



MOTION
ENGINEERING & SERVICES

ENGINEERING & SERVICES

Capability Statement

Anytime. Anywhere.
Always Here.™



WHO WE ARE

Motion delivers a world-class, customer-first approach to everything we do. This has firmly established our business as a leader in the market, providing excellence and expertise in industrial products, solutions, and services.

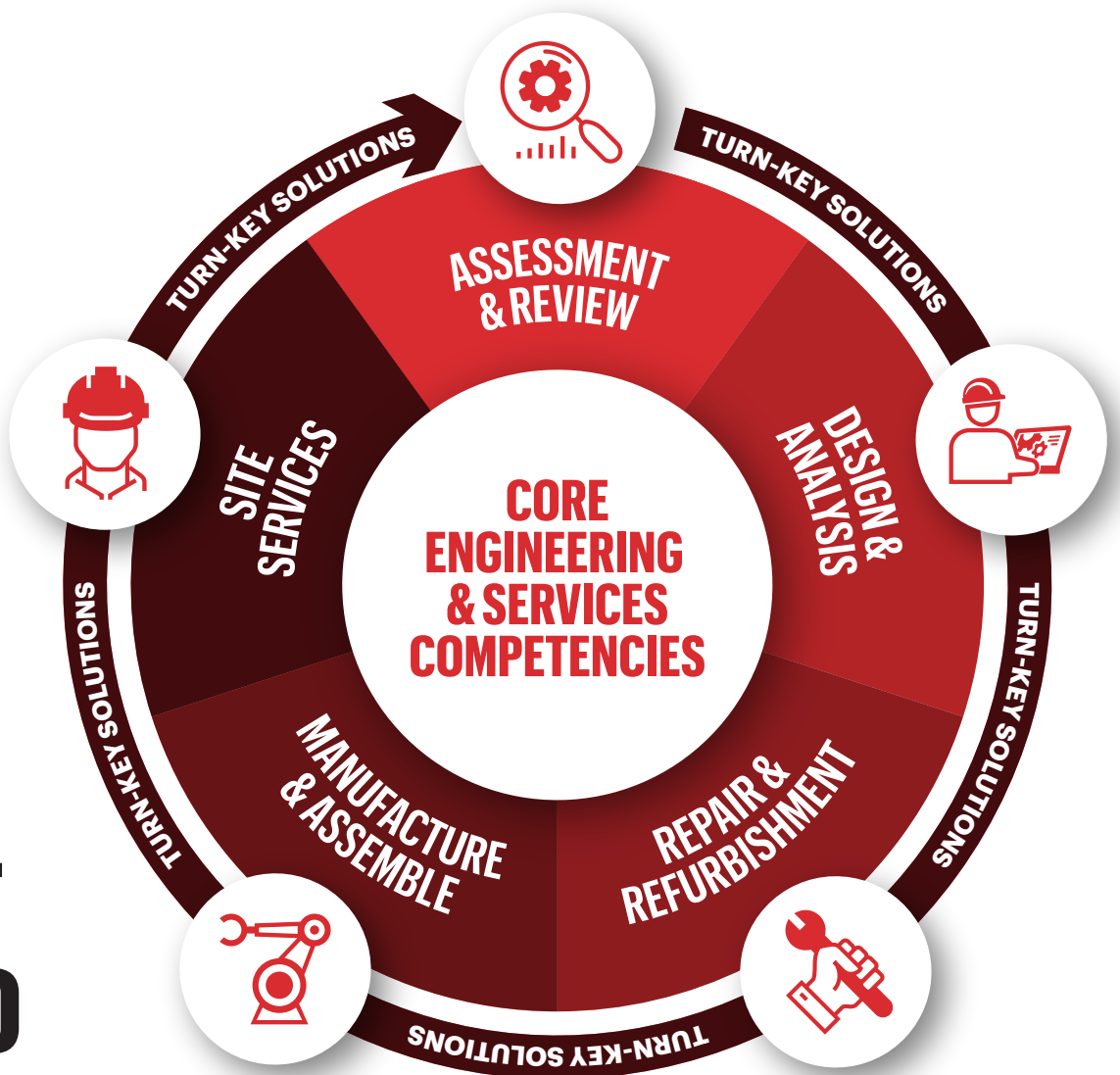
For more than 100 years, we have been a key part of the Asia Pacific industrial landscape, offering customers unmatched products and service through an integrated network of branches, workshops, and service centres.

