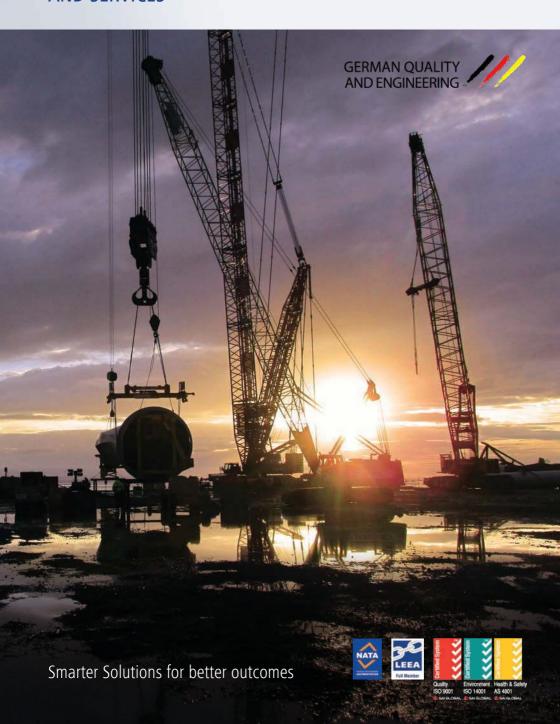
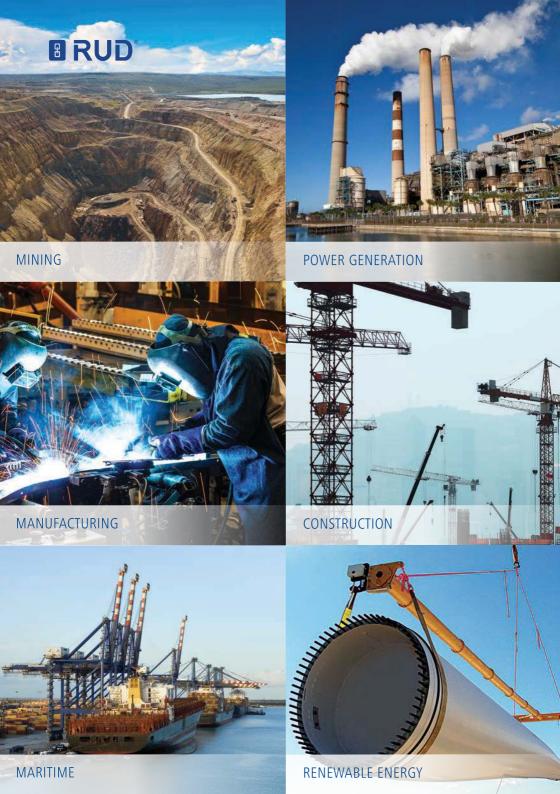
ENGINEERED PRODUCTS AND SERVICES







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ENGINEERINGSERVICES OVERVIEW

At RUD, we understand that productivity, safety and reliability is what creates sustainable value and helps businesses remain relevant and competitive.

Our reputation is built on quality, professionalism, and unrivalled customer service. Highly qualified CPEng/RPEQ engineers and experienced tradespeople can manage, in-house, every aspect of your engineered product or service requirements, to ensure you receive only the highest quality RUD products and solutions in a timely manner.

Our 6000m² Head Office, administration, warehouse and manufacturing facility located in Brisbane has a dedicated manufacturing team to offer complete manufacturing solutions including:

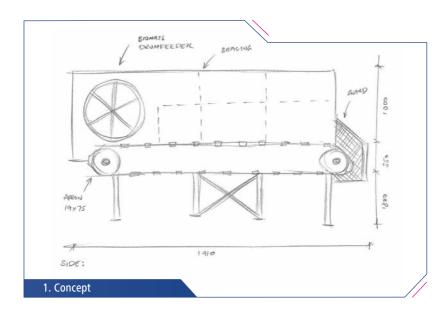
- Horizontal Tensile Testing standard and special (for very large and complex testing)
- Vertical Compression and Tensile Testing
- Paint Facility
- Small to large fabricated products
- Robotic Welding
- Hardness Testing
- Non Destructive Testing MPI, Dye Penetrant

CONCEPT TO COMPLETION

Our in-house team of CPEng/ RPEQ accredited engineers can oversee all facets of design, manufacture, testing and certification to deliver cost effective and practical solutions to engineering problems.

