distribution partners around the world.

Banlaw's products and services are proven to work in some of the world's harshest environments, and enable customers to secure, monitor, transfer and dispense over 1,000,000,000 litres of hydrocarbons per month with accuracy levels greater than 99.5 per cent.



We are active in 33 countries throughout North America, South America, Africa, Asia and Europe. Global offices are located in Australia and North America.

Manufacturing Expertise

Banlaw's manufacturing operation is managed in line with best-practice, High Performance Manufacturing (HPM) techniques, and we are constantly looking for ways to improve.

Our advanced manufacturing capabilities stem from:

- ▶ Unrelenting focus on product quality in terms of safety, performance, reliability, and features
- ▶ Ongoing investment in the most modern machining technologies, to enable best-in-class product quality, operational capacity, and production efficiency
- ▶ Continuous process optimisation, to fully-leverage new autonomous capabilities as they become available, and build flexibility into our manufacturing processes
- ▶ Diverse and highly trained manufacturing team members, from apprentices to shop floor operators with decades of experience

We sell our refuelling, overfill protection, and fluid transfer products under the Banlaw FillSafe™ brand name. They fill safe, fill clean, fill fast, and they're built for the job. Banlaw products are the most dependable on the market, and we intend to keep it that way.



Banlaw FillSafe™

Over 500 products
designed for heavy
industry and
guaranteed to work.

Refuelling – High Speed Refuelling



FillSafe Power – Electronic Overfill Protection



FillSafe Zero – Mechanical Overfill Protection



Fluid Transfer – Cleaner Service Fluid Filling & Evacuation



Machining Centres



Mazak i-100 Bartac-s

Simultaneous 5-axis machining

Autonomous/Unmanned operation

The Mazak SmoothX is the fastest CNC in the world, utilising the latest hardware and software for unprecedented speed and precision. Banlaw's i-100 Bartac is currently the only one of its kind in Australia. It is a compact multi-tasking machine designed for high productivity processing of bar stock up to Ø102mm, with 5-axis simultaneous machining. It is ideal for our FillSafe Zero product line. Our i-100 is optioned with an in-machine measuring system, 36 tool magazine, 800kg capacity LNS bar loader and robotic unloading system. This machine is capable of continuous unmanned operation.



DMG MORI NVX5100

Unmatched accuracy/precision

Our DMG Mori Vertical Machining Centre achieves the world's highest accuracy, and is used for machining critical components. It has a storage capacity of 30 tools, a 15,000 min-1 spindle, an in-machine measuring system, and an additional direct drive 4th axis rotary table. The NVX5100 provides unparalleled precision, and it is used for a wide variety of work pieces including our tank vents and FillSafe Power products.



Mazak j-200S + Fanuc M20iA Robot Arm

Autonomous 24-hour operation

Cast/Billeted components

Our j-200S Integrex, fondly named 'T-Rex', is a 5-axis multitasking machine with exceptional milling versatility. The j-200S has a second spindle, making it possible for us to perform continuous machining. It performs first and second operations in one process, and with the robotic arm for loading and unloading, delivers 24-hour operation for all of our nozzle castings and other billeted components. Never tiring, T-Rex gets all the night shifts!

CNC Lathes



Mazak Multiplex 6300Y

Autonomous operation

Unloading conveyor system

This multi-tasking CNC lathe with two opposed spindles and 2 turrets has unique processing capabilities for unsurpassed efficiency and productivity. The Multiplex provides processing of first and second operations simultaneously in 1 cycle. It's fitted with a bar loader capable of feeding up to Ø76mm stock, live tooling for milling operations, an additional Y-axis, and unloading conveyor system. This machine can work around the clock, making it ideal for high volume products like our stainless steel BRM dry break receivers.



Mazak Quick Turn Lathes

Lathes for autonomous machining of smaller components

- ▶ Mazak Quick Turn Nexus 100 (Barfeed)
- ▶ Mazak Quick Turn Nexus 100-II MS (Barfeed)
- ▶ Mazak Quick Turn Nexus 200 MS (Barfeed)
- ▶ Mazak Quick Turn Nexus 200-II MS (Barfeed)

Our fleet of 4 Quick Turn Nexus CNC lathes all have twin spindles, live tool milling capabilities, and are equipped with bar feeders. This gives us the ability to load up lengths of material sufficient for hours of unmanned operation. They are ideal for the smaller components used in our classic and BPL fluid transfer coupling ranges.



