



PENTI-M ENGINEERING

A U S T R A L I A

**CAPABILITY
STATEMENT**

ABOUT US

Penti-M Engineering provides clever, innovative engineering solutions to everyday problems faced by companies operating in Central Queensland and the Bowen Basin.

Our team will never offer you a band-aid solution. Instead Penti-M will get to the core of the problem and provide a superior solution, thanks to our unique reverse engineering process and in-house manufacturing capabilities.

In fact we don't stop there. Our team will always look to provide you with innovation to save you time and money with your machining and manufacturing needs.

Whether you need a component repaired, an out-of-stock item reverse engineered, or something designed and manufactured specifically for your project, Penti-M Engineering is able to provide a precision solution to suit your needs.

Our experienced team takes pride in their work and will spend the time to understand the requirements of your components and projects. Our workshop is equipped with state of the art equipment including a 5-Axis CNC machine tool and SolidWorks 3D Design Software which enables us to provide excellence and superiority.

Penti-M Engineering have built our business around strong relationships with our customers, and as we continue to grow, this philosophy remains our top priority.



PENTI-M GETS TO THE CORE OF THE PROBLEM WITH OUR UNIQUE REVERSE ENGINEERING PROCESS



PENTI-M ENGINEERING IS RENOWNED AUSTRALIA-WIDE FOR THEIR INNOVATIVE APPROACH TO COMPLEX JOBS.

SERVICES



SPECIALTIES

REVERSE ENGINEERING AND RE-ENGINEERING

It's quite common for certain parts to be worn out in vital production machines, and sometimes it's hard to identify where the part came from or who can replace it.

Penti-M Engineering specialise in reverse engineering components, and have precision engineered thousands of different components over their 25 years of operation. No matter how badly worn-out your components are, Penti-M can do better than just re-building – they re-engineer with the latest industry and safety standards in mind.

Our state-of-the-art 5-axis CNC machine allows us to engineer and custom-build designs from start to finish. The capability for designing & manufacture in one location makes Penti-M a time and cost-effective solution.

SPECIALISED WELDING

Another unique service offered by Penti-M Engineering is the provision of specialised welding and metal spraying of unusual materials.

Very few companies are able to provide the range of specialised welding that Penti-M Engineering are able to supply. We are able to weld magnesium, copper, bronze, aluminium, stainless steel, cast iron, nickel and alloys.

METAL SPRAYING

Our metal spraying services are state-of-the-art and include thermal arc spraying, hot metal spraying, cold metal spraying, plastic powder spraying and corrosion protection spraying.

Penti-M Engineering provide a full range of unusual material metal spraying, including ceramics, nickel, cobalt, copper, bronze, cast iron, aluminium and stainless steel.

IN-HOUSE DRAFTING AND UNIQUE MACHINE DESIGN

If you have an idea, we can design it. If you need a custom solution identified to fix a problem, we can make it happen. With state of the art 3D Modelling and design software, Penti-M Engineering can create, design, analyse, render or simulate in 3D, for simple and complex models.

Examples of world class machines designed and manufactured by Penti-M include:

- Spiral wrap cutting machines
- Spiral wrap application machines
- Grass seed harvester
- Submersible air track
- Explosive Tube cutting machine
- Hospital roller beds
- Flail mower system





Penti-M Engineering works within all industries and are recognised for our precision product design and manufacturing abilities, as well as our consistently on-time delivery.

MINING

Penti-M Engineering's efficient delivery of time and production-sensitive componentry has earned us a reputation as a reliable supplier with quality, precision workmanship.

Our cost-effective structure and efficient delivery times has enabled us to keep several leading companies in the Bowen Basin working to schedule and budget.

For mining companies and contractors, Penti-M Engineering can:

- Manufacture broken components
- Engineer obsolete parts
- Custom-build new and improved components, and
- Re-engineer parts for productivity and longevity

Penti-M Engineering is a proud local supplier, and will often get your components to you quicker than overseas manufacturers are able to.

HEAVY INDUSTRY

Penti-M Engineering has been a preferred supplier of precision components for Aurizon and Stanwell Power Station for many years. Our strong governance systems and experience allow us to provide cost-effective solutions, while we are a small enough company to maintain flexibility on projects.

Specialist heavy industry services include:

- Precision machining of power station valves
- Complete overhaul of heavy industry machinery.
- Re-engineering components for upgraded systems
- Refurbishment of parts from large to small
- Reclamation of worn out components
- On-site specialty machining of turbine components for power stations
- Urgent manufacture of rare components



WORKSHOP

The Penti-M Engineering workshop in Rockhampton, Queensland, is equipped as a complete machining, manufacturing and engineering workshop.