We have an ongoing commitment to invest in our people, facilities, IT, and systems to ensure we continue to offer a broad range of premium engineering design, servicing, and turnkey projects to our customers across the Asia Pacific region.

We are committed and proud to keep our customers in motion, every day of the year.

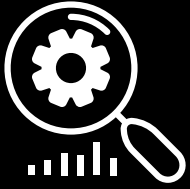
“WE KEEP THE
WORLD MOVING”





WHAT WE DO

Motion Engineering & Services has developed a range of core competencies that set us apart from our competitors and through our 22 national locations emphasise the diversity of skills we can deliver to our client.



ASSESSMENT & REVIEW

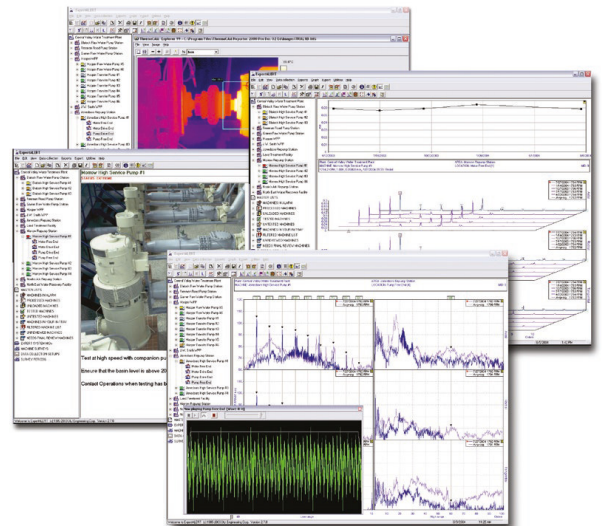
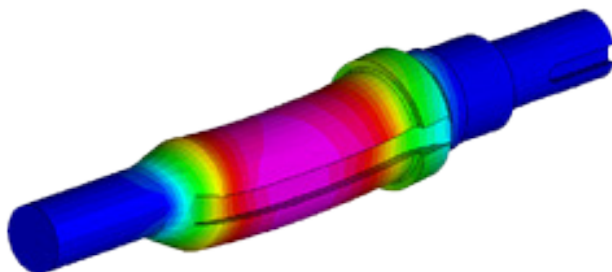


Knowing that equipment and processes are working to provide optimum reliability, performance and function is vital to maximise productivity and output, as is knowing that a planned expansion or alteration to an existing system or process will perform to expectations.

Our engineering teams have the hands-on experience across multiple industrial sectors to understand how industrial equipment and processes work. We use specialist sensing and data-acquisition equipment including the latest generation of Internet-connected, remotely located sensors to investigate and analyse the operation of production equipment. We aim to understand the challenges of an industrial environment and the opportunities for modifying, upgrading, or properly fixing equipment performing below expectations, and to determine and recommend a way forward.

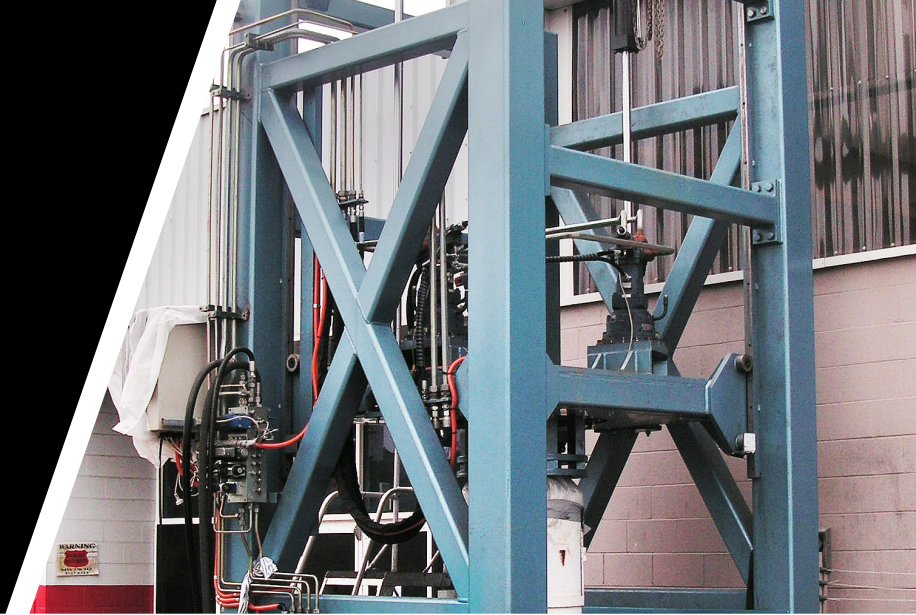
Our assessment and review services include:

