
 WWW.APEMGROUP.COM.AU
 SALES@APEMGROUP.COM.AU
 +61286051886

CAPABILITY STATEMENT

AUSTRALIAN PRECISION ENGINEERING &
MANUFACTURING

APEM

Unit 5&6, 78 Glendenning Road,
Glendenning, NSW 2761





WHY CHOOSE APEM

Design: Industrial Design, Layout Design, Drafting 2D/3D CAD modeling, Software Solution.

Machining: Advanced CNC Milling & Turning Centers

Testing: Partner with a NATA-approved testing facility.

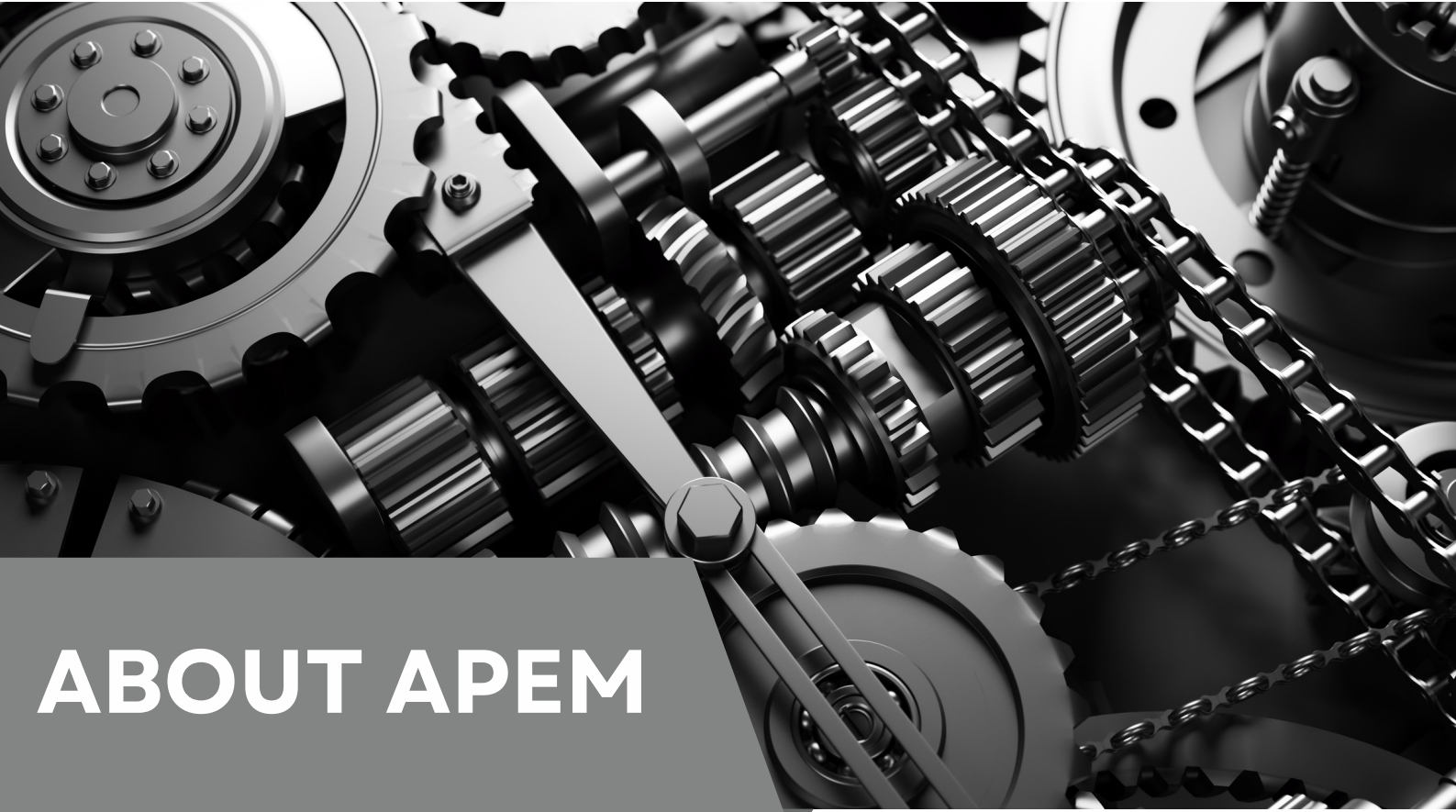
Repair & Maintenance Facility: APEM also has a full-fledged machine shop for lathes, milling, edge bender, bench grinders, TIG/MIG welding, bench drilling, boring, and mag drilling for repair and maintenance jobs.

