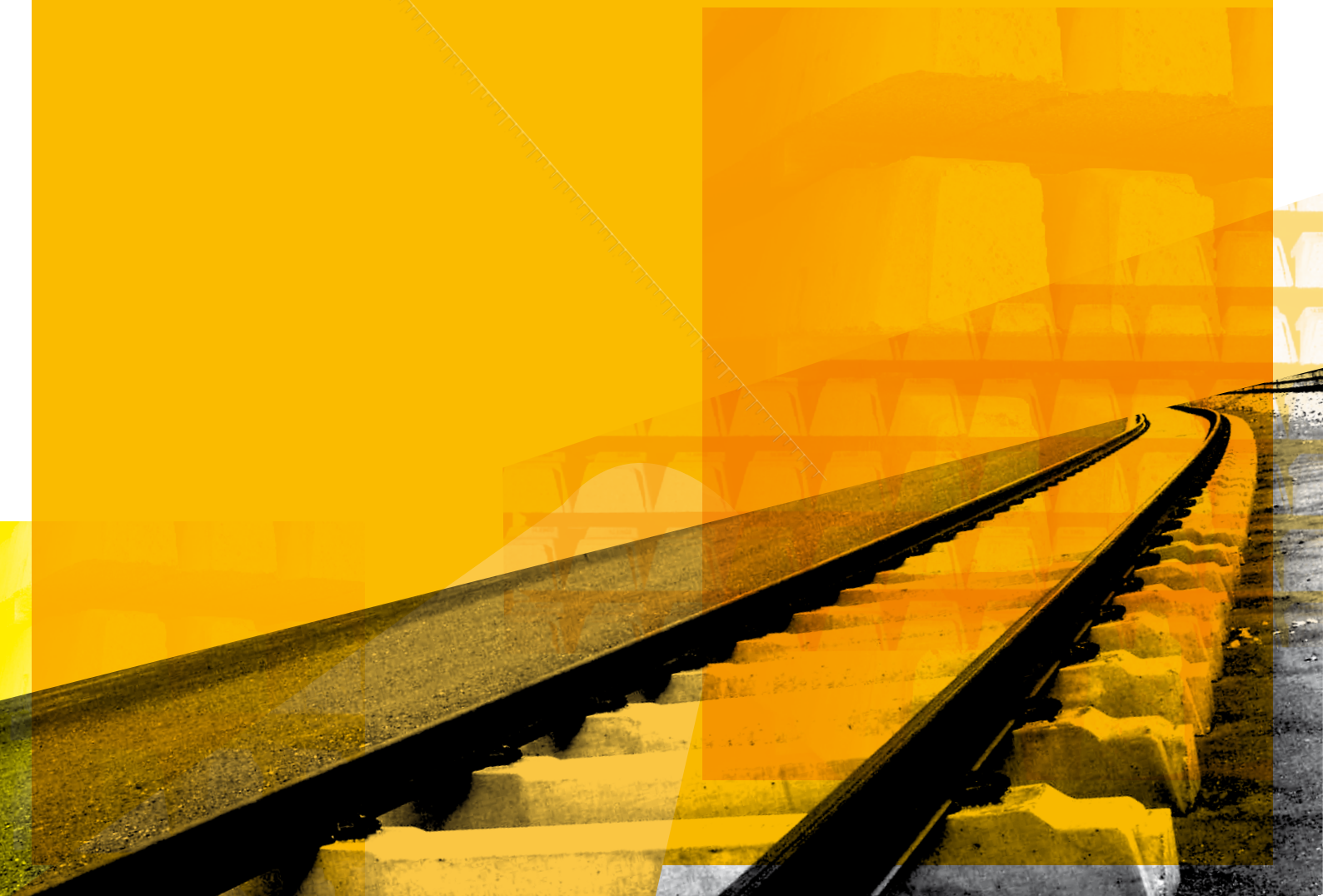


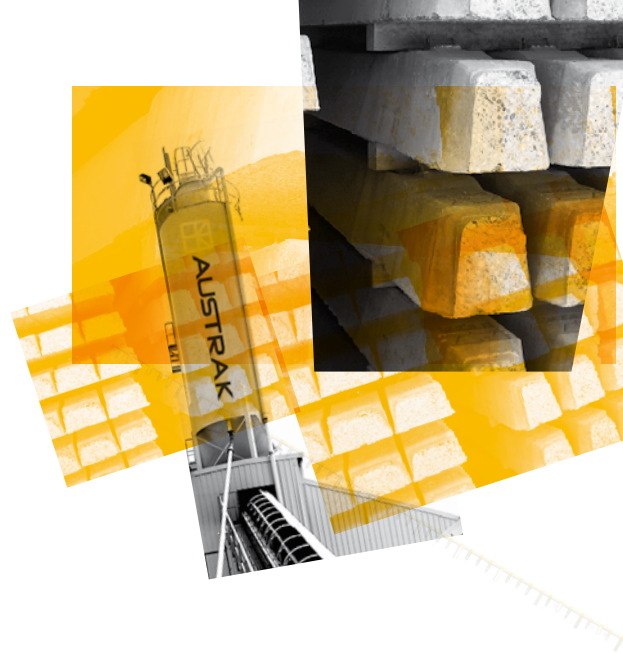


CONCRETE SLEEPER DESIGN, PROCESS & DELIVERY SOLUTIONS



**SAFETY, QUALITY,
SUSTAINABILITY,
INNOVATION AND
COMMITMENT ARE
THE CORNERSTONES
OF AUSTRAK'S
SUCCESS**





THE COMPANY

Since its establishment in 1980, Austrak has grown to become a world leader in the design and manufacture of pre-stressed concrete sleepers.

During more than 30 years of business, Austrak has cemented its place as the largest concrete sleeper manufacturer and supplier in Australia. As a dedicated sleeper technology company our focus remains on achieving the best in sleeper design and manufacture.

Safety, quality, sustainability, innovation and commitment are the cornerstones of Austrak's capability. Working in close partnership with clients provides an environment for driving innovation and change.

Long before the manufacturing process begins, we work in close partnership with our clients in an open and highly consultative way. We take the time and strive to get a strong understanding of our clients' needs across all key areas – everything from ballast condition to maintenance schedules. Our clients have input into the sleeper design from the very beginning and are encouraged to work alongside our design and engineering team.

We have produced more than 20 million sleepers for medium and heavy duty rail, and 2 million sleepers for light rail and tramways. Over this time, we've created a broad range of products designed to meet the varying needs of the rail industry.

As well as providing these pre-existing designs, we can work in partnership with clients to create new products that are tailor-made for their specific requirements.

Austrak is an industry leader in the design, construction, commissioning and operation of concrete sleeper manufacturing plants, having built and run 13 factories in Australia and overseas. Some of these factories have been custom-built for specific projects, and capacities range from 50,000 to more than 1 million sleepers per year.

