



RELIANCE HEXHAM

COMPLETE ENGINEERING SOLUTIONS

EST. 1989



DEPENDENCE - CONFIDENCE - TRUST

COMPANY PROFILE

Reliance Hexham Pty Limited was founded in 1989. Our site was originally the J&A Brown workshops established in the early 1890's then, in later years, became Hexham Engineering. This long history of knowledge and experience has been inherited and integrated into the modern and progressive company we are today.

Reliance Hexham specialise in the manufacture, overhaul and repair of equipment and machinery for use in the mining, aluminium and steel processing industries.



We offer a wide range of services, including forging, blacksmithing, heat treatment, profile cutting, proof load testing, destructive testing, non-destructive testing, fabrication, design and NATA certification (National Association of Testing Authorities).

Reliance Hexham manufacture, repair and certify lifting equipment, chains, shackles, attachments, fork arms, QDS, couplings and drawbars.



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DESIGN

**OUR PROFESSIONALLY QUALIFIED ENGINEERING TEAM
WILL OFFER DESIGN SOLUTIONS FOR YOUR SPECIFIC
REQUIREMENTS WITH COMPLIANCE TO THE APPROPRIATE
STANDARDS, STATUTORY GUIDELINES AND REGULATIONS**

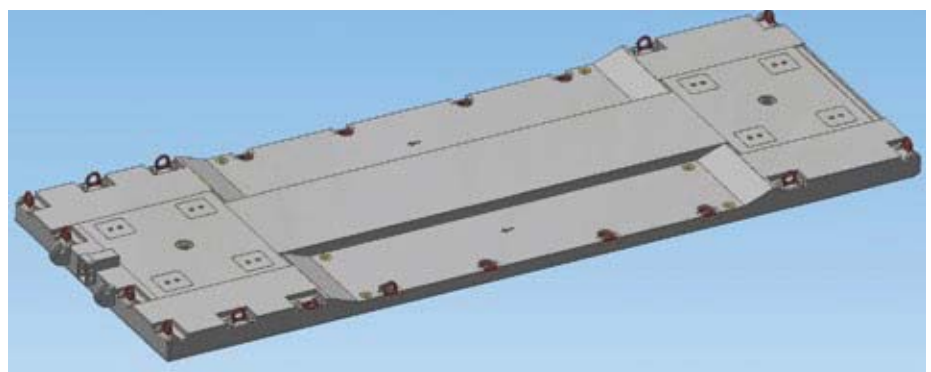
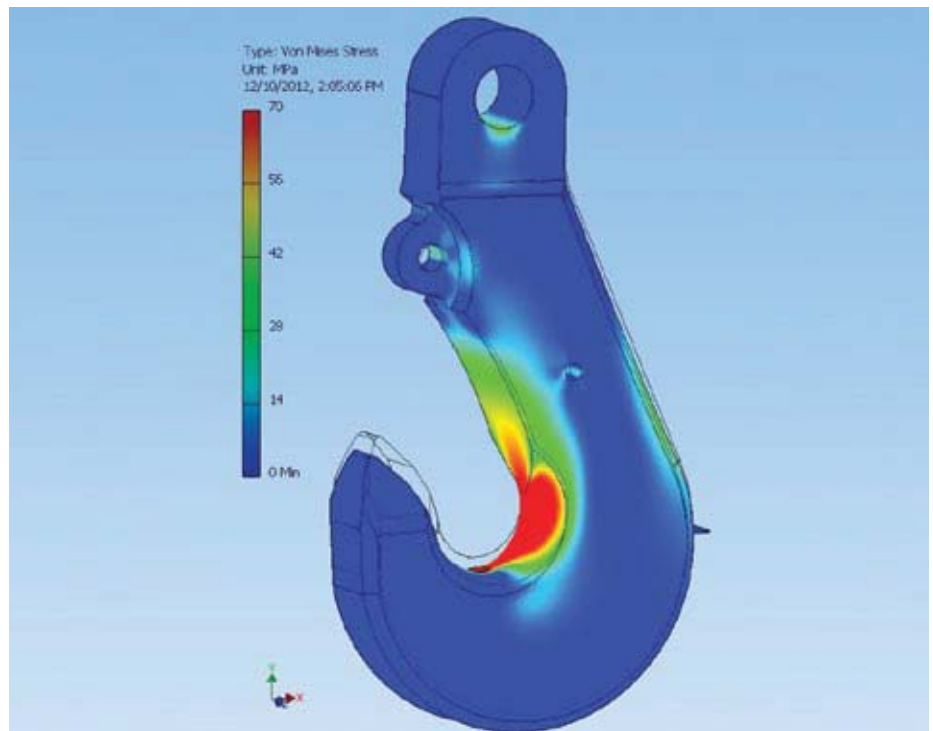
Design calculations are verified using a combination of hand calculations and Finite Element Analysis.