Our industrial location allows large deliveries and components to be delivered with minimal disruption.

OUR WORKSHOP CAPABILITIES INCLUDE:

5-AXIS SIMULTANEOUS CNC MACHINING

- Mazak Integrex 400 IVS complete with 80 tool magazine, bar feeder and parts catcher for ultimate productivity

PRECISION MACHINING

- TOS W100A Horizontal Borer with extensive tooling & digital readout, 100mm spindle, 3 tonne table capacity
- TOS SN 63C 3m Digital Readout Lathe
- Digital Readout Lathes 1.0m, 1.5m & 3.0m
- Pacific FTV-25 Digital readout milling machine
- Shaping Machine
- Metal Spray & Welding Lathe with variable speed

3D MODELLING/ENGINEERING & DRAFTING

- SolidWorks 3D Modelling & Design Software
- AutoCAD 2014 Drafting Software

PRECISION GRINDING

- Landis Cylindrical Grinder 1200dia x 2m centres - compounded angles capability
- Tool Room Surface Grinder

METAL SPRAYING

- Miller BP400 Thermal Arc Spray System
- Eutectic Tero Dyne 2000 Cold Metal Spray System
- Eutectic Super Jet Hot Metal Spray System

SPECIALIZED WELDING

- Fronius TPS 4000 -complete with Syncro Pulse
- 300 Pulse TIG
- 350 Electronic Control MIG
- Welding manipulator & fixtures



OUR GEAR IS NOT JUST UP TO SCRATCH IT'S THE BEST IN THE BUSINESS

Our precision equipment is supported by an extensive range of micrometers, calipers, and comparators, as well as specialised tooling including tool post grinders, rotary tables, comparison gauges, angles plates and jigs.

All of our equipment is regularly tested and tagged as well as supported by a significant replacement program to ensure our gear is not just up to scratch, but the best in the business.



**PENTI-M ENGINEERING
HAS COMPLETELY DESIGNED,
ENGINEERED AND MANUFACTURED
3 WORLD CLASS MACHINES
FOR OUR CLIENTS
OVER THE LAST YEAR.**



STAFF

Penti-M Engineering is a family-owned business with strong ties to the Rockhampton community.

Directors Wayne and Judy Keleher have built the business over 25 years to a six-person team that includes trade-qualified Fitter and Turners, Machinists, Draftsmen and Engineers.



AUNG AUNG
LEADING MACHINIST

Aung has over 20 years experience in the engineering industry. Aung's extensive experience with power station components and his knowledge of gear boxes, hydraulic cylinders and heavy earthmoving equipment make him a valuable member of the Penti-M team.



WAYNE KELEHER
DIRECTOR

Wayne is a trade qualified Fitter and Turner with an eye for perfection. Wayne started the business in 1989 and has maintained his strong values within the business throughout its growth. An ideas man, Wayne isn't afraid to think outside the box and has always believed in having a 'YES CAN DO' approach, turning many machines inside out in order to produce world class machines and components.



ZANE KELEHER
DESIGNER, INNOVATOR AND CNC MACHINIST

Zane is a trade qualified Mechanical Engineer with 8 years industry experience. Zane specialises in advanced CNC programming and machining and assists Penti-M in continuous improvement and implementing the latest technologies and strategies. Zane also is heavily involved in designing, drafting and specialised welding. Zane is passionate about everything he does and will always look to your best possible outcome.



WE ARE FAMILY OWNED BUSINESS OPERATING OUT OF CENTRAL QUEENSLAND



COREY MOSS
APPRENTICE

Corey has developed a love for engineering through years of experience working on farms and farm equipment and machinery. Learning his trade from the experts at Penti-M, Corey is eager to be a successful tradesman and further advance his skills and knowledge in every way possible.



JAKE KELEHER
DESIGNER

Jake is currently studying his Mechanical Engineering degree, with experience in the Bicycle and Rail industries. Jake brings an extensive knowledge of mechanical systems and components to the team. His years of experience with drafting and design in both 2D and 3D workspaces, using the latest software, makes Jake a valuable member of the Penti-M Engineering Design Team and can bring your idea into reality.

VISION

Penti-M Engineering aims to be a superior engineering service, one of the only specialists in Queensland who do what we do. We are constantly innovating and learning to truly satisfy the needs of both our customers and our team members.

TRAINING & DEVELOPMENT

Our team keeps up-to-date with our changing industry by attending manufacturing and engineering trade shows across Australia. Professional development is important to Penti-M Engineering, and our team are given every opportunity to succeed.

