



NEPEAN
Engineering &
Innovation

TM

**The most trusted
partner in high
value, innovative
and sustainable
engineering solutions.**



NEPEAN Engineering & Innovation

Opening its doors in 1974, NEPEAN Engineering & Innovation is now one of Australia's largest privately owned engineering service providers and has built up an elite design & project management team who understands the diverse nature of engineering.

NEPEAN Engineering & Innovation has the depth, diversity, capability and experience to successfully deliver on the largest and most complex engineering projects.

OUR PEOPLE

For over 45 years, NEPEAN Engineering and Innovation has maintained its culture which recognises and respects the importance of all participants in the business, building lasting relationships with employees, as well as sub-contractors and our valued customers.

Team members resourced to each job are hand-picked according to specific project requirements in terms of experience, specialist skills and problem solving capabilities.

Global Strength,
Local Service
and Support

OUR MARKETS

Manufacturing, Construction, Infrastructure, Mining, Defence, Civil Works, Pharmaceutical, Scientific and Aerospace.

OUR SERVICES

Engineering design and project management; design and manufacture of special purpose machinery; heavy to light complex fabrication; precision machining, manufacturing of moulds and press tools.

Our engineering services are supported by extensive facilities including over 50,000 square metres of workshop space, in-house design, fully equipped state-of-the-art machine shop, steel fabrication shops, laser cutting, sheet metal, shot blasting, painting and powder coat finishing.

All products are manufactured under a quality assurance system complying with ISO 9001:2015.

NEPEAN DNA

Make the customer successful

Take ownership

Get things done

The best team wins

Be entrepreneurial

Be professional

Keep growing



Our Advantage

NEPEAN Engineering & Innovation is a specialised engineering company actively pursuing, refining and successfully implementing new technologies.

Our consultative approach ensures the delivery of superior product outcomes, meeting even the most demanding specifications for our global customers.

OUR CAPABILITIES

NEPEAN Engineering & Innovation have the capability to exceed your expectations on quality, timeliness and continued service. Longevity in the market provides peace of mind that the processes, equipment and suppliers we use are tried and tested.

PROCESS EXPERTISE

Our competitive advantage is the ability to leverage our deep engineering domain expertise and unique capabilities. This includes our heavy machining, CNC and high precision toolroom along with design-for-manufacture, installation and commissioning of complex components, products and structures.

Nepean Engineering & Innovation are the trusted partners to deliver large, complex or site-based engineering solutions

CUSTOM DESIGN

NEPEAN Engineering and Innovation uses the latest 3D modelling software and design applications. We guarantee confidentiality with intellectual property by incorporating on-site security links for data transfer.

TURN-KEY PACKAGES

NEPEAN Engineering & Innovation has the capability to provide complete turn-key project solutions. We listen and respond to your needs to provide a specialist solution for manufacture, installation and commissioning to enable asset optimisation. We have proven products operating across multiple industries.

MANUFACTURING CAPACITY

With over 50,000sqm of high-tech manufacturing space, our facilities are suited to deliver complex projects. We offer dedicated in-house machine shops, fabrication, specialist surface treatment and assembly facilities.

NEPEAN Engineering and Innovation also offers a complete in-house manufacturing capability by operating:

- The latest in 3, 4 and 5 axis CNC machining centres and CNC turning
- Cylindrical, surface and jig grinding
- Wire cutting and EDM
- Profile cutting, laser cutting, sheet metal and fabrication
- Sand blasting, painting and powder coating





OUR INDUSTRIES AND CAPABILITIES

Precision Manufacturing

The latest and most technically advanced machines and manufacturing processes ensure NEPEAN Engineering & Innovation deliver the highest quality on one-off, complex or high volume production projects.

NEPEAN Engineering and Innovation is committed to maintaining a reputation as the premium producer of special purpose machines and unique engineered machine components for Australian manufacturers across all industries.

Our extensive tool room also boasts Laser tracking and precision measurement component inspection facilities to ensure the highest quality standards are met.

NEPEAN Engineering & Innovation's ISO9001: 2015 certification (SAI Global) ensures that our manufacturing processes and final products are completed with the highest degree of quality.

COMPONENT MACHINING

- The latest and most technically advanced machines and manufacturing processes
- One-off or high volume production

CUSTOM MANUFACTURING

- Innovative processes
- Dedicated facilities
- Specialist technicians

TOOLMAKING

- Complete tooling solutions
- Specialist machines and equipment
- Low to high volume production
- Wire cutting and EDM

SPECIAL PURPOSE MACHINES

From an initial concept, NEPEAN Engineering & Innovation brings machines with brand new capabilities to life. The combination of extensive product manufacturing knowledge and state-of-the-art machine technology, NEPEAN Engineering & Innovation has created a world-leading facility for the design, engineering and manufacture of high value, special purpose machines.