Specialties include:

- Product Certification
- · Lifting System Design
- Load Restraint Design and Service
- Materials Handling Solutions
- Major inspections, testing and commissioning





CAPABILITIES

Manufacturing

RUD's facility in Brisbane has a dedicated in-house team offering complete manufacturing and project management solutions including:

- Manufacturing of Endurequip Hoists the only Australian made portable heavy vehicle hoist
- Sourcing of material including a warehouse of standard stock items
- Fabrication and specialised welding including robot welding
- Machining, non-destructive testing and commissioning
- Quality control in accordance with standards

Lifting System Design

- In-house design, manufacture, testing and certification of lifting beams
- Customised lifting designs
- Lift studies and on-site audits/reporting
- 3rd party certification



Certification

RUD Australia prides itself to its ongoing commitment in ensuring our engineered solutions, manufacturing processes and proof loading facilities comply with recognised standards.

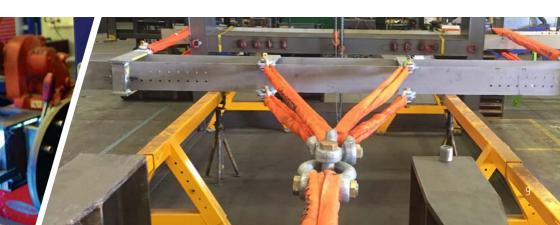






Inspections and Testing

- Comprehensive inspection and testing facilities for in-house testing of lifting beams (up to 200t), chain slings, anchor plates, synthetic slings and wire rope
- Hardness testing and magnetic particle inspection
- Chain wear measure inspection reports and preventative maintenance plans to optimise the life of equipment or systems



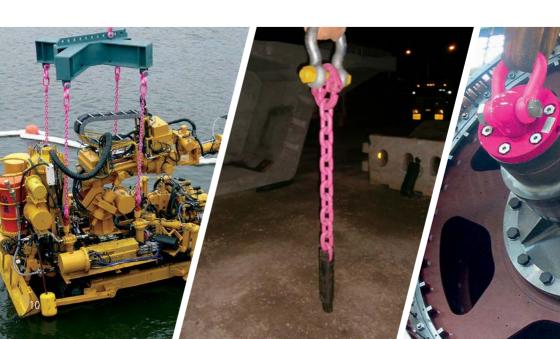
LIFTING EQUIPMENT

RUD Australia has over 30 years experience in the design and manufacture of high quality lifting and lashing equipment.

The RUD team work with you to design, manufacture, load test and certify standard or special fabricated lifting and lashing gear to suit your specific application.

- Beam Products 50kg to 200t plus
- Special Lifting and Lashing Points
- Container Lifting
- Concrete Lifting (Bridge Girders and Decks)

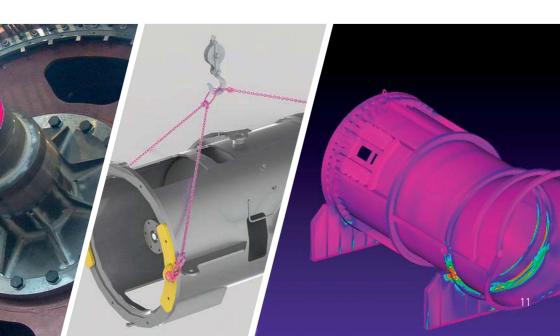
All RUD fabricated lifting and lashing products are designed, manufactured and tested to the appropriate Australian / International Standards



MATERIALS HANDLING

RUD provides the full package from concept to design, manufacture, certification and project management — including on-site commissioning and training.