As a wholly-owned subsidiary of major international construction company Laing O'Rourke, Austrak has the backing of the largest privately owned construction firm in the United Kingdom. Laing O'Rourke provides Austrak with the backing of a global, multi-billion dollar organisation with operations in Europe, the Middle East and Australasia.

Creativity, flexibility and an aligned focus towards joint goals encapsulate Austrak's business approach.

INNOVATIVE SLEEPER SOLUTIONS

Austrak specialises in providing concrete sleeper solutions. Our core focus is to provide our clients with cost-effective concrete sleeper solutions. Our emphasis on researching and developing sleeper design and production technologies ensures we remain industry leaders.

We make sure that all of our products meet exacting standards including fit for purpose structural design, beam strength, materials specification and selection, concrete durability, manufacture process, correct stressing, concrete compaction, dimensional integrity, aesthetics, visual inspection processes, and performance testing processes.

While we specialise in sleeper solutions, our real product is the intellectual property tied up in our factory designs and operating systems. We have proven robust systems, processes and equipment. Our focus on research and continuous improvement ensures we implement the most innovative and efficient technologies.

Our factories operate under Austrak's own work methods and quality assurance standards which are third party accredited to ISO 9001. The systems also comply with the requirements of ISO 14001 and AS/NZS 4801.





**“QUALITY AND CERTAINTY
OF SCHEDULE ARE TWO
OF THE MOST IMPORTANT
THINGS FOR US. AUSTRAK
HAS DELIVERED ON
BOTH COUNTS.”**

Peter Thomas

Project Director Port and
Rail Expansion Projects, FMG

PROVEN RELIABILITY

In over 30 years of operation, we have never had an ‘in track’ failure of any Austrak sleeper product. This is largely due to our in-house Standard Operating Procedures, which is at the heart of our factory management system and ensures we can keep to our commitments.