- Vibration analysis
- Oil analysis
- Energy audits
- System troubleshooting
- Hydraulic audits
- Plant audits
- Root cause analysis
- Electronic monitoring and data acquisition
- Motion and servo control system analysis
- Design reviews





DESIGN & ANALYSIS



Overall project success starts with the customer's process, requirements and expectations. To fully understand the problem and then work at achieving the right design. The right decisions at the start will meet the expectations at commissioning.

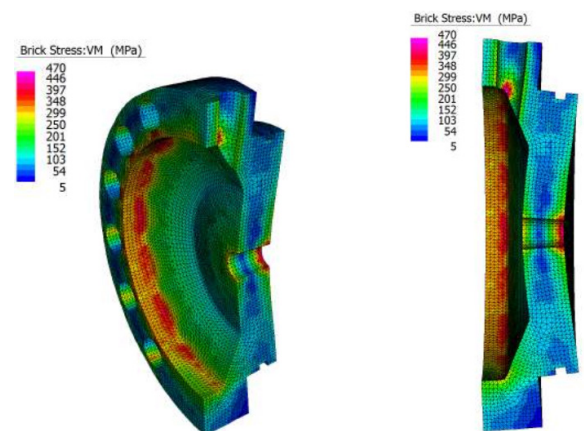
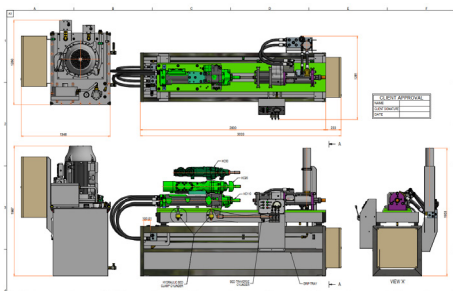
In a modern industrial environment a multi-disciplinary design approach is typically required including mechanical, process, hydraulic and automation engineering. And with the rapid transition to highly connected electronic devices, smart sensors and controls that are a feature of Industry 4.0, the demands for cohesive and multi-disciplined engineering are increasing. Paralleling the growth of interconnected hardware is increasingly connected engineering design software that allows more design aspects of a project to be carried out as part of an overall system.

Making the most of the newer hardware and software technology requires engineers who have the necessary training, skills and experience to maximise the potential and opportunities the

technology offers to get the design right – and the right design to meet any engineering and physical demands and deliver an effective and efficient project.

Our design and analysis services include:

- Hydraulic system design
- Mechanical equipment design
- Automation systems
- Electrical control panels
- Stress analysis and Finite Element Analysis (FEA)
- Motion control system design
- Hydraulic cylinder design
- Expert engineering services
- Failure mode and effects assessments
- Specialist bearing and drive design
- Dynamic system analysis and simulation





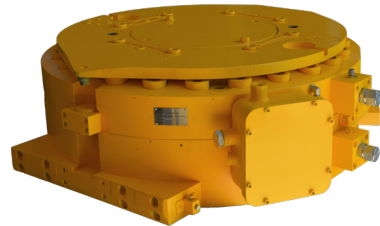
REPAIR & REFURBISHMENT



Most production-oriented equipment is mechanical. It's designed to move. Up, down, sideways. To push. To pull. To turn. Quickly, regularly, consistently. That movement generates physical wear on components and no matter how well components are made their design dimensions will change, their ability to perform required tasks will diminish. Chances are that at some stage of its operational life an item of equipment will need to be repaired or refurbished.

Our specialist workshops around the country provide a customer-focussed and product-focussed service. They have the ideal combination of tradespeople and technicians with appropriate training and experience, supported by an extensive range of machinery and equipment, to effect repairs quickly and to minimise downtime.

Our experience has shown that some repair jobs occur on a regular basis whereas others are unique. The flexibility of our highly skilled team members to assess the work required and effect repairs promptly and efficiently has consistently assured our clients their job will be done on time, on budget and ready for operation.