- Material Handling Products
- Offshore Equipment
- Special Containers and Lifting Beams
- Special Lifting and Lashing Points
- General Fabrication





CUSTOM FABRICATED PRODUCTS

Work Platforms/ Vehicle Stands / A-Frames / Gantries

Designed to your requirements, either fixed or mobile.

Specials

- Baskets and Cages
- Custom Forklift libs
- Goods Cages
- Custom products designed to your specific application. Concrete Lifting (Bridge Girders and Decks)

TRANSPORT FRAMES FOR SAFE TRANSPORTATION OF GOODS

Designed in accordance with Australian Standards and the NTC Load Restraint Guide, we have expertise in the custom design and manufacturing of Transport Frames for the safe transportation of goods.



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HOISTING, ROTATING & TRAVERSING SOLUTIONS



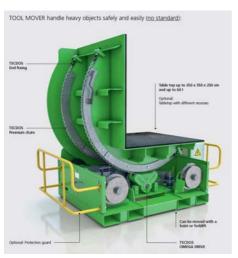


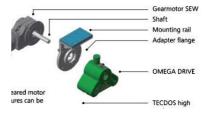
















TOWNSVILLE RING ROAD STAGE 4 (TRR4)

The project involves the creation of the last section of the Townsville Ring Road. This section will complete the 22km Townsville Ring Road link, which has been developed in stages since 2005, providing a freight bypass of Townsville and delivering improved safety and traffic efficiency.

RUD SOLUTION

RUD completed the lifting design for all the deck units and piles for Humes Holcim. This involved the design of a 35t x 25m modular spreader beam - manufactured, proof loaded and certified by RUD and the use of innovative cast in lifting hoops — a safer and efficient solution for lifting heavy prestressed units.

RESULTING BENEFITS

Lifting Hoops

- Safer to use
- Can be inspected easily (no cover/sheath)
- Easy to install

Spreader Beam

- Lightweight (half the weight of other beams)
- Long term asset to crane fleet added versatility and increase utilisation of cranes
- Cost effective solution





WHAT THE CUSTOMER SAYS

Seymour Whyte

The most important aspect of any lifting device is its safety performance - on the TRR4 project we required a lightweight multipurpose modular spreader beam to deliver the TRR4 project.

RUD and Bullivants were able to meet our specific requirements for WLL, multiple spans and most importantly the tight delivery time frame. The spreader beam has been simple and easy to use and been a real asset to this project.

We were very pleased with the performance of the RUD Cast-in Lifting Hoops and the RUD Vario spreader beam, and look forward to using them in the further projects."

Reon Knowler

Project Engineer, Seymour Whyte

Townsville Cranes

This beam is simply the best in town and is a real asset to our Crane Fleet! It gives Townsville Cranes a competitive advantage as other beams of similar size are twice the weight. We look forward to working with RUD again to increase the capability of our rigging gear throughout the fleet."

Mick Pearson

General Manager, Townsville Cranes

THE WHEATSTONE LIFTING BEAM PROJECT

The Wheatstone Lifting Beam Project in Western Australia involved collaboration, innovation and persistence which ultimately lead to the delivery of a high quality, safe solution that RUD Australia has earned a reputation for.

BACKGROUND

Dusko Barac, lead project rigging engineer of the Wheatstone Project in WA, had an innovative idea to extend the reach of the gantry trains to pick up elements that could not previously be reached.

DESIGN PHILOSOPHY

The philosophy behind the design was to look for opportunities to increase the operational envelopes of permanent facility bridge cranes for maintenance works.

CHALLENGES

- Tight lead times for structural and steel fabrication
- Custom designed and manufactured trolleys, sourced from Germany





TESTING

- Lifting beam went through rigorous design testing prior to the beams being shipped to site
- Fine tuning of the pneumatic control systems with the client, Chevron, in order to meet their desired operational settings for the system
- A full suite of design and testing documentation accompanied the project, the most comprehensive ever received by the client for a stand-alone lifting apparatus

WHAT THE CUSTOMER SAYS

The beam's operational capabilities have since been demonstrated on site to major maintenance partners and the feedback received has been very positive, particularly around the ingenuity of the design, built in safety features and the overall ease of operation.