It is the result of years of development and captures the essential elements required to ensure that we consistently deliver high-quality sleepers. We record and capture everything from our raw materials test results, to our operator training records, right through to our daily production and quality results.

We also operate an integrated management system (IMS) which has various quality control processes built in.

These include:

- State-of-the-art concrete testing laboratories at all factories
- Trained and competent management and operators
- Management system that ensures compliance to the applicable standards including AS1085 Railway Track Material Specifications.

Austrak is a dedicated sleeper company with a sole purpose - to provide high quality engineered sleeper solutions using state of the art manufacturing processes. Benchmarking and performance monitoring is used extensively to ensure optimum manufacturing efficiency and performance.

Reliability, repeatability, and value for money are the hallmarks of the Austrak system which has been continually improved since our inception in 1980.

PRODUCT RANGE

Austrak's versatile and comprehensive range of products meets the various requirements and needs of our clients.

We have designed sleepers to accommodate axle loads varying from nine tonne for tram sleepers, through to 30 tonne for freight railways, right up to 50 tonne axle loads for heavy haul lines.

Our product range includes:

- Broad gauge
- Standard gauge
- Narrow gauge
- Narrow/standard dual gauge
- Standard/broad gauge changeable
- Turnout bearers
- Level crossing panels
- Monorail
- Gauge widened sleepers
- Guard rail sleepers
- Splay rail sleepers
- End stop sleepers
- Timber replacement sleepers (TRS)

Austrak is an industry leader in the specialised field of manufacturing pre-stressed concrete beams for turnouts, crossovers, diamonds and catchpoints. These have been developed for varying axle loads and gauges as well as divergance ranging from 1:6 through to 1:25.

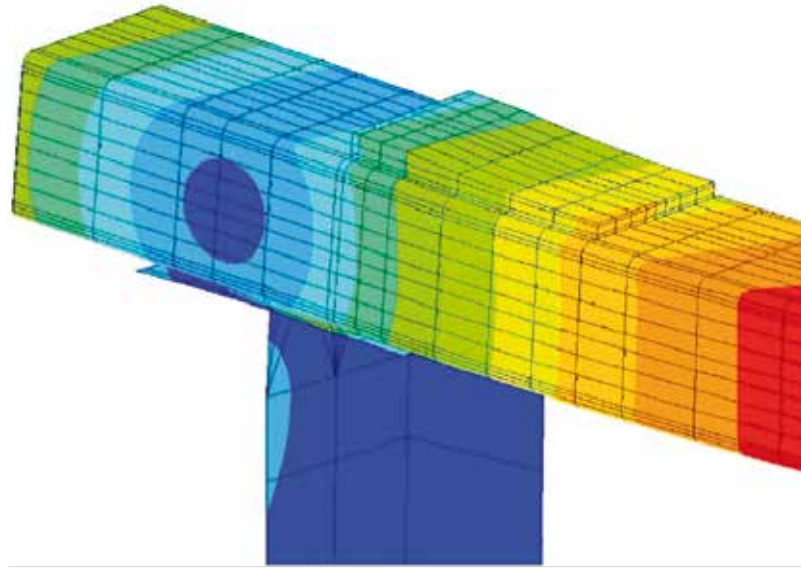
Austrak's capabilities extend to producing sleepers and turnout products using all approved fastening systems.

Following an extensive research, development and testing process, Austrak has developed timber replacement sleepers. The highly-engineered solution for replacing ageing timber sleepers was based on extensive rail track data and analysis to ensure the sleepers are a similar size and match the specifications of the line. The sleepers are longer-lasting, more economical and lower maintenance than timber sleepers.





Through innovation, value engineering and an unrelenting commitment to quality in sleeper design, manufacturing systems and processes we are striving to be the world's premier provider of concrete sleeper solutions.



TESTING

Comprehensive testing is an integral part of Austrak's design and production process. We create and refine sleeper designs to ensure they meet train speed and load-bearing specifications.