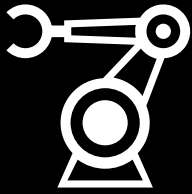




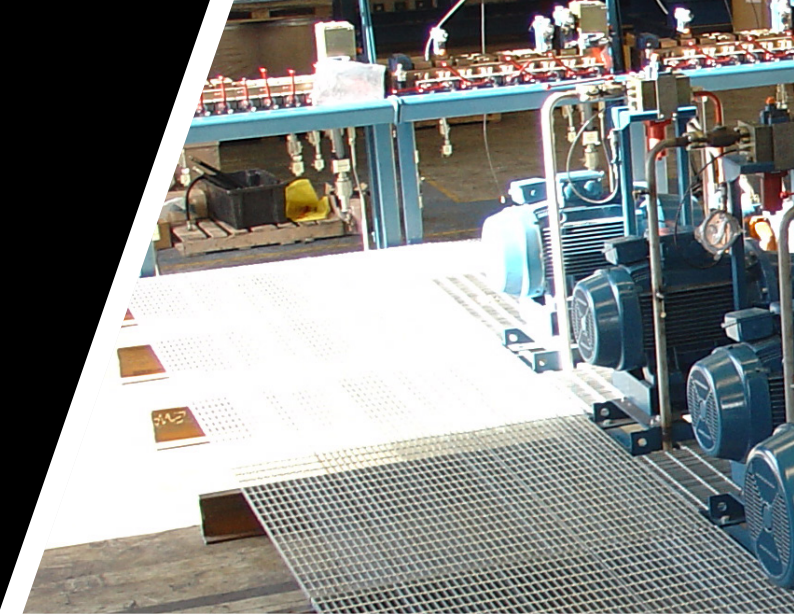
Our range of repair and refurbishment services includes:

- Hydraulic and pneumatic cylinders
- Hydraulic pumps and power units
- Process pumps
- High-pressure hydraulic pipe and hose
- Gearboxes
- Compressors
- Hydraulic valves
- Structural steel
- Undercarriage and final drives
- Underground machinery overhaul
- Surface drill rig overhaul
- Fans
- Driveshafts
- Balancing services
- Bearing and housing
- Full hydraulic servo and proportional valve assessment and refurbishment
- Process and power generation valve assessment and refurbishment
- Oxygen equipment hydrocarbon cleaning and certification





MANUFACTURE & ASSEMBLE



Manufacturing and assembly is an integral part of our business and through a network of specialist workshops – that have the equipment and the experienced technicians and tradespeople to get the best from that equipment – our services range from large-scale fabricated structures from steel or aluminium to the manufacture of bespoke components or a complete machine or operating system for unique applications including material testing, mining and manufacturing, through to making a replacement for a damaged part.

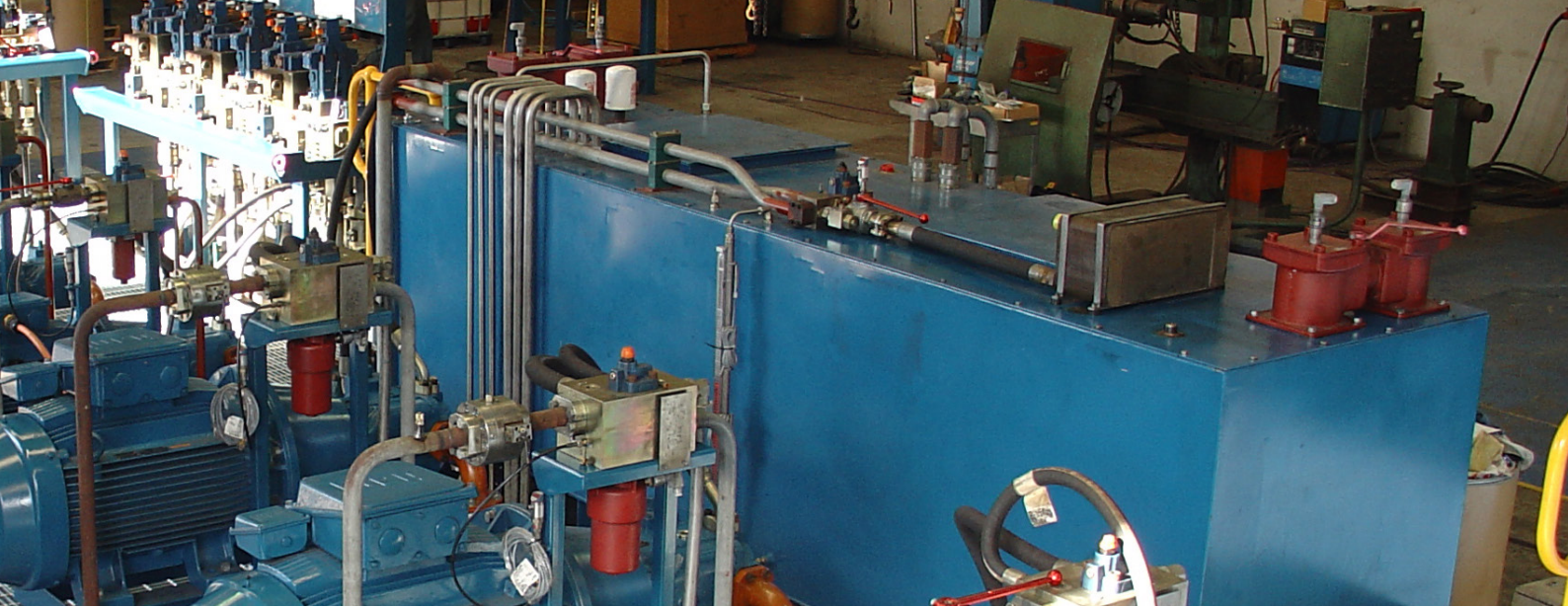
Whether an upgraded steam pipe installation or a selection of replacement seals, each project, irrespective of its size, complexity or application, is carefully managed in accordance with our Quality Assurance program to deliver a quality product which will integrate seamlessly into our customer's infrastructure.



