



www.fernandes.net.au



Fernandes & Associates

Your Specialist Consulting Engineers In Queensland

For your mechanical and structural engineering requirements you need to ensure your project is in competent and reliable hands. Servicing Queensland since 1993, Fernandes & Associates can be your trusted partner throughout the engineering or problem-solving process. We are an Australian owned consulting engineering company, providing clients with personalised consultancy services in mechanical and structural engineering, safety and quality management systems. Focusing on efficient solutions, we maintain a high standard of commitment towards quality, safety, engineering and client satisfaction. We intend to achieve outstanding outcomes for our customers' projects. Feel free to call us today to discuss your specific project.

Consulting Engineering Services

Our consulting engineering services include the following:

- ✚ 3D printing and accelerated product manufacture
- ✚ Cable and light-weight structures
- ✚ Cold-formed steel structures
- ✚ Computer simulation
- ✚ Cyclone testing (LHL)
- ✚ Design and drafting
- ✚ Expert witness reports
- ✚ Falling Object Protection Systems (FOPS)
- ✚ Finite Element Analysis (FEA)
- ✚ Forensics and failure analysis
- ✚ Gantry cranes - 10 year inspection and repairs
- ✚ Gantry cranes - design and verification
- ✚ Guardrails and handrails
- ✚ Hydraulic cylinders
- ✚ Load testing
- ✚ Man cages
- ✚ Mezzanine floors
- ✚ Mobile cranes - 10 year inspection and repairs
- ✚ Product design and evaluation
- ✚ Prototype manufacture and product testing
- ✚ Roll Over Protection Systems (ROPS)
- ✚ Safe load tables
- ✚ Screw thread analysis
- ✚ Self-erecting cranes - 10 year inspection and repairs
- ✚ Sheds, carports and garages
- ✚ Steel framed residential structures
- ✚ Steel structures
- ✚ Tower cranes- 10 year inspection and repairs
- ✚ Vibration and fatigue analysis
- ✚ Vehicle hoists and platforms
- ✚ Welded structures
- ✚ Wind loaded and wind sensitive structures
- ✚ Work platforms and work boxes

Mission Statement

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Fernandes & Associates Pty Ltd is a Consulting Engineering company committed to developing practical, safe, cost-effective and innovative solutions to clients' engineering and safety problems. The solutions will be readily and fully integrated with clients' plans, focussing on understanding our clients' needs and applying cutting edge technology to solving their problems. We intend to be our clients' first choice when it comes to problem solving.

The Name Queensland Trusts For All Consulting Engineering Requirements

A leading consulting engineering company in Queensland, Fernandes & Associates provides a comprehensive range of services to suit your needs. We offer mechanical and structural engineering solutions across a range of industries. Our solutions are innovative and of the highest quality. So call our Brisbane based team today.

2D And 3D Design And Drafting Services

We provide a design and drafting service for an existing product or prototype that you want drawn up or if you have concept sketches or ideas of a product. We will work with you to bring your ideas to fruition and will reduce the prototyping costs and lead time from concept to a manufactured product.

Cable Structures

Cables structures provide an alternative method of construction. Cheaper, lightweight and flexible structures can be built using cables. Cables can span large distances and are often used in the construction of large span roof girders, shell-like roofs, shade and protective structures. Combinations of cable and steel sections are often used to build protective structures which are used by car yards to protect their cars and other valuable assets from hail and wind damage. Other areas where such structures are used are in weekend markets and in schools to protect children from harmful UV rays and from the rain.

Crane Inspection Services

Queensland codes of practice require that cranes be inspected at frequent intervals and after every 10 years of service to ensure they continue to be safe to operate.






Regular inspections are required to ensure electrical, hydraulic, mechanical, pneumatic and structural components of the crane have not been compromised accidentally, or by corrosion, fatigue, overloading or other forms of abuse.

During the inspection services, weakened or damaged parts are identified and are either repaired or replaced.

