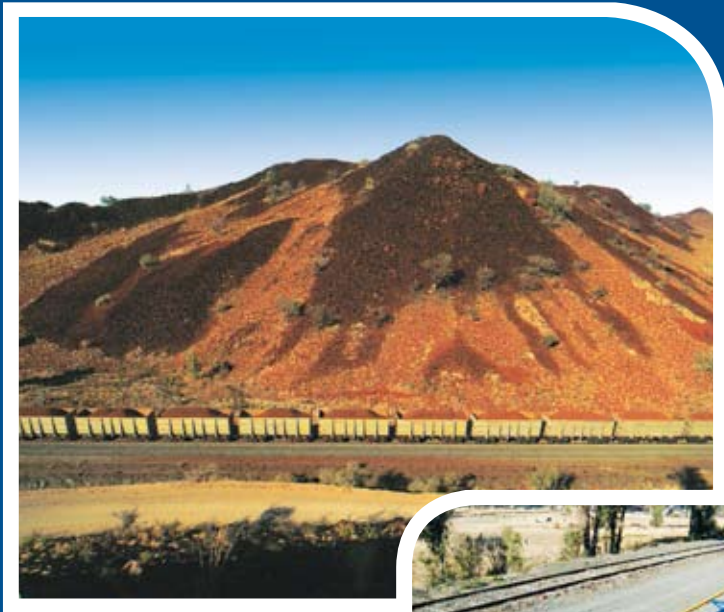
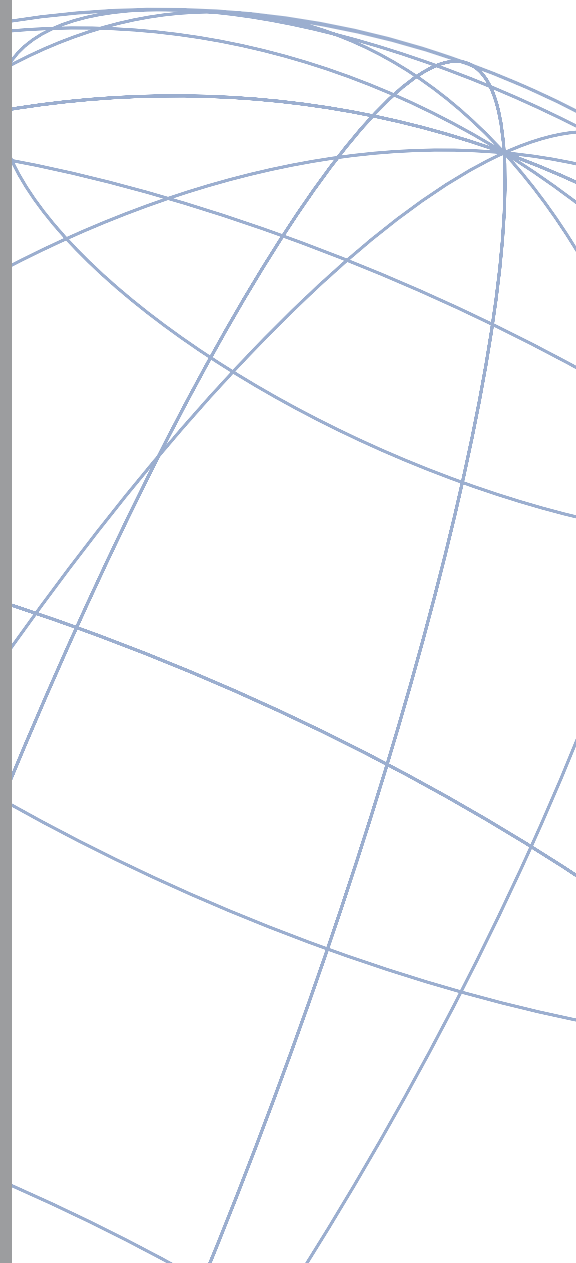


Rail



Our Innovation. Your Advantage.







About Bradken®

Bradken is a leading supplier of differentiated consumable products to the resources and freight rail industries.

Bradken has grown to take its place on the world stage as a leading foundry and heavy engineering company. With its headquarters in Newcastle, NSW, Bradken operates manufacturing facilities across Australia, New Zealand, China and the United Kingdom, as well as other key strategic locations around the globe. Listed on the Australian Stock Exchange, Bradken has sales approaching \$630 million per annum.

With more than 2,900 employees, the company's focus remains on employing and retaining the very best people who will, in turn, develop long term relationships with their customers. It is through these relationships Bradken can fulfil its promise to understand your business and work with you at every step to customise solutions to your individual needs.