Advanced CNC Machining & Large-Part Manufacturing

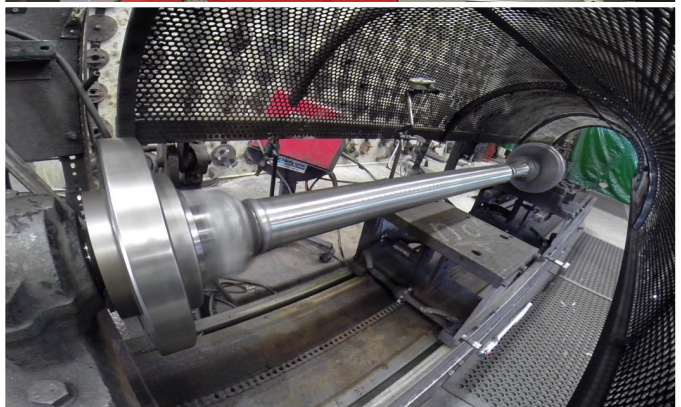
Motion delivers advanced CNC machining and large-part manufacturing solutions to support complex, high-tolerance industrial applications. With multi-axis milling, large-capacity turning (up to $\text{Ø}1800 \times 6000 \text{ mm}$), vertical boring, and 5-axis capability, Motion produces precision components ranging from one-off engineered parts to small and medium production runs.

Backed by modern equipment, and skilled technicians, Motion provides reliable, cost-effective manufacturing with strong quality control, flexible capacity, and integrated support across engineering, fabrication, and repair services.



Our manufacture and assemble services include:

- Hydraulic and industrial hose
- High- and low-pressure piping
- Gearbox assembly
- Hydraulic cylinders
- Linear shaft
- Cut to length or specialty attachment roller chains
- Hydraulic power units
- Driveshafts
- Electrical control and automation systems
- Bearing housings
- Seals and gaskets
- Custom test machinery
- Special purpose mining and manufacturing machinery
- Steel fabrication
- Process pump assembly
- Lubrication systems
- CNC Machining
- Onsite Machining





SITE SERVICES



Site services mean taking our expertise, equipment and facilities to your plant.

We can be there to install equipment, for regular maintenance to vital production-oriented technology and components, to advise on alterations or additions to existing infrastructure, to troubleshoot, identify and repair equipment failures, for specialist servicing, for equipment upgrades and planned shutdowns – for any of the myriad of specialist service functions required by industry.

We also know that, occasionally, the job the site service team has been called in to complete will reveal unknown or potential problems. With the back-up of fully-equipped workshops, staffed by experienced technicians and tradespeople, damaged components can be taken off site, quickly assessed, repaired and returned ready for re-installation.

Whether at site or in the workshop, our focus is to deliver a quality service. To complete the task quickly, efficiently and safely. To understand the workplace environment. To minimise any disruption to production. To avoid any interruption to workflow.

