Turnkey structural civil and mechanical construction for mining, infrastructure and maritime sectors.

***Engineered in-house, delivered on site*.**

MCA Engineering brings something rare to a complex project: one team that can design it, build it and commission it. For over 20 years we have delivered high-value civil and mechanical construction for Australia's leading mining operators and infrastructure contractors, without the delays, gaps and accountability shortfalls that come with managing multiple specialist contractors.

We engineer our own solutions

Our in-house team designs custom heavy lift systems, strand jack configurations, temporary works and structural solutions. Complex problems get resolved internally, saving time and reducing your risk.

We mobilise fast

350+ pieces of owned, site-passed equipment. A regional workforce across NSW, Queensland and the NT, already in the field. When your purchase order arrives, we're moving — not waiting on hire approvals or interstate flights.

One contract. Full accountability.

Civil, mechanical and engineering under a single delivery model. You have one point of contact, one programme and one team responsible for the result.







Company overview

MCA Engineering are Specialised providers of total engineering solutions for the mining, industrial, and construction sectors. Building out of a combined six decades of engineering experience from founding Directors Paul Barwick and Andrew Pascoe, MCA has assembled a team of some 200 dedicated, professional experts - becoming one of the most sought-after heavy industry contractors in Australia.

We offer access to key personnel across fabrication, construction, and procurement, supported by a talented management team that ensures every project is delivered to schedule, within budget, and to our client's complete satisfaction.

MCA has the scalable resources to operate nationwide, with offices located in New South Wales, Queensland, and South Australia. We confidently tackle any project, getting the right people on the ground to deliver each and every job with the same innovation and excellence in engineering and construction that's come to be expected from MCA.





Our Expertise

The MCA team provides a wide range of expertise, with capabilities across engineering, fabrication, mechanical, civil, installation, and construction services. We provide innovative solutions, employing highly qualified operators with a passion for problem solving.

We have significant experience in underground work and are leaders in mine shaft engineering and maintenance. Our equipment and heavy machinery specialists have practicable industry knowledge and are supported by in-house manufacturing, fabrication, and machining facilities.

MCA has a long history of delivering successful projects for our clients, owing in large part to our dedicated, internal Project Management team - a team that brings all our technical expertise together to ensure a smooth, structured rollout, from conceptual design through to final commissioning.

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Our Sectors

Underground Mining
Shafts & Conveyances
Winders & Rope Handling
Structural, Mechanical and Civil Construction
De-Water Management
Manual Handling
Ventilation

Surface Mining
Civil construction
Structural, Mechanical and Civil Construction
SMP
Plant Installation
Water Management
General Structures

Infrastructure
Culverts
Pump Stations
Buried Services
FRP
Water Management
General Structures
SMP

Marine
Passive Mooring Systems
Heavy Lift Systems
Winches and Cable Handling Systems

Renewables
Hydro
Shaft Construction

Local Government
Water treatment
Reticulation
Wet Wells

"AUSTRALIAN OWNED AND OPERATED, MCA ARE COMMITTED TO INNOVATION IN ENGINEERING, SETTING NEW BENCHMARKS FOR SAFETY AND QUALITY FOR HEAVY INDUSTRIES."

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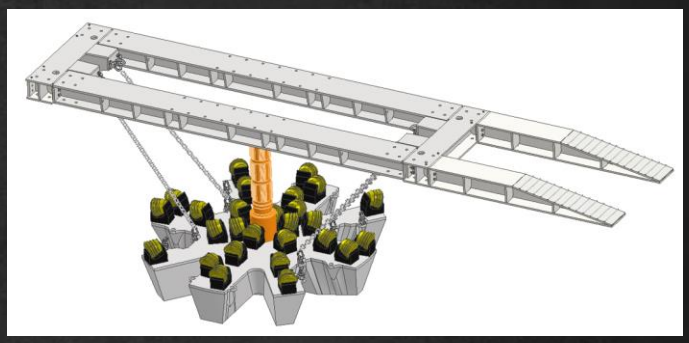
Structural Design