Dusko Barac

A comprehensive suite of design and testing documentation was provided, which is the most comprehensive I've received on a project to date for a stand alone lifting apparatus."

Chevron's Gene O'Keefe

From the client's perspective, "I believe this is the best system that we could have chosen."

COMPLEX LIFTING SOLUTIONS

RUD SOLUTION

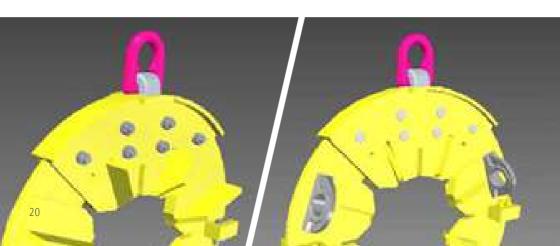
Customised Lifting Bracket

The customer required a solution to complete a complex lift in a power station. There was a realisation of significant time savings by changing the lifting process.

The RUD Engineering team presented design options after further consultation with the customer, then finalised and designed an engineered solution based on customer feedback. RUD also manufactured and proof tested the lifting solution as per Australian standards and provided commissioning support on-site.

RUD BENEFITS

- Competent engineering team with experience in lifting
- Project management from concept to delivery
- Design process integrated with customer feedback
- Onsite and ongoing technical support





Before – Lifting using soft slings.

Difficult to position slings due to sharp edges and slippage of slings. Time consuming and lifting tackle not positively engaged.



After – With RUD solution.

Positive engagement of lifting bracket.



The RUD Group, with a manufacturing facility and head office based in Germany, is a dynamic family owned group which has been active worldwide for over 140 years.

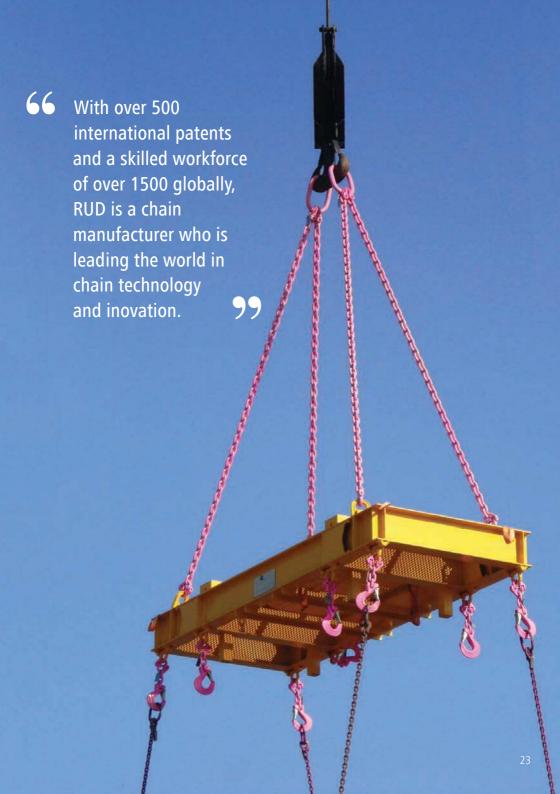
Innovation and Quality are an Institution

With over 500 international patents, we are proud to call ourselves an industry leader — a reputation that we maintain by ensuring every RUD product passes through our rigorous internal testing and quality control systems which include ISO 9001, ISO 14001 and AS 4801.

Our Commitment

We have significant inventory and fabrication capabilities to modify our products to your specified applications, and are available 7 days a week, and in most cases within 24 hours notice. This is a commitment which extends from the time you first purchase a quality RUD product, through to commissioning and throughout its working life. Our team of professionals have earned an enviable reputation in the marketplace for excellence in sales, customer support, technical and on-site service





THE COMPLETE SOLUTION

Engineering Services | Lifting and Lashing Equipment | Conveyor & Drive Technology | Tyre Protection & Traction Chains | Portable Heavy Vehicle Hoists



Tradition In Dynamic Innovation