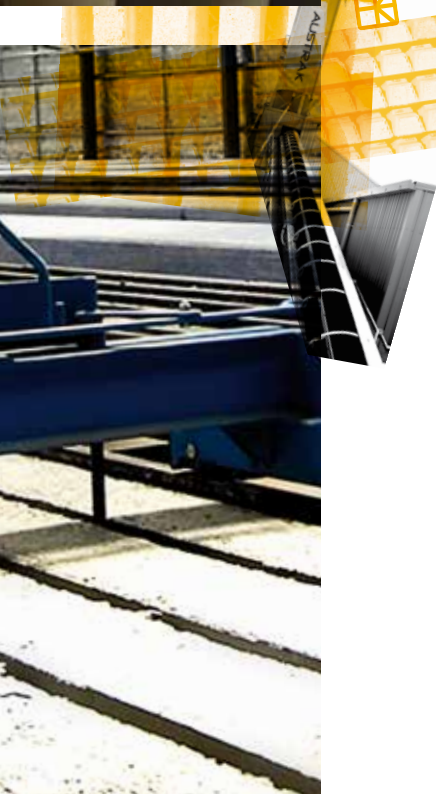
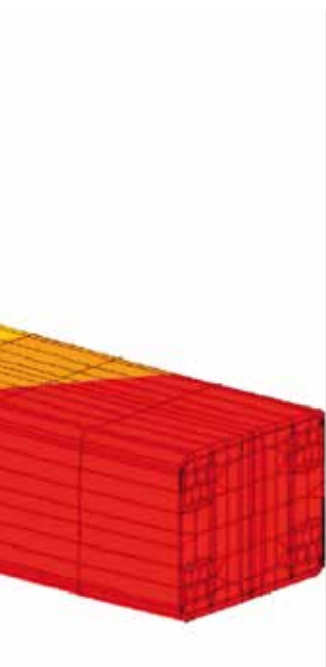
Before mass producing a new design, the company carries out computer-based modelling to prove the theoretical design. Then exhaustive repeated-load tests on prototype sleepers are evaluated against the theoretical data and the client's performance expectations.

During production we perform various tests to ensure the conformity of:

- Materials utilised in the products;
- Prestressing; and
- Concrete strengths

Sample sleepers are taken from each bed to ensure the final product meets testing criteria for bending moment cracking and bond as well as dimensional testing. All sleepers are visually checked as part of our quality assurance program.





PRODUCTION TECHNOLOGY

Austrak has proven experience in factory construction and operation.

We have proven and robust manufacturing systems, processes and equipment and continual research ensures we remain a leader in the field.

Our factory employees undergo rigorous training to ensure quality, productivity and safety are of the highest standard. Our operational and management staff bring extensive experience to the business and a client-focused approach to each project.

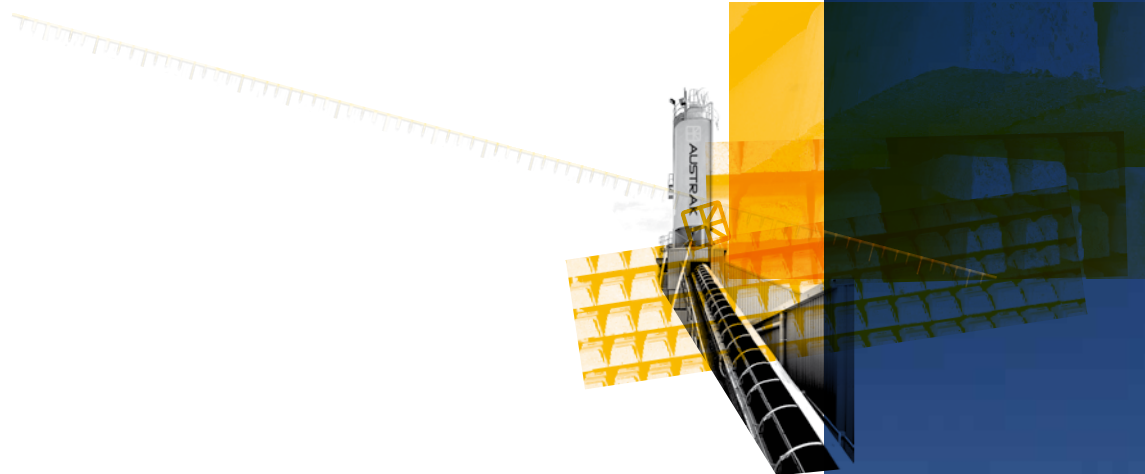
Austrak builds and operates factories in close proximity to large-scale projects to provide cost and time efficiencies. For example, two factories were built in the Northern Territory to manufacture two million sleepers for the 1410 kilometre rail line from Alice Springs to Darwin, one of Australia's largest infrastructure projects. The construction of the factories was fast-tracked and the sleeper production rate accelerated allowing the project to be completed three months ahead of schedule.