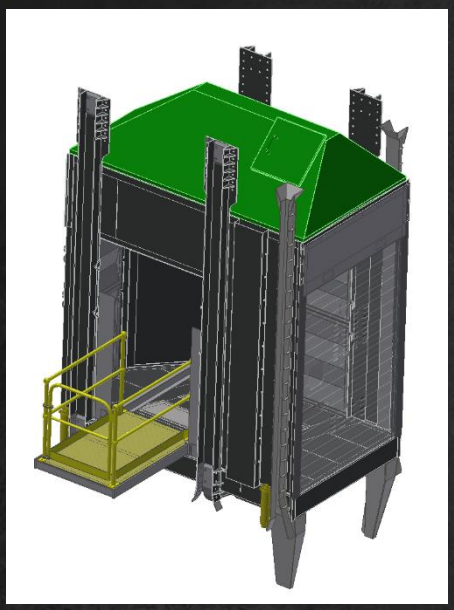
MCA offer a comprehensive range of services across a wide variety of industries, from concept and detailed design through to fabrication, construction and installation. MCA has extensive experience in civil and structural engineering, enabling us to apply our expertise in design, project management and site supervision to every project.

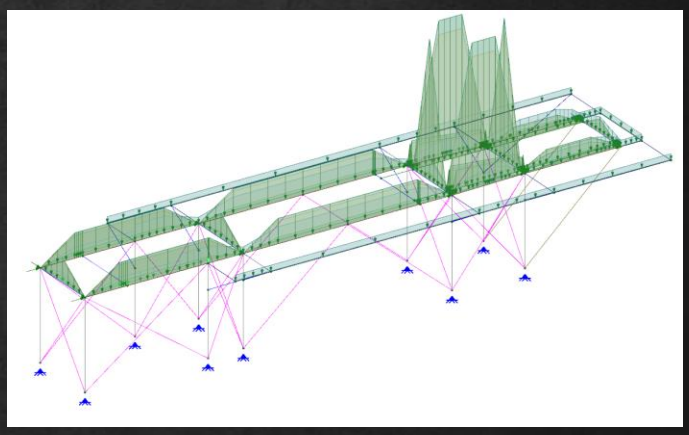
We have access to a range of advanced software packages, allowing us to deliver services across all stages of the design process. Our civil and structural design services support projects throughout the construction, mining and infrastructure sectors.

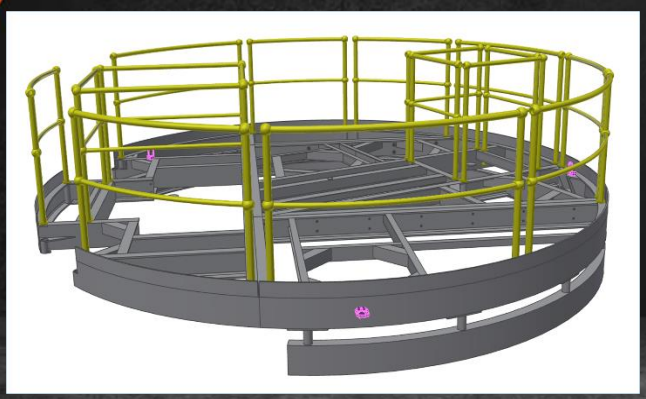
DESIGN TOOLS

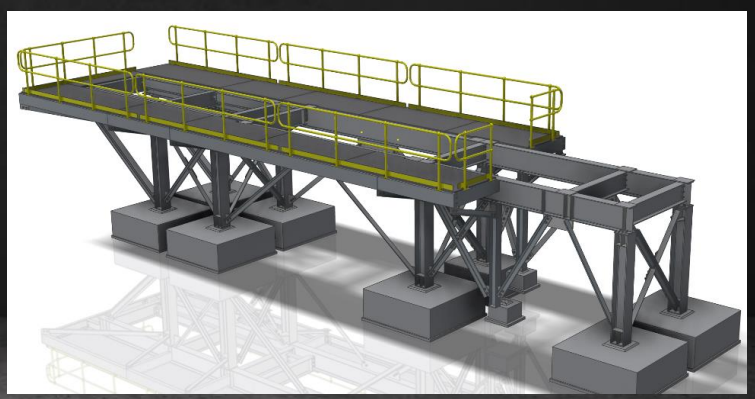
SPACE GASS · Structural Toolkit · AUTODESK INVENTOR · AUTODESK Inventor Nastran · AutoCAD