Mazak Quick Turn Smart 200

Quick setup & programming

Small production runs

The Quick Turn Smart is a single spindle, 12 tool turret CNC lathe. It is designed for super quick programming and setup, making it the perfect machine tool for our smaller batch product runs.

Bar & Billet Cutting



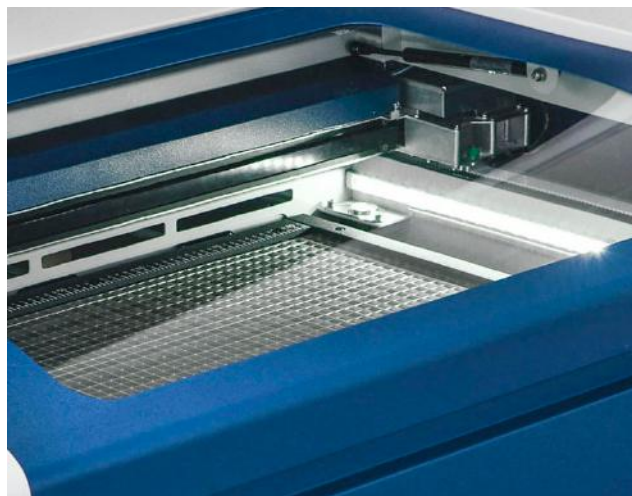
MEP Shark 230 NC HS 5.0

Bar stock cutting

Automated

Processing an average of 10 tonnes of bar stock through its jaws each month, the Shark 230 cuts feed stock for our CNC's bar loaders, and billets for the j-200S and 200 Smart. It is an automated double-column bandsaw, capable of cutting solid bar of up to 230mm.

Laser Etching & Cutting



Epilog Fusion M2 30w Fiber Laser

Laser etching

Rotary laser etching

The Epilog fusion M2 is an industrial grade fiber laser, used for direct engraving and marking of products. These range from our BPL coupling tails and caps to our ResTrack Advanced Controller doors. It also has the option of adding a rotary table device making it ideal for larger diameter components like the BFCV23 FillSafe Zero Control Valves.



Epilog Fusion M2 60w Co2 Laser

Laser etching

Laser cutting

Similar to the fusion M2 fiber, the Epilog fusion Co2 laser, is designed for engraving and cutting a variety of materials including acrylic, timber, and gasket materials. It is used for direct marking of products, and also setting out and cutting template tables, which are then used to house components in batches on both lasers. This eliminates the need for loading products individually prior to laser etching.