Penti-M Engineering has also employed several mechanical engineers as Apprentices through CQ TAFE as part of our commitment to skills development in regional Australia. We interact with local schools to recruit the brightest young minds as future participants in our apprentice program.

“NO JOB IS TOO BIG, TOO SMALL, TOO HARD OR NOT WORTH THE EFFORT OF DOING IT 100% THE FIRST TIME.”

WAYNE KELEHER



CLIENTS & PROJECTS

Penti-M Engineering has been a trusted supplier to power stations across Queensland assisting with annual outages and shutdowns to provide time-critical, on-site machining and component repairs to strict quality standards and deadlines.

Penti-M focuses on forming high-quality and lasting relationships with our clients, who include:

POWER INDUSTRY

Mitsubishi Hitachi Power Systems

Shut downs, overhauls, on-site machining to tight deadlines, machining and grinding of valves and components.

Stanwell Corporation Ltd

Manufacturing boiler pump and slurry pump components, supplying obsolete but critical components.

Siemens Ltd

Replacement of turbine diaphragms and machining for turbine overhaul for Stanwell Power Station.

Alstom Ltd

Machining of turbine shroud, fan nozzles and manufacture of components for Callide Power Station.

MINING

Wesfarmers Curragh

Machining repairs to Coal Rake linear actuators.

Cook Colliery

Reverse engineer, program & manufacture Dolly Car rail wheels & Custom Drive Sprockets.

BMA Blackwater Coal Mine

Design & Manufacture of purpose built oil filter cutting inspection bench.

MEM

Design and machine all components for their large hydraulic disassembly/assembly bench.

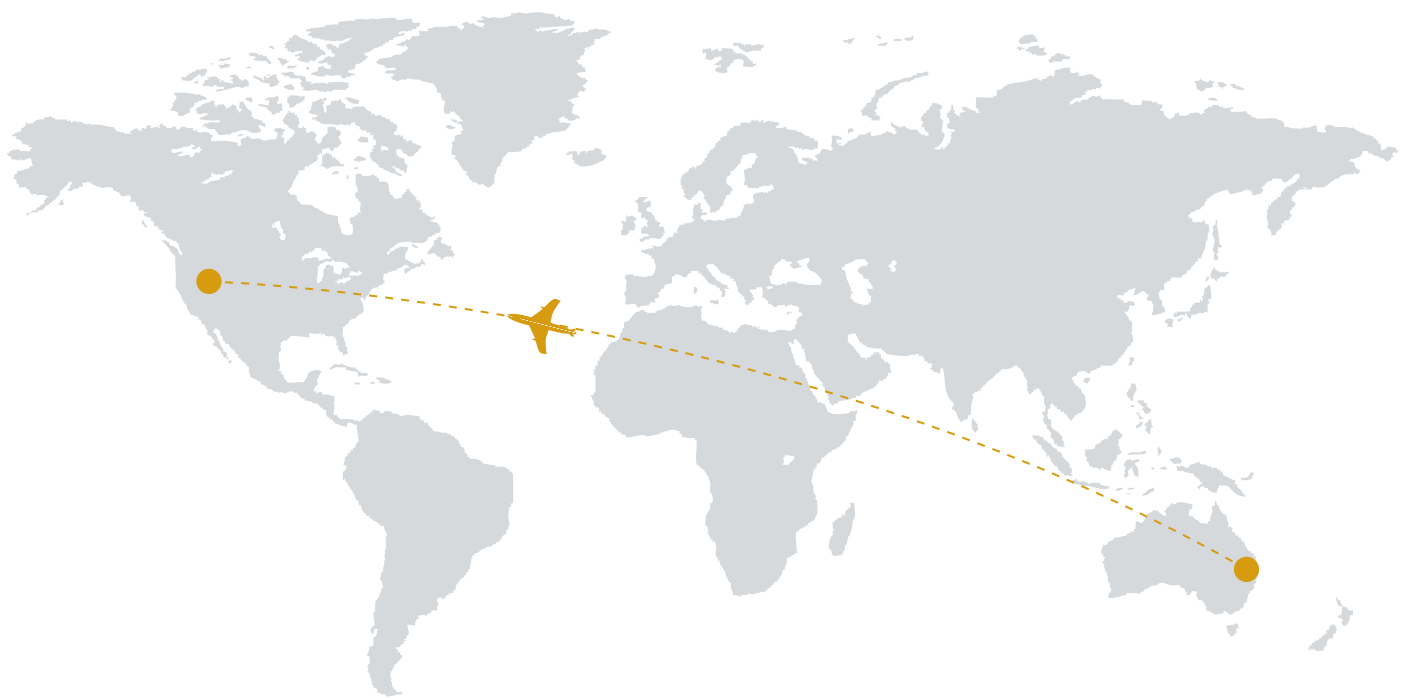
New Mining

Machine all components for small mobile roof bolting machine.