Currently Austrak has factories in:

- Geelong, Victoria
- Rockhampton, Queensland
- Port Hedland, Western Australia
- Wagga Wagga, New South Wales
- Dubai, United Arab Emirates

In the past we have built and operated factories in:

- Mackay, Queensland
- Wickham, Western Australia
- Townsville, Queensland
- Katherine, Northern Territory
- Tennant Creek, Northern Territory
- South Hedland, Western Australia
- Malaysia



SAFETY ABOVE ALL

Austrak is committed to a 'no compromise' approach to health and safety which is enshrined in our 'Mission Zero' approach.

Mission Zero is our safety program designed to eliminate all accidents in the workplace by 2020.

A slingable pack design:

From a risk assessment, Austrak has determined that the logistics component of the supply chain is the most likely to cause serious harm. Special precautions need to be taken before a sleeper is moved to minimise the health, safety and environmental risks. Austrak have designed a proven and robust slingable pack design to enable safer and more efficient loading and unloading process. This is an alternative to the forkliftable pack.

Factories safer by design:

Our factories are designed to incorporate valuable safety features to minimise risk on-site. Some design initiatives include:

- One way traffic flow on site has mitigated risk of reversing vehicles
- Zonal areas separating vehicles, moving equipment and pedestrians to prevent collisions
- Designated wet areas away from the main production area developed to reduce risk of slips and trips
- Overhead positioning of services and utilities to prevent slips, trips and reduce electrical risk.





SAFE AND TIMELY DELIVERY

Austrak is proud to have exported heavy haul (40TAL+) sleepers from our overseas manufacturing facility into Australia. We have developed robust manufacturing processes and procedures that can withstand the transport and logistics to deliver sleepers to remote project locations. We have a proven record of meeting our clients' expectations to consistently and safely deliver to schedule, quality and cost requirements.

Austrak continue to invest in our plant and equipment to ensure we deliver quality sleepers that can be relied upon to perform to the required standards. We have existing capability to support and assist our facilities with state of the art, remote online fault diagnosis systems from anywhere in the world.

Our ongoing investment improves our sleeper reliability and in turn, our clients' infrastructure delivery performance. Additionally, our rigorous preventative and predictive maintenance regimes help ensure optimum performance of our sleepers long after the tracks have been laid and are in use.

From a green field site our Wagga Wagga factory was producing sleepers seven months after order placement. Following from this our latest factory in Dubai was in production four months after order placement. Both examples underscoring our abilities to deliver on time against the commitments we have made. Experience in factory design, build and commission gives our clients piece of mind that their project won't be jeopardised.

Importantly, Austrak understands the priority of meeting schedules so as not to impinge on the overall project programme.



MAJOR PROJECTS

ALICE SPRINGS TO DARWIN RAILWAY



Client: Australasia Railway Corporation (Austrak was a subcontractor to ADrail)

Location: Northern Territory

Overview: The Alice Springs to Darwin railway line was one of the largest infrastructure projects ever undertaken in Australia. As part of the overall project, Austrak was charged with the responsibility of manufacturing approximately two million concrete sleepers in just 16 months for the 1410 kilometre single track railway.

To meet this daunting challenge, Austrak designed, constructed and commissioned two strategically located factories at Tennant Creek and Katherine.

By constructing and managing its own factories, the project team was in complete control of the supply chain, manufacturing processes and quality control, being well positioned to deliver the job in the most cost effective and timely fashion.

BHP BILLITON IRON ORE PROJECTS



Client: BHP Billiton Iron Ore

Location: Western Australia

Overview: Austrak's long-term relationship with BHP commenced in 1986 when the company was contracted to manufacture and supply sleepers and turnout bearer sets for the partial duplication of the line to Mt Newman, Yandi, Whaleback and Jimblebar.

To date, Austrak has manufactured and supplied about 1.5 million sleepers and 200 turnout bearer sets for BHP.

To support BHP's requirements, Austrak rapidly built and commissioned a single bed rail sleeper factory at South Hedland in Western Australia. A new five bed factory was built and commissioned at Wedgefield in 2000 and this supports BHP's current production needs. This facility has also been producing turnout bearers since 2005.