CUSTOMISED EQUIPMENT

- Transformer tanks
- Coil car, un-coilers and mandrels
- Custom design and manufacture of wheel loader attachments

Capabilities include:

- 18 CNC Machining centres and borer
 - Spindle speeds up to 25,000rpm
 - Table sizes up to 12mx4m
 - Boring up to 16m deep
- CNC Turning up to 6m long x 2m diameter
- 7 CNC lathes
 - Spindle speeds up to 4,500rpm
- Maximum turning diameter 2,000m
- Distance between centres 6,000m
- 2 EDM Wire Cutting Machines
 - Maximum work place 1.5T submerged
 - Maximum thickness 400mm submerged
- 2 Spark Eroders
 - Maximum workpiece 2T
- Jig Grinding
- Surface Grinding
- Cylindrical Grinding
- Precision Inspection capabilities with Leica Laser Tracker AT901
- Profile and Laser Cutting
- Shot Blasting, Spray Painting and Powder Coating
- Sheet Metal Fabrication
- Up to 60T of overhead crange

Mining & Earthmoving

NEPEAN Engineering & Innovation's specialist teams will design, manufacture and manage small to large-scale projects for the mining, earthmoving and material handling industries.

MATERIAL HANDLING & PROCESSING EQUIPMENT

- Longwall pans and mini pans
- Conveyor frames, crusher units
- Main gates, swan necks, boot ends, drive units, coal loading chutes
- Kilns, trommels and screens
- DCB flame proof boxes

SITE MAINTENANCE & INSTALLATION

- Coal Handling Preparation Plants (CHPP)
- Process plants and washeries
- FMCG sites and high-speed processing
- Machine breakdowns and after hours call outs

- OEM Machine maintenance inspections
- Shaft repairs, pumps & valve overhauls

MINE VENTILATION

- Mine ventilation ducts
- Ventilation impellers

EARTH MOVING

Custom design and manufacture of excavator and wheel loader attachments such as:

- Large range of custom buckets
- Material handling arms
- Log grapples
- Fork frames

Capabilities include:

- Heavy fabrication
- Precision and heavy machining
- Structural steel fabrication and erection
- Laser and profile cutting
- Plate rolling
- Sheet metal fabrication
- Pressing and bending
- Sub-arc, MIG and TIG welding
- Shot blasting
- Spray painting and powder coating
- Up to 40T over head crane
- Break presses
 - 80T, 2.5m CNC
 - 125T, 3m CNC, 175T, 3m CNC
 - 1000T, 6m CNC





Infrastructure & Civil Works

NEPEAN Engineering and Innovation is one of Australia's largest fully-integrated manufacturers of steel structures and associated metal products. We carry a vast variety of specialised knowledge to support civil works.

The latest and most technically advanced equipment support the design, construction and maintenance of the physical and naturally built environment, including projects for roads, bridges, water infrastructure, power generation and buildings.

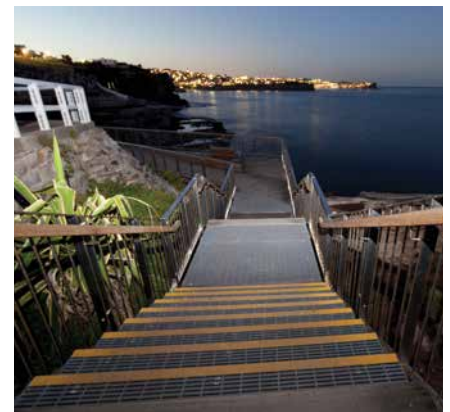
STRUCTURAL STEEL

From concept to completion, NEPEAN Engineering & Innovation have dedicated and experienced teams who specialise in large scale design, sourcing, fabrication and erection of structural steel.

We have consistently delivered structural steel projects in excess of 1,000 tonnes of steel work.

SPECIAL PURPOSE FABRICATION

- Structural steel bridges and walkways
- Elevators and structural steel for elevator framework
- Steel gantries
- Large traffic & digital road signage



Capabilities include:

- Structural Steel Fabrication and Erection
- Beam Line and Beam Cambering
- Light to Heavy Fabrication
- Sub-Arc, MIG and TIG Welding
- Plate Rolling and Pressing
- Profile and laser Cutting
- Pressing and bending
- Sheet Metal
- Shot Blasting, Powder Coating, Spray Painting
- CNC Milling and Boring, up to 12m
- CNC Turning, up to 6m long and 2m diameter
- Up to 40T over head crane
- Precision and Heavy Machining
- Assembly and Factory Acceptance Testing



Pharmaceutical, Scientific, Aerospace and Defence

NEPEAN Engineering and Innovation's specialist teams will manufacture and manage small to large-scale projects for the pharmaceutical, scientific, aerospace and defence industry.

Our team's technical expertise and project management skills ensure we deliver quality output.

NEPEAN Engineering & Innovation partner with Australia's most progressive defence and Aerospace suppliers such as Thales, Raytheon, BAE Systems, Boeing and Qantas to provide robust, innovative and high-quality precision engineering and custom manufacturing solutions.