At Bradken, our innovation is your advantage. With a passion for commitment and service, employees take ownership in modelling, engineering and manufacturing business solutions and delivering them on time, every time.

The intrinsic culture of continuous improvement ensures all customers have access to local expertise of the very highest calibre. The dedicated, regionally-based sales and service teams are complemented by in-house product development groups, all offering high quality products, local service and technical support.

Health, safety and the environment are Bradken's highest priority and we believe 'all injuries and accidents can be prevented'. Through the involvement, commitment and education of all employees, reductions in injuries and incidents continue to be achieved.

An ongoing commitment to personal development enables individuals to fulfil their potential and generates a passion for the business which is rare in a manufacturing environment. Bradken encourages, builds and retains a dynamic, flexible and innovative human resource through innovative internal initiatives including: the CEO Leadership Program, which provides for the continual development of leaders within the company; and the Employee Recognition Awards program, to formally celebrate employees who exemplify excellence.

Bradken's Management Systems are based on the International Quality Standard ISO 9001 (2000).



AS/NZS ISO 9001: 2000
Lic. QEC0007
SAI Global





Complete Freight Rollingstock Solutions

Bradken has been in the enviable position as the leader in the Australian rail freight market for more than half a century. It is a position which is never taken for granted. The company's reputation is built on staying at the forefront of technological advances, innovative engineering solutions and leading edge manufacturing techniques.

With a comprehensive range of products and services, Bradken is a total package provider. Focused on the iron ore, coal, intermodal and other bulk commodity sectors, all are serviced by Bradken's three specialist business units:

- Freight Rollingstock
- MainteNet
- Express Parts

Specialising in the design and manufacture of freight bogies and wagons, Bradken's experience enables tailoring of each request to suit the needs and demands of individual customers. Bradken has developed a position

of innovation and differentiation in the heavy haul market through its bogie capacity. The 40 tonne axle load bogie, globally acknowledged as the heaviest payload bogie available, is designed and manufactured by Bradken and runs in some of the toughest operating conditions in the world.

Bradken's ability to integrate products with comprehensive maintenance services, the supply of spare parts and a fully supported technical network means our customers can confidently concentrate on their core business.

At Bradken, our aim is to be the freight wagon supplier of choice to all operators in the Australian rail market. Every member of our team continues to strive to attain this goal.



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Manufacturing Capabilities

Bradken is Australia's largest combined foundry and heavy engineering group and one of the leading ferrous casting companies in the world.

Bradken's network of manufacturing facilities throughout Australia, New Zealand, China and the United Kingdom underpins its position as a world class, cost effective, high quality foundry and heavy engineering company.

The company's 20 manufacturing facilities – including foundries and heavy engineering workshops – are supported by more than 20 sales and service centres. Strategically located throughout Australia, New Zealand, the USA and the UK, each centre has the capacity to provide the latest technologies and a wealth of technical expertise, all close to local markets to provide unrivalled service and accessibility.

Bradken's operational and field experience positions the company as one of the world's most cost effective and quality founders. Complemented by the extensive product range and capacity, this combines to offer customers high security of supply now and in the long term.

All classes and types of freight rollingstock are manufactured in our facilities. Wagon life is also extended through maintenance and refurbishment programs.

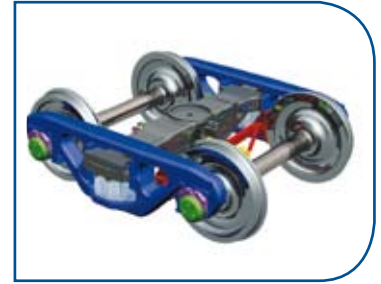
State of the art equipment, such as computer controlled machine centres for direct machining of patterns and dies, CNC borers and lathes for direct machining of components, heat treatment furnaces including polymer quenching, computerised coordinate measurement equipment and fixtures and gauges, ensures quality products are supplied by all facilities.

Today, Bradken consistently manufactures products with fits, tolerances and finishes that only 10 years ago were considered impossible to achieve without machining.

Bradken takes a long-term proactive approach to improve its facilities and manufacturing processes to protect the environment in which it operates. The company's environmental management system complies with the International Environmental Standard ISO14001.

It is Bradken policy to be environmentally proactive and adopt practices which minimise adverse environmental impacts.





Product Development

Bradken's skilled product development teams, together with worldwide technology partners, enable development and delivery of products and services which set new benchmarks for excellence, while offering significant advantages to customers.

Bradken boasts strong alliances with leading international organisations, including Amsted Industries (ASF) for the supply of railway components, a relationship which has spanned more than eight decades.