Project examples include:

- Dolly Cars with carrying capacity up to 40 persons
- Man Cars including those upgraded to current regulations
- Materials and equipment transporters for slope haulage drifts
- Cages for vertical shafts
- Skips for Coal, Mineral and Ore
- Specialised Lifting Devices

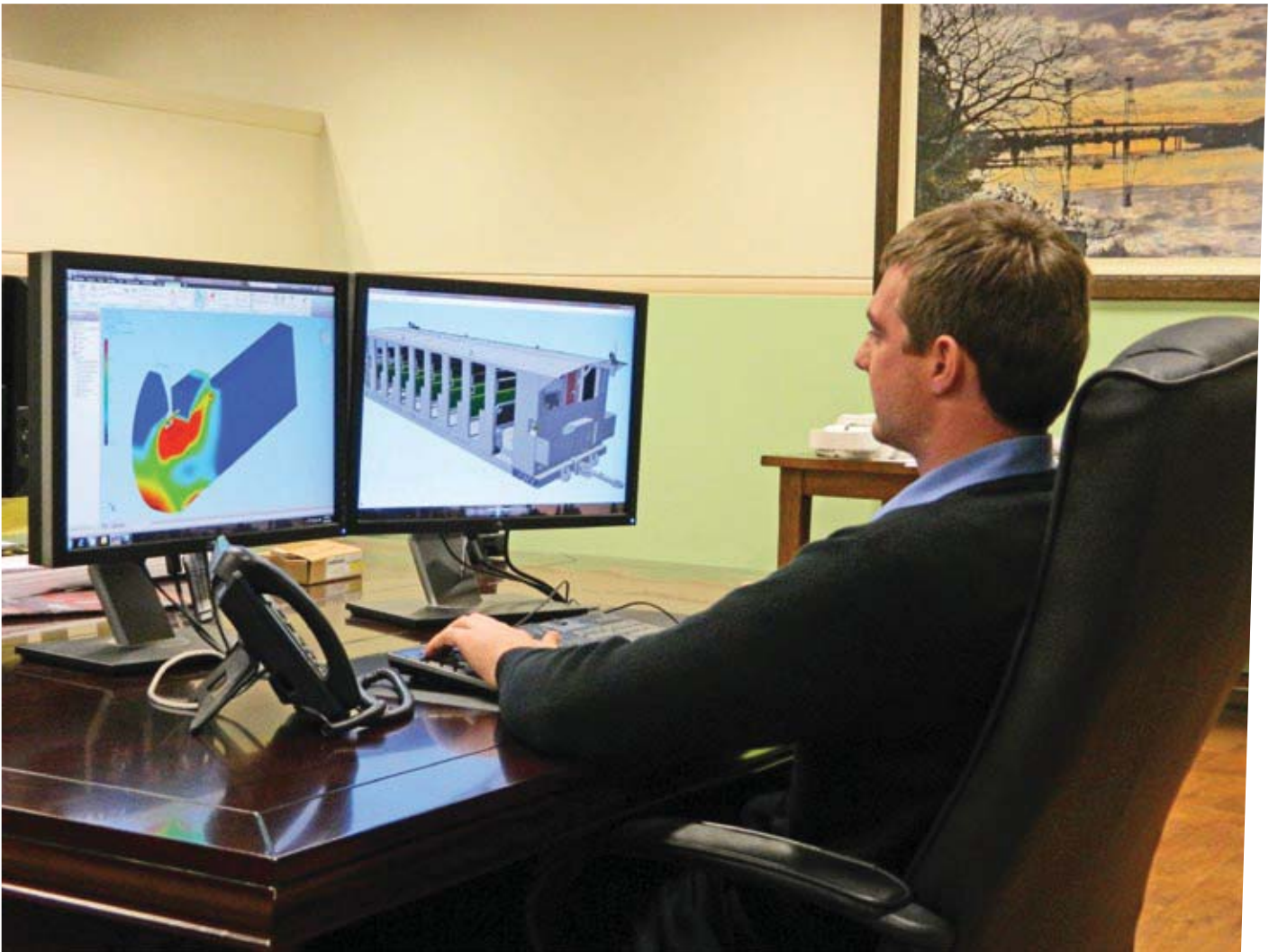
We utilise a range of the latest software.

Design verification by means of destructive testing is also offered.