PHARMACEUTICAL & SCIENTIFIC SPECIALISED EQUIPMENT

- Hot Cell Design
- Manufacturing for processing of raw and waste materials
- Special Purpose handling equipment for radioactive applications
- Medical screening equipment

AEROSPACE

- Aircraft thrust test fence
- Shipping containers for Boeing 777 elevators
- MR550FMV dual shield ring mount
- Aircraft wing support trestles
- Portable cargo access stairs

- Cradles and transport trailers of jet engines
- Tooling for Orion aircraft
- Assembly jigs and fixtures
- Tooling for composite parts
- Layup mandrels
- Rout fixtures

DEFENCE

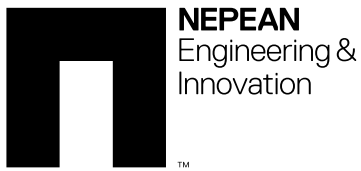
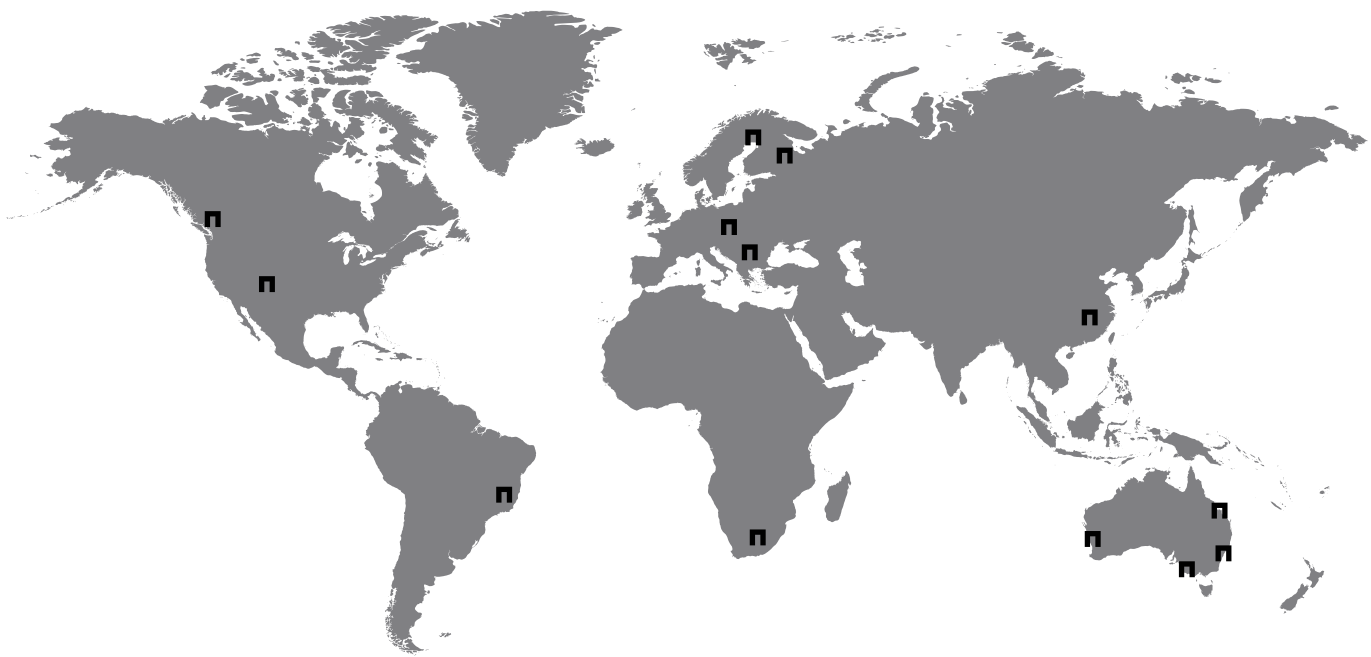
- Underwater remote control recovery unit
- Weapons system locker for The Royal Australian Navy
- Fabricated modules for:
 - DC-DC PSU
 - High portability server
 - Broadcast and alarm system control module
 - Fast case lite
- Embarkation equipment for sonar
- Various items for naval vessels – brackets, mounting plates, retainers and printer supports

Capabilities include:

- Light to heavy Fabrication
- CNC Milling and Boring up to 12m
- CNC Turning
- EDM Wire Cutting
- Spray Painting and Powder Coating
- Spark Eroding
- Jig Grinding
- Surface Grinding
- Cylindrical Grinding
- Laser and Profile Cutting
- Shot blasting
- Plate Rolling
- Pressing and Bending
- Sub-Arc, MIG and TIG Welding
- Precision inspection capabilities with Leica Laser Tracker AT 901
- Special purpose design of components and complete systems from concept to shop drawings for manufacturing
- Precision Machining
- Working with special alloys and inorganic materials
- Complete workshop Factory Acceptance Testing followed by on site commissioning



NEPEAN LOCATIONS



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