The engineering team at Bradken is renowned for its unequalled skill and experience in the design of bogies and drawgear componentry as well as for wagon bodies. This expertise has been the cornerstone of the company's reputation as a leading designer of freight rollingstock.

That reputation for producing high quality, innovative products results from understanding customers' operating conditions and business needs and providing a superior performance product. Bradken designs are based on functional solutions adapted to specific user

requirements and characterised by reliability, efficiency, cost effectiveness and whole of life value.

The extensive range of design tools employed by Bradken are used to prove the designs of bogies and freight rollingstock. They push the limits to enable continuous improvements in freight rollingstock design.

The advanced technologies utilised, allow Bradken to link engineering with manufacturing. This ensures a strong synergy between the product design process, application requirements and interactions of customers' operations. This combination of design skills and application expertise guarantees Bradken products provide superior performance in service and deliver tangible economic benefits to customers at all times.

Bradken's investment in new generation technology and focus on product development reinforces the company's commitment to provide customers with specific, world competitive solutions to their individual needs.



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Capabilities

- Freight rollingstock design
- FEA and Fatigue Analysis
- Wagon design validation and testing
- Manufacture – fabrication and castings
- Technical service and support

Technical expertise

- 3D CAD design
- Finite Element Analysis
- Fatigue Analysis
- Instrumentation and Data Acquisition
- 3D CAM patternmaking
- Casting solidification simulation
- Manufacturing process technology
- Robotic manufacturing
- Maintenance, service and refurbishment

Products/Services

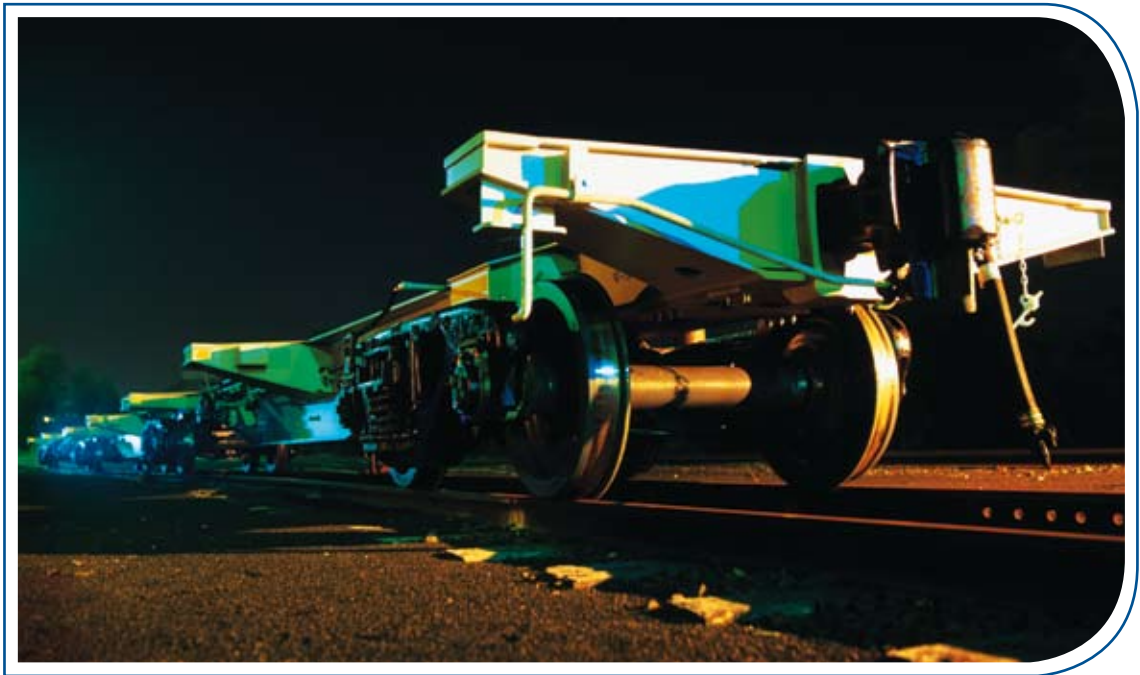
- Freight wagons
- Bogies
- Drawgear
- Spare parts
- Maintenance, service and refurbishment

Alliances

- **Amsted** – Bogie and drawgear technology
- **Miner** – Draftgear and sidebearer technology
- **SKM** – Instrumentation and noise analysis
- **Interfleet** – Wagon and bogie dynamic simulation
- **TUNRA** (The University of Newcastle Research Associates) – Bulk materials handling
- **CSIRO** – Discrete element modelling
- **Monash University/IRT (Institute of Rail Technology)** – Fatigue analysis and material testing