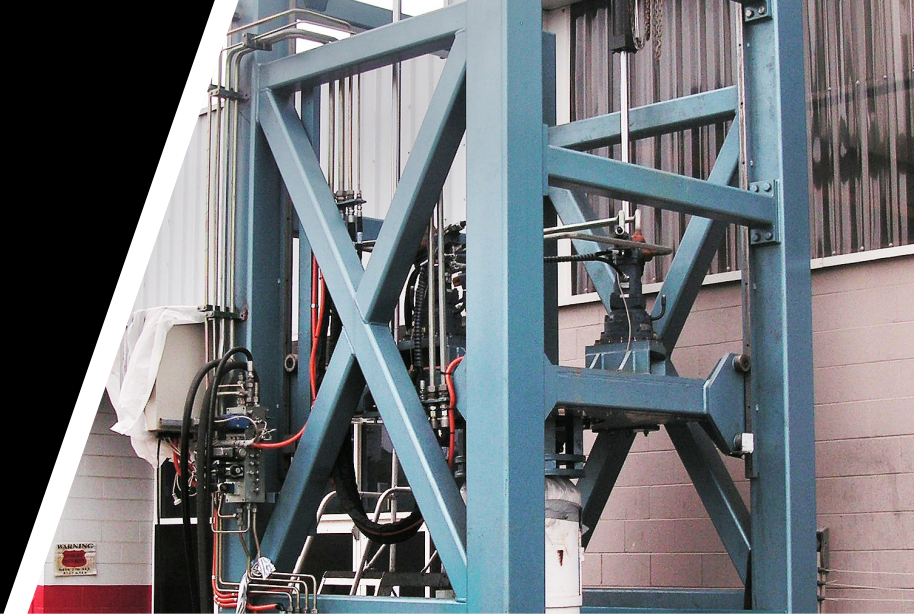
Our site services include:

- Pipe work installation pressure testing and flushing/ cleaning
- Plant shutdowns requiring large, multi-disciplined work crews
- Bearing and gearbox installs
- Equipment installation and commissioning
- Laser alignment
- Thermography
- Oil sampling
- Hydraulic equipment servicing
- Motion control system tuning and troubleshooting
- Portable vibration measurement and analysis
- Hose vans
- Powerplant and turbine shutdown site servicing
- Steel fabrication and installation
- Specialty mine site maintenance
- Rental equipment (portable hydraulic power units, flushing rigs, filter buggies)
- Pressure testing
- On site, in situ: milling, turning and line boring





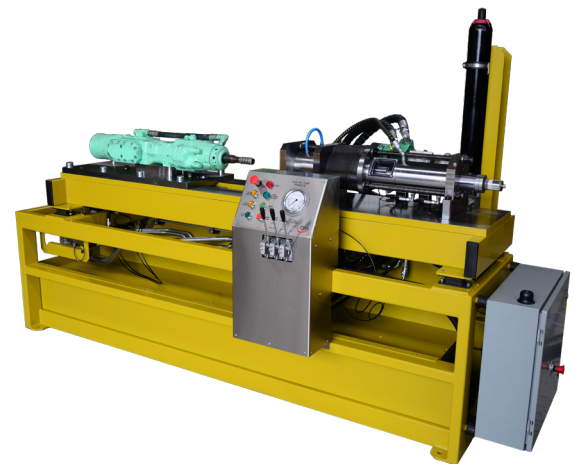
TURNKEY SOLUTIONS



The dynamics of contemporary industrial environments make staying competitive an imperative. Customers are placing more demands on suppliers and technology is changing equipment and processes. Moving forward might mean new equipment, or a whole new department. A successful outcome to such a decision could depend very much on the first steps.

With a proven and comprehensive portfolio of business support competencies and long-established supplier and subcontractor relationships, Motion Engineering & Services has the personnel with the appropriate skills and expertise to assess the proposal, input specialist hydraulic, mechanical and electrical design parameters, source, fabricate, manufacture and install production equipment and provide comprehensive and reliable ongoing support and service to deliver an end-to-end turnkey solution which can be implemented, with minimum disruption, into an existing business model.

Our turnkey solutions are a viable alternative, carefully designed to be compatible with OEM process equipment and can save time and money when constructed, implemented and project managed to maximise their potential.





MOTION

Delivering a world-class customer-first approach providing excellence and expertise in industrial products, solutions and services.

MOTION
FLUID POWER SOLUTIONS

Specialists in Fluid Power Solutions tailored to keep your equipment moving.

MOTION
ENGINEERING & SERVICES

Specialist design and engineering, manufacturing, repair and maintenance services.

Anytime. Anywhere.
Always Here.™



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