Futuristic: With over 100 years of combined industry experience, we are a future-focused, diversified services provider. Every job we do, no matter how small or large, is an opportunity to engineer continuous improvement. We use our engineering, manufacturing, and fabrication expertise as a one-vendor supplier to solve your problems.

Project Work: APEM can act as a principal contractor to see an entire project through from design to installation, or work as a one-vendor subcontractor to carry out works efficiently. We make innovation and engineering-led design a primary focus for all projects, giving you results that save both, time, and money.

Abrasive Products: Our abrasive products include coated abrasives (all ranges) and non-woven abrasives. A range of abrasive products includes Cutting Discs, Grinding Disc, Flap Discs, Flap wheels & Abrasive Belts.

You can count on us to provide you with competitive and quality-assured machining and manufacturing services for production and prototypes.



ABOUT APEM

Australian Precision Engineering and Manufacturing (APEM) is a 100% Australian-owned company based in Glendenning, Sydney (New South Wales), aspiring to become an industry leader in precision engineering and fabrication. We strive to serve clients across Australia and internationally, offering the latest in machining and manufacturing technologies.

At APEM we believe in constantly investing and upgrading our capabilities to reassure our clients that they will always have a competitive edge, be it quality, price, or punctual delivery. We build strong synergy with our clients and use a collaborative approach to achieve the best manufacturing outcomes. This involves continuously investing in more specialised plants and equipment and storing machined stock on consignment for client convenience. No matter what the requirement, we are prepared to go the extra mile, work together, and come up with manufacturing solutions.



We are proud to be an engineering business run by engineers for engineers. Our aim is to boost Australian manufacturing capabilities to cater to the local demands and further impart manufacturing skills to young workers and apprentices, to ensure continuity of self-reliance in the longer term. Led by industry experts, our global team of engineers strives to deliver outstanding service to clients. Boasting a combined 100+ years of designing, planning, complex CNC Machining, and precision engineering experience, our leadership team has what it takes to meet the complex machining and manufacturing requirements of the Australian economy.





WHO ARE WE?

At APEM we are driven by innovation that consistently challenges the norm and creates value for our customers. This is backed by our problem-solving professionals, skilled tradespeople, diverse technical experts, and capable support staff. Our local and global teams work together at speed to find solutions to our client's challenges with a focus on quality, cost, and on-time delivery.



Mining, construction, industrial manufacturing, field maintenance, service, and fabrication are among APEM's areas of expertise. Our state-of-the-art workshop facility in Western Sydney is conveniently close to the M4/M5/M7 Motorways. Our qualified staff offer full-service fabrication and manufacturing service, and back up our experienced field service teams who provide engineering, mechanical and trade services on-site across Australia.

APEM provides the complete package, from innovative engineering-led design through to project management and delivery, site-qualified and experienced trade services, and full installation and commissioning, plus long-term servicing, and maintenance. Our mission is to be faster, smarter, eco-friendly, and more efficient. We have decades of proven experience and knowledge in providing timely and efficient service, backed up by our extensively equipped Western Sydney workshop facilities and our field service crews. Our focus on the latest technology and innovation enables us to achieve fast turnaround times allowing us to serve all customers in a flexible and optimal manner.

OUR CAPABILITY

SPECIALISED FIRST CLASS MACHINING

We offer advanced CNC machining services to clients across Australia and around the world. We have an expansive capability in machining precision components and parts, mass manufacturing, and prototyping. Our flexible operations cater to a wide variety of industries with a strong focus on quality and reliability.

Using the latest CNC lathes and milling centres that are linked to state-of-the-art CAD/CAM software for precision and accuracy. APEM has been set up to handle both short run and large production quantities in plastics, alloys, stainless steels, steels, high tensile tool steels, hard machining and or exotic materials.