Facility	Type	Capacity
Adelaide, SA*	Foundry	13,000tpa
Bassendean, WA	Engineering workshop	23,000m ²
Darlaston, UK	Foundry	1,700tpa
Dunedin, NZ	Foundry	750tpa
Henderson, WA	Foundry	15,000tpa
Innisfail, Qld	Engineering workshop	3,750m ²
Ipswich, Qld	Engineering workshop	17,200m ²
Ipswich, Qld	Foundry	6,500tpa
Launceston, Tas	Foundry	5,000tpa
Mackay, Qld	Engineering workshop	3,000m ²
Mittagong, NSW	Engineering workshop	11,000m ²
Mt Thorley, NSW	Engineering workshop	1,700m ²
Muswellbrook, NSW	Engineering workshop	1,532m ²
Newcastle, NSW	Engineering workshop	4,500m ²
Runcorn, Qld	Foundry	26,000tpa
Scunthorpe, UK	Foundry	10,000tpa
Welshpool, WA	Foundry	6,300tpa
Wodonga, Vic	Foundry	7,000tpa
Wundowie, WA	Foundry	3,800tpa
Xuzhou, China	Engineering workshop	7,800m ²
Total foundry capacity		95,050tpa
Total engineering workshop capacity		73,482m²

*Adelaide capacity planned to increase to 32,000tpa by 2010



Freight Rollingstock

Bradken designs and manufactures products to stand up to the harshest climates and most demanding operating conditions in the world.

A variety of iron ore, coal, bulk and intermodal rail freight wagons, freight bogies and drawgear componentry are designed and manufactured by Bradken's highly skilled workforce.

Bradken enjoys a large market share in Australia and, through innovative design and customised solutions, aims to consolidate and build on that share. The design capability at the core of Bradken's operations enables the company to answer the toughest of performance criteria demanded by our diverse customer base. Remaining at the forefront of innovative ideas and solutions while employing advanced and proven technologies makes this all possible.

The range of bogie designs on offer from Bradken suits standard, broad, narrow and one metre gauge railways. Bradken's 40 tonne axle load bogie is globally acknowledged as the heaviest payload bogie on the market. With axle load capacities ranging from 9¼ tonnes to 40 tonnes, the product range is exhaustive. The variety of wagons is similarly designed to meet customers' exacting specifications, whether they are hauling iron ore, coal, containers, grain, fuel tank or ballast.

Whatever your criteria, be it lightweight, increased capacity, stable ride or reduced track wear, Bradken's specific designs can meet every expectation.



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MainteNet

Maintaining and increasing productivity for the lifetime of rollingstock, to facilitate improved product reliability and reduced running costs is as important to Bradken as it is to you. That is why enhanced maintenance practices are employed to retain longer lifetime reliability.

Bradken's specialist engineering and technology skills mean we are able to offer a total package, incorporating maintenance, service and refurbishment for longer life.

From innovative products and the use of modern jigs and gauges, through to materials handling techniques, management systems and warehousing, the skilled team at Bradken ensures customer satisfaction is always the number one priority.

All services meet AAR, ROA and DIRN rail standards.

The excellent workshop facilities evident throughout the Bradken network utilise cost effective methods to maximise the efficiency of every rail operation.

Maintenance and refurbishment services are strategically located at facilities across Australia and complemented by specially equipped mobile service vehicles which operate around the clock to ensure minimised wagon downtime.

Maintenance and refurbishment services include:

Rollingstock

- commissioning
- running maintenance
- infield service
- major rebuilds and modifications
- ancillary equipment repairs
- painting to customer requirements

Bogies

- bolsters
- sideframes
- brake beams

Drawgear

- couplers
- yokes
- draftgear





Express Parts

Bradken understands the meaning of the word 'express'.

With more than 21,000 line items in stock at strategically located warehouses across Australia, when you deal with Bradken, you can rest assured your request will be delivered fast into service, on time, all the time.

Bradken's extensive range includes spare and renewed parts for freight vehicles, passenger vehicles and locomotives, drawgear, bogie and brake components, as well as signal equipment and infrastructure equipment such as rail lifting tongs and derailleurs. If a required item is not one of the 21,000 line items, Bradken's extensive alliances and supplier relationships will ensure it is obtained.

Long term licence agreements with major parts suppliers coupled with advanced inventory management systems and skills, deliver unparalleled responsiveness.

Bradken's fast, reliable system provides the capabilities to comprehensively manage all inventory thanks to a process of:

- stock classification;
- forward ordering;
- measurement of stock usage;
- national stock reallocation.

As a result, our customers can be confident their spare parts requirements will always be met.

Bradken has a presence in every major market across Australia, enabling the company to keep in touch with customer needs and supply the right product at the right price every time.



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