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Structural Design

MCA takes design from concept through to successful implementation, combining technical expertise with practical, project-focused solutions. We consider function, simplicity, strength, durability and safety at every stage of the design process, ensuring that each outcome is fit for purpose and aligned with the needs of the project. Through collaboration, experience and continual feedback, we develop solutions that help protect our people, improve efficiency and keep operations performing at their best. From initial planning and assessment through to construction support and delivery, MCA remains focused on achieving high-quality results that provide lasting value.











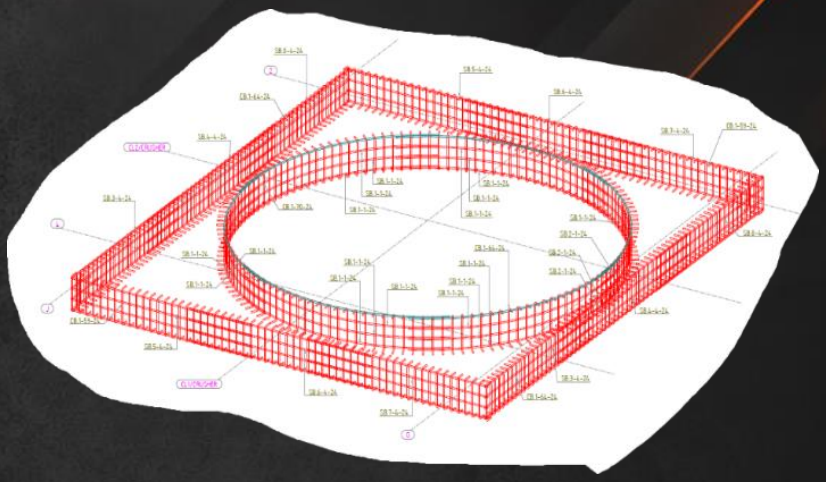


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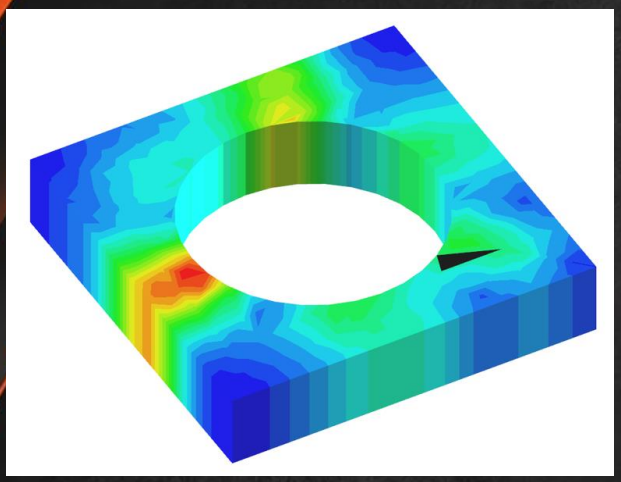
Civil Structural Design

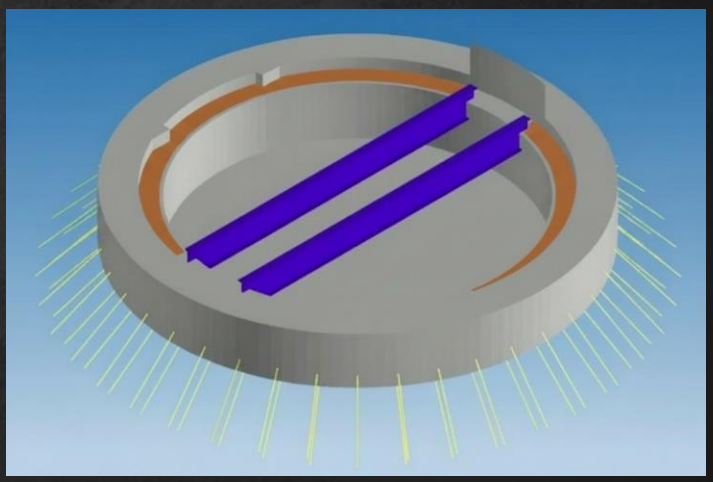
MCA provides a comprehensive range of civil and structural engineering services for mining, industrial, infrastructure and construction projects. Our work is tailored to the specific requirements of each project, with a focus on safety, constructability, durability and efficient delivery.