FABRICATION

Our team of experienced fabricators can complete small to large fabrication jobs in-house, within our dedicated fabrication bay. We have both carbon steel and stainless-steel capabilities along with aluminum fabrication. All welding is in accordance with the relevant Australian Standards, as well as our internal quality standards. Following a work ethic driven by excellence and professionalism, we have extended our capabilities to range from the simplest to the most complex projects.



www.apemgroup.com.au



Unit 5&6, 78 Glendenning Road,
Glendenning, NSW 2761



+61286051886



sales@apemgroup.com.au



OUR SERVICES

LOCAL EXPERTISE & SUPPORT

We offer a complete turnkey solution, from design to engineering, manufacturing, commissioning, and servicing. Alternatively, if our clients want only a part of our service spectrum, we are capable to adapt and customize our service offerings as per client requirements. There is one thing that our experience has taught us – no matter how reliable or well-designed your operational systems are, there is no substitute for local expertise and support provided in the time frame you need. Australian manufacturing is the critical component of our economy, and we are backing it strongly to strengthen it further.

- Engineering, Design & Drafting.
- Solidworks, AutoCAD, Fusion 360 modelling.
- Prototyping.
- Fabrication, Manufacturing & Repairs.
- Field Maintenance & Servicing.
- Mechanical & Compliance Services.



PLANTS & EQUIPMENT

- Equipped with state-of-the-art of art Hurco VMX64i BT50 taper Big plus milling center.
- Vertical Turning center VT 650R MC with 12- 24 inch chuck with quick turret type.
- State-of-art machine shop with all milling lathe, drilling grinding cutting options.
- Specialized In structural bridge bearing design manufacturing, break hubs, pressure plates, valve body, brake drums, brake disks , dies, molds, tapering with five axis option.



CNC MILLING CENTRE

HURCO MILLING CENTRE- VMX 641 WITH BIG PLUS SPINDLE

**WIMAX CONTROL WITH 32 TOOLS CAPACITY FOR PRODUCTION AND LIGHT
OUT OPERATIONS**

Capacity	VMX64i 50 Taper
X,Y,Z -axis Travel	1,625 x 864 x 762 mm
Table Work Surface	1,676x 889 mm
Table T- Slots	7 x 18 mm on 125 mm centres
Maximum Table Load	2,722 kg
Spindle Nose to Table	152 to 914 mm
Coolant Capacity	590 Liters
Floor to Table Surface	1,155 mm





CNC VERTICAL LATHE & MACHINE CENTRE

HWACHEON VT-650

VERTICAL TURNING CENTRE WITH Ø450 MM CHUCK, Y AXIS AND TOOL MAGAZINE

For many well-known manufacturers, the VT-650 is the turning center of choice for machining brake discs, brake drums, hubs, and valve bodies because it is safe, durable, and efficient. In addition to limiting thermal distortion extremely well, the single piece cast machine bed effectively absorbs unwanted vibrations and ensures the highest quality surface finish and precision.

For this type of machine, HWACHEON has become the first manufacturer to provide a Y axis since June 2020. The Y axis is implemented by hand scraped box guide ways for the highest possible stability.

TECHNOLOGY 01.

Integrated, ultra-durable bed

VT-650 has an integrated 45-degree angle bed frame to minimize heat distortion, and the precision-polished wide guide surface and the unique bed design absorb the vibration sufficiently, to ensure high degree of precision at hard turning. All guide surfaces are rectangular and incorporate tack guide to maintain rigidity and accuracy in prolonged operation.



TECHNOLOGY 02.

High-performance spindle

The spindle in VT-650 provides powerful chucking for stable, precise machining. The Hwacheon clean room assembly facility, where these super-precision, super-speed spindles are manufactured, maintains optimal temperature and humidity, and is kept free of any foreign substances. Only the most skilled master engineers are allowed in the assembly facility, to produce only the best equipment under the toughest quality standard in the industry.



TECHNOLOGY 03.

High performance transmission

The gear transmission system allows for high-torque turning at low speed and also high speed turning. The transmission and the spindle motor are designed separately so that the heat and the vibration generated from the transmission don't interfere with the spindle axis. Max. torque: 2,572Nm (when the ap40 motor is equipped with the transmission system)