Machined Component Types



Stainless Steel



Aluminium



Anodised



Cast



Steel Zinc Plated

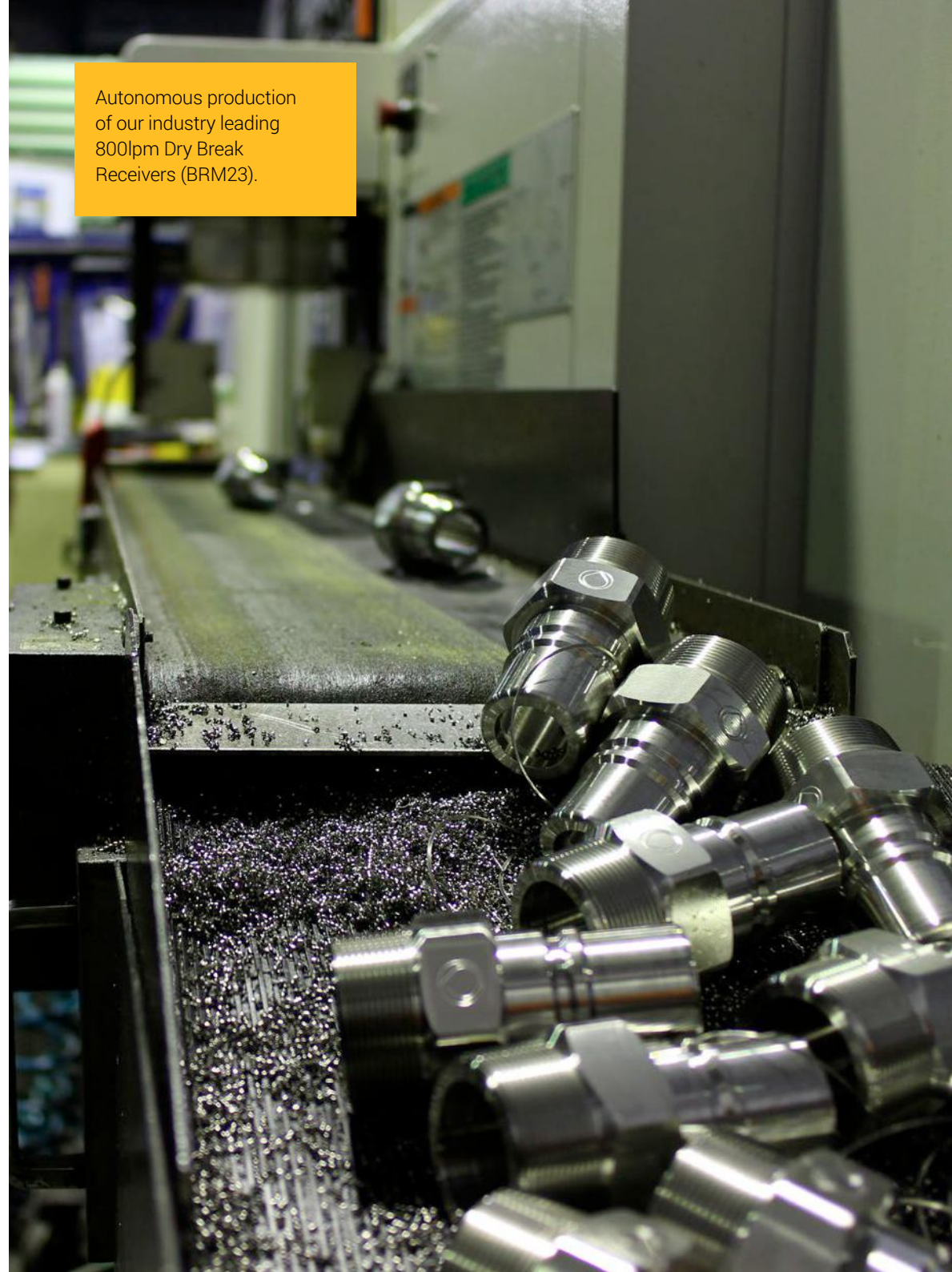


Brass



Acetal/Plastics

Autonomous production
of our industry leading
800lpm Dry Break
Receivers (BRM23).





STTIQRs for Our Values

Safety

Teamwork

Trust

Innovation

Quality

Respect

Company Values

Whether it's onsite or in the factory, Safety is always at the top of our list. It influences everything we do, and everything we create. Banlaw's values help remind our whole organisation, wherever in the world they happen to be, who we are, and how we behave.

This photo is from our advanced manufacturing facility in Newcastle, Australia. The robot and machining centre in the background run autonomously day and night.

The team in the photograph are engineers, designers, machinists, and craftsmen. They are responsible for the production of Banlaw's products, and they represent the core skills we rely on to keep pushing technology forward, and solving problems for our customers.

Quality at Banlaw

Our world class research and development, manufacturing and assembly facilities in New South Wales Australia, are externally quality assured and certified by SAI Global.

Certifications

ISO 9001:2015 certified quality management system

MIL-STD 810G certified (extreme cold temperature products)

Awards

2017: Rio Tinto – Health, Safety & Environment Innovation Award

2016: Engineers Australia – High Commendation –
Dry-Break Refuelling System with Tank Overfill Protection

2011: NSW Port Corporation – Hunter and Central Coast
Exporter of the Year

2006: MAP Awards – Fastest Growing Manufacturer

2003: Ministers Award for Exceptional Performance –
Regional Employer of the Year