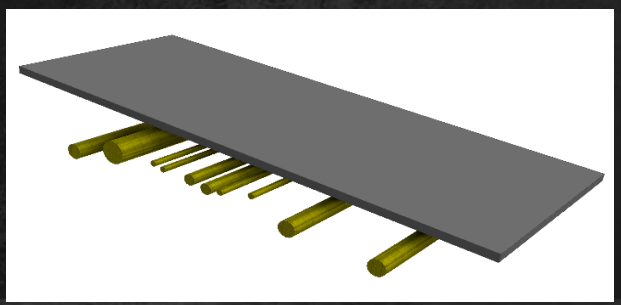
These services are supported by detailed analysis, practical engineering judgement and close collaboration with clients, contractors and other project stakeholders. MCA works from concept development through to detailed design, construction support and project completion, delivering solutions that are functional, robust and suited to real-world site conditions.



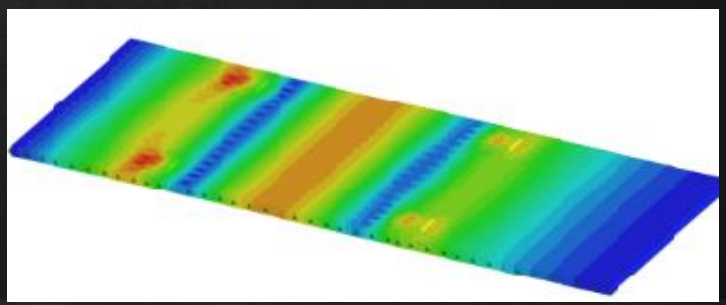
Re-enforcement design with rebar schedules







Foundation Slab and proximity with buried services.



Foundation Slab, shear capacity over buried services.

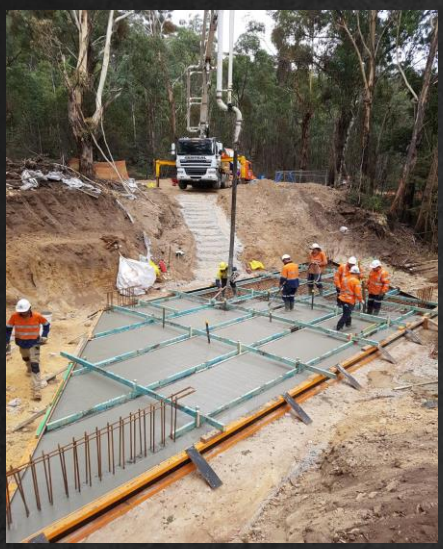
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Civil Structural Design

Our capability includes preliminary sizing, load assessment, structural analysis, reinforcement and detailing design, punching shear and deflection checks, construction-stage considerations, and coordination with foundations, columns, walls, services, and architectural requirements.

Designs are developed to meet applicable codes and project specifications, with a focus on safety, constructability, durability, efficiency, and cost-effective material use.