MAIN NORTH-SOUTH LINE PROJECT



Client: Australian Rail Track Corporation (ARTC)

Location: Victoria, New South Wales and Queensland

Overview: The Australian Rail Track Corporation (ARTC), with the support of the Federal Government, initiated the Melbourne to Brisbane rail corridor upgrade project to improve the performance and competitiveness of the Melbourne to Brisbane rail network.

Austrak was awarded the more than \$100 million contract to manufacture and supply 1.25 million standard gauge mainline sleepers and 22,350 dual standard/broad gauge pre-stressed sleepers over two years. In addition, Vossloh commissioned Austrak to initially manufacture 122 turnout bearer sets using canted rail seats.

To provide cost-effective sleeper delivery and guaranteed quality control, Austrak designed and built its own dedicated factory in Wagga Wagga, New South Wales to support the contract.

CERTAINTY OF DELIVERY ENSURES OUR CLIENTS COME BACK AGAIN AND AGAIN

We work with our clients to develop solutions that maximise the benefit to them. Our design flexibility and innovation has met the diverse demands of private and government sector organisations by working in unison with them, developing and refining specific solutions tailored to each situation. We have the ability and expertise to work in remote and regional locations and have worked on the biggest rail projects in Australia.

QUEENSLAND RAIL PROJECTS



Client: Queensland Rail + Aurizon

Location: Queensland

Overview: Austrak is proud to have a 30 year relationship with Queensland's passenger and freight rail services. Until 2009, both areas were managed under the banner of Queensland Rail. With the separation of services, we now work closely with both Queensland Rail and Aurizon.

We are the sole supplier of concrete sleepers to both companies and Austrak has built factories at Mackay, Rockhampton and Townsville to support railways in Queensland.

RIO TINTO IRON ORE PROJECTS



Client: Rio Tinto Ltd, Norths Ltd and Robe River Associates

Location: Western Australia

Overview: Since 1987 Austrak has had an ongoing relationship with Rio Tinto, one of the world's leading mining and exploration companies.

By leveraging its existing factories and being able to quickly build new factories in remote locations, Austrak is supremely positioned to deliver Rio Tinto's specific design needs now and in the future.

Austrak has supplied various projects for Rio Tinto including Robe River Project, North Limited Project, Hope Downs 4 Rail and RCE283.

PILBARA IRON ORE AND INFRASTRUCTURE PROJECT



Client: Fortescue Metals Group (FMG)

Location: Western Australia

Overview: FMG contracted Austrak to manufacture and supply materials necessary to lay the inaugural 255 kilometres of single track railway that connects the company's port facilities at Port Hedland with their iron ore mine site. To meet this challenge, Austrak used its existing local factory in Wedgefield, Port Hedland in Western Australia to ensure all sleeper production met the demanding schedule.

We are proud to continue our long-term relationship with FMG and have recently supplied 445,000 sleepers for their Solomon Expansion Project in the Pilbara from both the existing Port Hedland factory and a new factory in Dubai, UAE built to supply the project.

MANAGEMENT SYSTEMS

Austrak's management systems are continually evaluated to ensure the company is delivering to world standards.

- **Health and Safety**

We recognise the importance of staff safety and ensure that in all facilities we have specialist personnel who control safety and quality assurance systems.

Our operating factories have third-party accreditation to AS4801:2001, Health and Safety Management Systems.

- **Quality**

Since 1996, Austrak's quality assurance system has been third-party accredited to ISO 9001. The system extends from verification of raw materials used in concrete blends, to monitoring process control variables, to operator training and auditing.

- **Sustainability**

Austrak recognises the importance of environmental issues and our systems comply to ISO 14001. Factories are designed with waste minimisation, water recycling and energy efficiencies in mind.

- **Training**

Training begins with the induction of new staff and continues through to a competency based system to ensure our staff attain the specialist skills needed to control the sleeper manufacturing process.

- **Technology**

We have specialised in-house developed production and quality systems to monitor, control and report on all factory systems.

- **Community**

Austrak aims to participate in community activities that develop and nurture positive relationships built on mutual understanding, respect and trust. Wherever possible, we employ local people to further develop the local economy.

We have a documented Reconciliation Action Plan (RAP) in place that outlines our commitment to Indigenous Australians, and have been awarded for our training programmes.

- **Innovation**

Austrak has an active and significant R&D agenda focused on further developing efficient sleepers, production processes and environmentally sustainable solutions.





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