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$$S_f = \frac{9.81 \times 10^3 K_{sc} W}{K_{sf}(b - 2r)t}$$

$$S_f = \frac{9.81 \times 10^3 \times 5.2 \times 6.25}{0.88 \times (129.5 - 2 \times 20.5) \times 3}$$

$$S_m = 0.75S_f$$

$$S_r = 1.5S_f$$

$$S_{ar} = 0.96(S_u - S_m)$$

We offer the following professional design services:

- Design verification of existing equipment
- Design of new equipment
- Certificate of Mechanical Design
- Design Calculation Reports
- Design Risk Assessments
- Concept Designs
- 3D Computer Modeling
- Detailed Design Drawings





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ROPE ATTACHMENTS

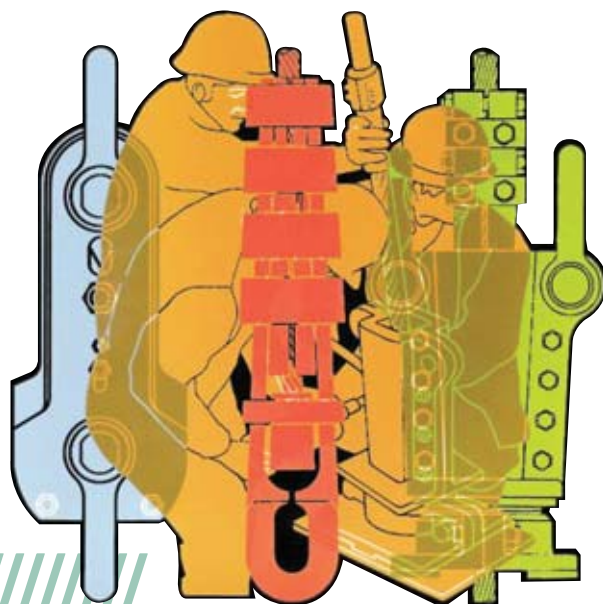
A FULL RANGE OF SUSPENSION EQUIPMENT IS MANUFACTURED FOR SINGLE ROPE, MULTI ROPE, BALANCE ROPE AND GUIDE ROPE SYSTEMS, ROPE HANDLING AND SHAFT SINKING OPERATIONS.



The product range includes King type Detaching Hooks, Wedge and Thimble type Capels and a wide range of Chase Blocks, Sockets, Links, Drawbars and Swivels.

The company's staff pride themselves on their commitment to quality, customer service and innovation to provide the most cost effective, fit for purpose design solutions.

Reliance Hexham has facilities to undertake all aspects of rope suspension equipment supply. This includes the latest 3D drawing programmes, CNC machining, forging, heat treatment and nationally accredited proof load and magnetic particle testing facilities.





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HAULAGE COUPLINGS, DRAWBARS + SAFETY CHAINS

RELIANCE HEXHAM MANUFACTURE AND REPAIR A LARGE RANGE OF COUPLINGS, DRAWBARS AND SAFETY CHAINS TO SUIT CUSTOMERS' NEEDS.

All couplings, drawbars and safety chains are manufactured and repaired for mining applications to AS3751 or the relevant standard and are proof load tested, magnetic particle tested and NATA certified.

Reliance Hexham can manufacture a range of haulage equipment in many different sizes to suit your needs.

SCOPE OF WORK FOR COUPLINGS, DRAWBARS AND SAFETY CHAINS CAN INCLUDE:

- Item Assessment
- Replacement of Parts
- Repair of Parts
- Heat Treatment
- Hardness Testing
- Proof Load Testing
- Magnetic Particle Examination
- NATA Certification

TRAINING

RELIANCE HEXHAM OFFERS ONSITE TRAINING FOR OUR EQUIPMENT, SPECIALLY SUITED TO YOUR COMPANY, THIS IS DELIVERED BY OUR TAE ACCREDITED TRAINERS.

Our technical staff discuss what outcomes you wish to achieve with the training, and the presentation will be built around customer requirements.

THE TRAINING PACKAGE

Our technical trainers are on hand after the presentation to answer any questions your staff may have. All technical training for mine site

personnel is in line with current Australian standards. Reliance Hexham has provided training to various mines and industries throughout Australia and overseas.



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CONVEYANCES

OUR TEAM WILL DESIGN, MANUFACTURE AND TEST CONVEYANCES FOR VERTICAL SHAFTS, INCLUDING CAGES, SKIPS AND KIBBLES AND ALSO SLOPE HAULAGE SYSTEMS, INCLUDING DOLLY CARS, MAN CARS AND FLAT TOPS.



We can:

- Design and 3D Model new conveyances or modify existing conveyances.
- Manufacture, proof load and non destructive test conveyances in accordance with relevant standards and regulations.
- Overhaul, test and recertify existing conveyances.
- Assist with onsite installation and commissioning



Reliance Hexham's Engineering Team have carried out the specialised design and manufacture of Man Cages & 40 Man Dolly Cars.