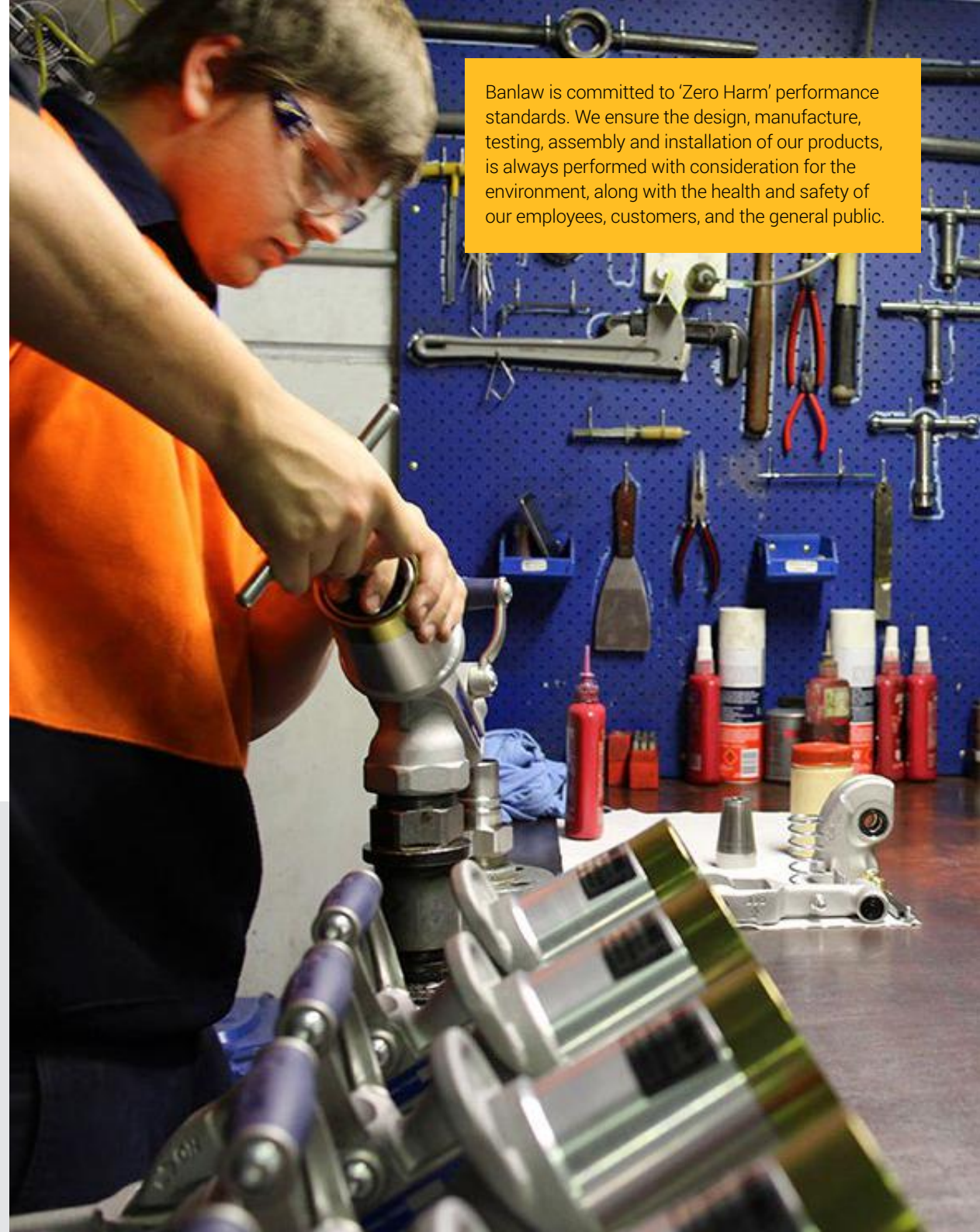
Quality
ISO 9001

SAI GLOBAL



ISO 9001:2015 quality management system.
Certified for: The design, development, manufacture, repair, service and support of dry-break refuelling systems, lubrication and evacuation systems, tank overfill protection systems and electronic fuel monitoring systems for on road and off road (including rail) fuel powered equipment.

Banlaw is committed to 'Zero Harm' performance standards. We ensure the design, manufacture, testing, assembly and installation of our products, is always performed with consideration for the environment, along with the health and safety of our employees, customers, and the general public.





Contact Banlaw today if you need increased Accuracy, Accountability, Security, or Productivity for your fluid assets.

Australia / International

Head Office / Manufacturing Facility

Telephone +61 2 4922 6300

Email sales@banlaw.com

Address 19 Metro Court

Gateshead NSW 2290 Australia

Western Australia

Telephone +61 8 9209 1514

Email sales@banlaw.com

Address 1/16 Oxleigh Drive

Malaga WA 6090 Australia

Americas

Banlaw North America

Telephone +1 385 259 0456

Email americasales@banlaw.com

Address 2009 S 4130 W, Suite D

Salt Lake City Utah 84104 USA

banlaw.com