We prepare an inspection and test plan (ITP) and supervise the inspection and repairs. We ensure replacement parts and materials used are at least as strong as the originals and all the inspections and repairs are carried out by appropriately qualified and competent personnel. After the inspection and repairs have been completed, we review all the inspection and repair reports and check that all the inspections and repairs comply with the relevant codes of practice and Australian Standards. We will issue an engineering report/certificate documenting the history of the inspections and repairs only after we are confident that the crane is safe. If we are not satisfied that the crane is safe, we will prescribe additional inspections and tests.






















Crane Repairs

We manage and supervise the repair of cranes. We:

-  Inspect the damaged crane before any work is carried out on it
-  Prepare an inspection and test plan (ITP) to ensure that all damaged, worn out and weakened items are thoroughly tested and repaired
-  Ensure all repairs are completed to relevant codes of practice and Australian Standards
-  Review the repair and test reports to ensure that the crane is safe to use
-  Issue a comprehensive engineering report/certificate so that you can be confident that your crane has been expertly repaired and is safe to use








Services Provided

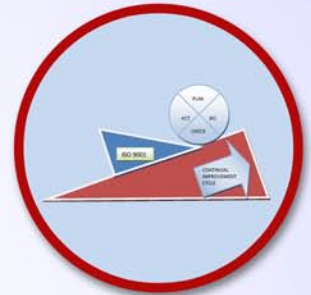
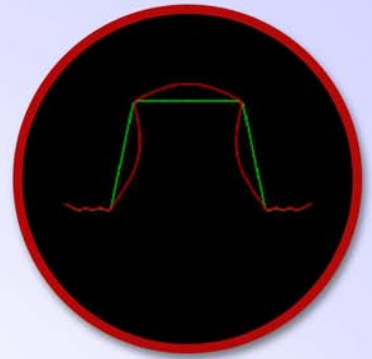
Mechanical Engineering

-  Vibration Analysis
-  Dynamic Structural Analyses
-  Faailue Analysis
-  Fatigue Analysis
-  Stress Analysis
-  Expert Witness Reports
-  Finite Element Analysis (FEA)
-  Product Design
-  Drafting
-  Fall Arrest systems (AS1891)
-  Truck Trailers
-  Materials Handling
-  Working Load Limit (WLL) Certification
-  Storage, Lifting and Hauling Equipment
-  ROPS and FOPS
-  Crane Inspections
-  Crane Repairs (AA1418, AS2550, AS1554)
-  10 Year Crane Inspection Services (AS1418, AS2550)
-  Vehicle Hoists (AS1418)
-  Design Verification - Mobile, Tower, Self-erecting and Gantry Cranes (AS1418)
-  Shipping Containers






Structural Engineering

-  Residential Steel House Framing
-  Mezzanine Floors
-  Decks and Shade Structures
-  Fixed Platforms, Walkways, Stairways and Ladders (AS1657)
-  Guard Rails and Hand Rails
-  Cable Structures
-  LHL Cyclone Testing






Workplace Health and Safety

-  Workboxes, Manboxes and Work Platforms
-  Working at Heights - Fall Arrests Systems
-  Mechanical Aids and Safety Equipment

Quality Management Systems (ISO9001)

A well planned and implemented Quality Management System (QMS) is important to improve business efficiency and reduce costs. Most successful businesses have implemented QMS to international standards (ISO9001) and have their systems certified to ISO9001.

We provide the following QMS Consultancy services:

-  Gap Analyses
-  Assistance with preparing quality systems documentation (policy, procedures, work instructions)
-  Internal quality audits



Fernandes & Associates is an Australian owned company which was formed in 1993, providing clients with personalized Consultancy Services in Mechanical, Structural, Safety and Quality Management Systems.

The company is an efficient organisation with a high standard of commitment towards quality, safety, engineering and client satisfaction. We are committed towards achieving outstanding outcomes for our clients and intend to be our customers first choice when it comes to problem solving.



Fernandes & Associates Pty Ltd
THE MEWS COMMERCIAL

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(ON STREET AND FREE OFF STREET PARKING AVAILABLE UNDER THE BUILDING)