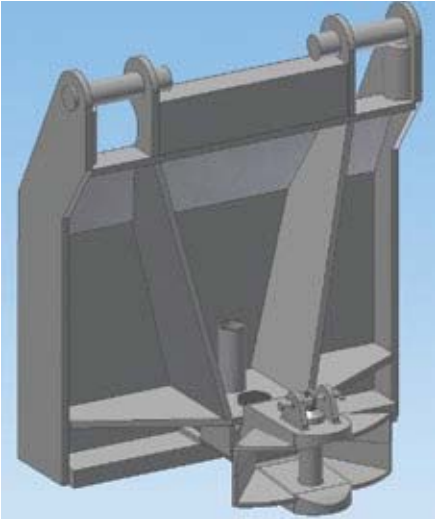
The 40 man Dolly Car is uniquely innovative due to its increased capacity which allows improved efficiency in the transportation of men underground and versatility to also couple with rail mounted vehicles for materials transportation. Passenger safety, comfort and ease of maintenance are paramount in this design.



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MATERIALS HANDLING

MATERIALS HANDLING IS AN IMPORTANT FACTOR IN ALL BUSINESSES. HAVING THE RIGHT CERTIFIED AND DESIGNED EQUIPMENT AND MAINTAINING THAT EQUIPMENT IS OF THE UTMOST IMPORTANCE. SAFETY EQUIPMENT IS OF THE HIGHEST PRIORITY.



Reliance Hexham manufacture and repair a range of specialised materials handling equipment. All equipment is manufactured and maintained to current Australian and International Standards.

All testing is carried out in compliance with the NATA accreditation of our laboratory to ISO/IEC17025 – General Requirements for the Competence of Testing and is traceable according to NATA and Quality Requirements.



MANUFACTURED HOOKS

RELIANCE HEXHAM MANUFACTURES LIFTING HOOKS TO AUSTRALIAN STANDARDS USING ONLY THE HIGHEST QUALITY MATERIALS.

Our trained personnel have many years experience and each item is manufactured to the highest standards.

A NATA endorsed certificate is issued with each manufactured hook, outlining the Working Load Limit and the Proof Load carried out on the item.





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PROOF LOAD TESTING

OUR NATA ACCREDITED LABORATORY ENABLES US TO TEST MECHANICAL ITEMS WITHIN OUR CERTIFICATION CRITERIA.

Our laboratory complies with the requirements of ISO17025 - General Requirements for the Competence of Testing.

All testing carried out by Reliance Hexham to our accreditation is certified and traceable as per the NATA ruling and our quality assurance endorsement.

All our test rigs are calibrated as per our NATA Accreditation.



CAPACITY: 200 TONNE
USEFUL LENGTH: 12M
CYLINDER STROKE: 1.25M
INSIDE WIDTH: 1082mm maximum

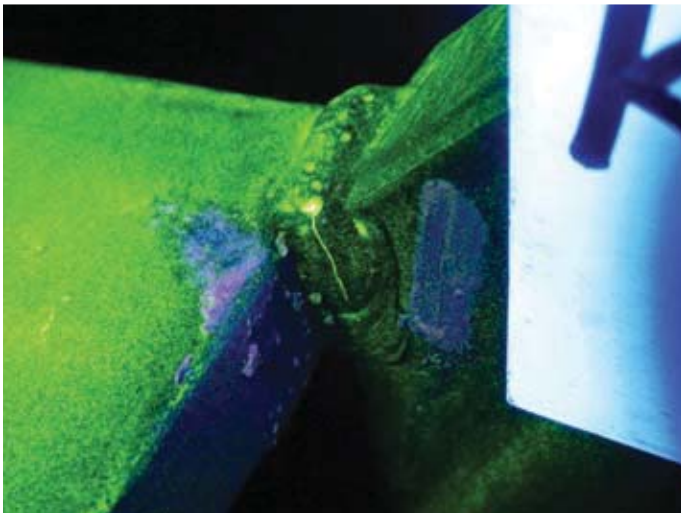


MAGNETIC PARTICLE TESTING

ALL TESTING CARRIED OUT BY RELIANCE HEXHAM TO OUR ACCREDITATION IS CERTIFIED AND TRACEABLE AS PER THE NATA RULING AND OUR QUALITY ASSURANCE ENDORSEMENT.

Our Level 3 & Level 2 AINDT qualified magnetic particle testers are approved for multi industrial sectors. Testing is carried out in compliance with AS1171.

We offer non-destructive testing in our workshop or at any other location required. Our skilled technicians are trade qualified to carry out weld repairs after detecting any discontinuities. They will then carry out final testing to ensure that there are no longer any discontinuities present.





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100 Old Maitland Rd, Hexham NSW 2322
P.O. Box 489, Mayfield NSW 2304

ph: 02 4964 8500

sales@reliancehexham.com.au
accounts@reliancehexham.com.au



SCAN TO LEARN MORE