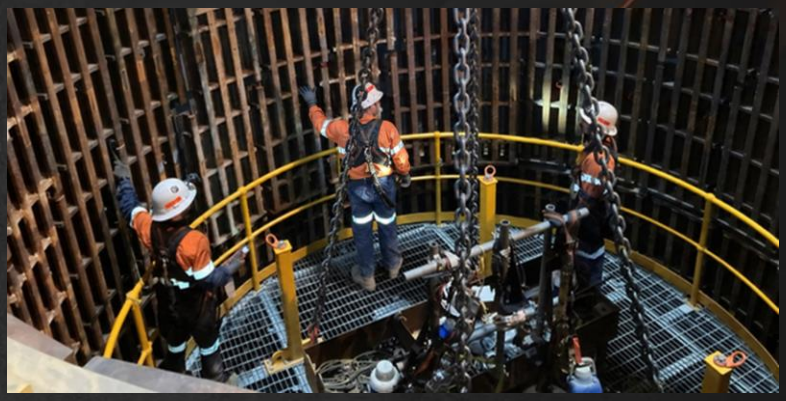
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Shaft Reinforcement

At MCA, quality assurance is embedded throughout every stage of our design and delivery process. Our experienced engineers apply rigorous technical review, sound engineering judgement and practical construction knowledge to ensure that each solution is safe, functional, durable and fit for purpose.

We provide civil and structural engineering services for shafts, underground structures and excavation works across the mining, infrastructure and construction sectors.

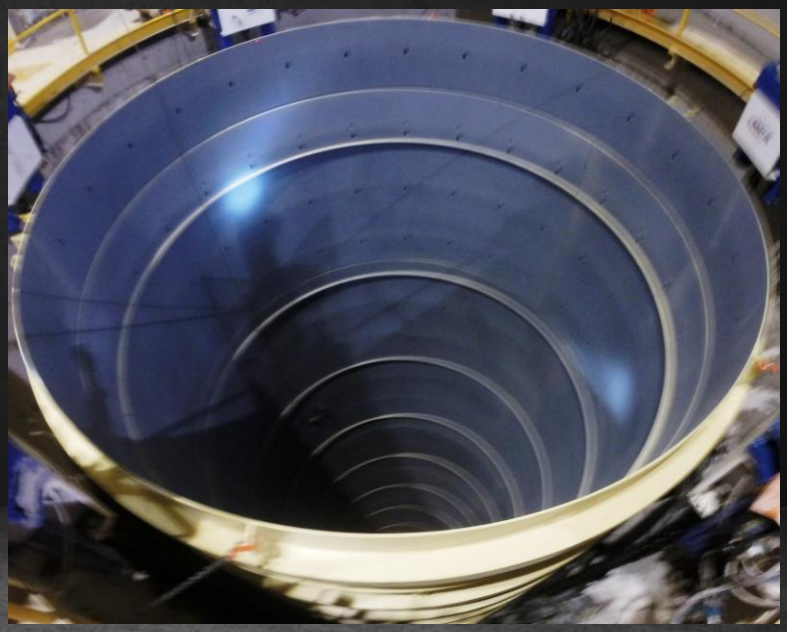
Our team works closely with clients, contractors and other project stakeholders to understand shaft conditions, operational requirements, construction methodologies and programme constraints. This collaborative approach enables us to develop efficient designs that are practical to construct and aligned with the overall project objectives.











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Our Services

Civil Construction

Earthworks, concrete, pump stations, culverts, site establishment and structural civil works.

Mechanical Construction

Plant installation, SMP works, heavy lift operations and full mechanical commissioning.

In-House Engineering

Custom heavy lift design, strand jack systems, temporary works, FEED studies and structural engineering. Certified in-house.

Specialised Shaft Work

Shaft construction, roping, winders and winches. Twenty years of underground expertise, including purpose-built winder fabrication.

Fabrication

Custom structural fabrication manufactured in-house to reduce supply chain dependencies.

Poly Pipeline Installation

Tailings, water and irrigation pipeline installation across mining and infrastructure projects.

Marine Infrastructure

Turnkey ship lift design and construction, including structural engineering, hydraulic jack systems and commissioning.

Electrical Services *(Emerging)*

We're building out an electrical division to complete our end-to-end delivery offer.

Get in Touch

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7-9 Renshaw Road, Parkes NSW 2870 | P: 1300 528 535
7 Davis Road, Mount Isa QLD 4825 | P: 1300 528 535
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