JOY Mining

Machine extensive range of flame paths for underground electrical enclosures and systems.





PENTI-M ENGINEERING'S
SERVICE IS SO WELL RECOGNISED
THAT WE MANUFACTURE PARTS
FOR INTERNATIONAL CLIENTS,
EXPORTING THEM ACROSS THE GLOBE.



CLIENTS & PROJECTS

HEAVY INDUSTRY

Aurizon

Servicing track maintenance machines, reverse engineering, repair and rebuilds of parts, for over 25 years.

Weldalloy

World first unique machine design and manufacture, in Australia and the USA.

Mackellar Mining

Repair & reclamation of Caterpillar components, as well as specialised welding and metal spraying services.

MHPS Plant Services

Complete valve overhauls, precision radius grinding and machining.

OTTO Industries

Reclaim large plastic extrusion barrel for Sydney factory.

Weir Warman

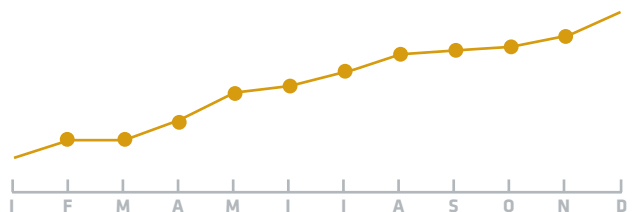
Machining of pump back liners and special tooling.

AGRICULTURE

Dunavant Ginning

Manufacture cotton bale press components, metal spraying of lint saw shafts, manufacture bale transportation components.

THOUSANDS OF INDIVIDUAL COMPONENTS DESIGNED OR REVERSE ENGINEERED AND THEN MANUFACTURED A YEAR.





Quality is the core of our business, and at Penti-M Engineering we are committed to quality in our workplace practices, our environmental management and our employee standards.

HEALTH AND SAFETY

Penti-M Engineering is committed to the provision of a safe and healthy work environment for our employees, contractors and clients.

Physical safety is only the beginning – the wellbeing and health of our employees as well as our approach to work/life balance all contribute to making Penti-M Engineering a sustainable and productive business.

Penti-M Engineering firmly takes the stance that it is not acceptable for any person to be harmed while at work. To further this value, Penti-M Engineering is committed to:

- Making safety our first priority;
- Keeping up with and exceeding industry-standard practices;
- Identifying, controlling and eliminating hazards;
- Proactively managing health and safety risks within our business;
- Providing regular training and resources to staff;
- Reducing risk at all levels, and
- Introducing injury prevention strategies.

ENVIRONMENT

Penti-M Engineering understands that our business may impact the environment through our work practices, products and purchases.

When it comes to the environment, Penti-M aims to meet or exceed environmental management industry standards.

Our management will make environmentally responsible decisions regarding sustainability of our business operations.

We bring positive attitudes to environmental considerations and realise that our whole team must be involved in taking care of the environment through our everyday actions. From turning lights off to environmentally friendly purchasing decisions where possible, Penti-M Engineering will consistently act in a manner that endeavours not to harm the environment.





QUALITY

Penti-M Engineering has built our business reputation around our quality and precision standards. Without this focus on quality, our business cannot continue to grow in a manner commensurate to our vision.

Penti-M Engineering is committed to furthering our quality reputation by:

- Ensuring our work meets statutory obligations and quality standards;
- Constantly asking how we can improve: in design, in methodology and in delivery of our services;
- Training our staff to our high standards, and constantly challenging these standards;
- Encouraging constructive feedback from superiors and clients, during and after projects, and;
- Regularly evaluating the performance of our staff, subcontractors and suppliers.

COMMUNITY

Penti-M Engineering is proudly based in Central Queensland. We believe that as a successful business operating within a regional community it is imperative for us to show our support through sponsorships and donations where possible. An example of this is our ongoing support of the Rockhampton Motocross scene, including:

- Sponsoring an up & coming athlete competing in Australia's most prestigious motocross championships the Monster Energy MX Nationals.
- Long-term involvement with the Rockhampton & District Motocross Club. Assisting in the complete rebuilding and upgrading to a national standard venue after devastating floods.





PENTI-M ENGINEERING
A U S T R A L I A

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