WHITE INDUSTRIES CAPABILITY PROFILE

Metal Cast Component Solutions

White Industries, Dalby & Ipswich
Queensland

WHITE

www.whiteindustries.com.au

Capabilities

White Industries operates the largest privately owned foundry in Queensland. The Dalby operation includes a modern foundry, machine shop and fabrication facility using some of the most advanced automated foundry and machining equipment available worldwide.

This flexible operation caters for small through to large production runs of a vast range of products. Examples of these products include.

- Mining – manganese steel bushes, rigging components for draglines and excavators, bucket teeth, fixed plant GET, chute wear liner components and underground cast components.
- Oil and Gas - flanges, housings and couplings.
- Rail – axle boxes, hinge brackets, wheels, hose coupling for brakes and other components for high speed and mining rail operations.
- Defence – military vehicle brake components.
- After-market automotive – turbo housings (local and export), exhaust manifolds.
- Transport - heavy haulage brake drums, hitches, and suspension components
- General Engineering – structural components, vice components.
- Sugar – chain links, centrifugal separator components, shredder hammers, pinions.
- Agriculture – hub and stub assemblies, equipment components.
- Water industries and irrigation – pump and valve components.
- Supplying Australia-wide and overseas.

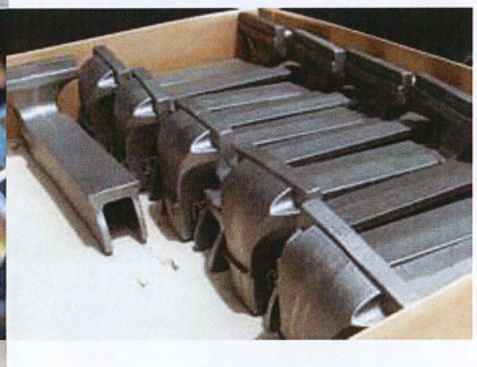
White Industries caters for general engineering through to high-precision, high-integrity cast components. The company is committed to high performance manufacturing drive by proactive investment in advanced manufacturing technologies and continuous improvement in efficiency, productivity and quality.

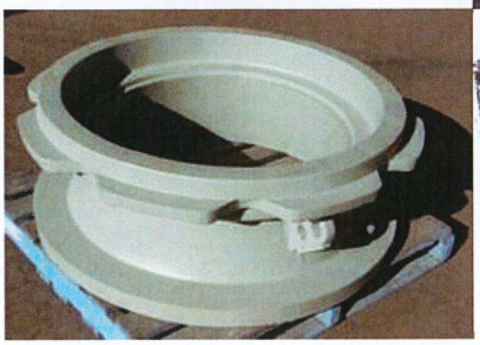
A family owned Australian business

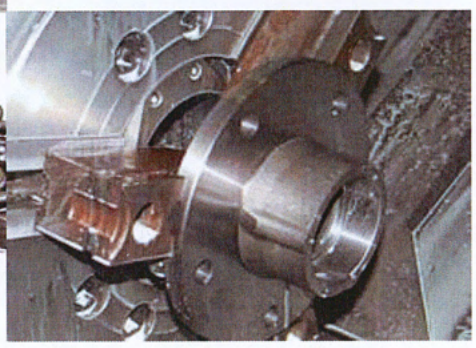
• Ferrous and Non Ferrous Casting • Patternmaking • Moulding • Melting and Heat Treatment Machining • Fabrication • Quality Controls

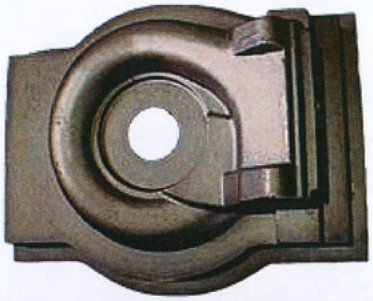
Certified System Quality ISO 9001

DRAKE
AUSTRALIA

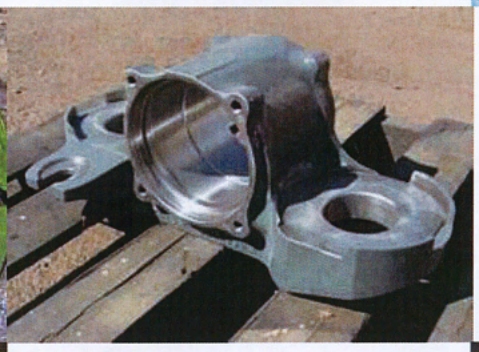
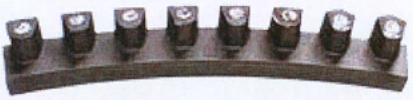


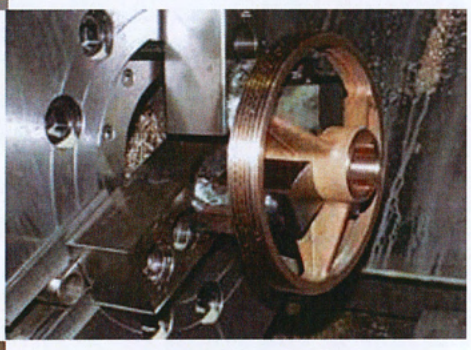


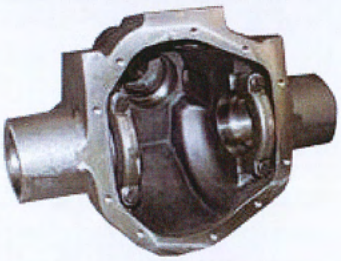




120 TONNE





Services include:

- Product development and production capabilities:
- Ability to accept product designs in most electronic formats.
- Assist in design for effective manufacturing and cost control.
- In-house metallurgist to assist in selection of materials.

Mould design:

- State-of-the-art automated green sand moulding line using German BMD equipment for mass production of castings.
- Chemically-bonded sand for both large castings and small run jobbing.
- Cater for the one off and small run castings.

- On-site patternmaking of timber, resin and metal tooling to clients' specification.
- Storage of clients' patterns on-site.
- Complete confidentiality of client IP and patterns.
- Manufacture, heat treatment and machining of castings.
- Inspection and packaging for dispatch to client.

Castings covering:

- Ferrous and non-ferrous castings.
- High quality castings in Grey Cast Iron, Ductile Iron, Mild Steel, Low Alloy Steel, Duplex Stainless Steel, Austenitic Stainless Steel, Austenitic Manganese Steel, High Alloy White Irons, Ni-Resist Alloys, Aluminium, and Copper Alloys, including phosphor bronzes, gunmetals and brasses.
  Small scale through to large volume casting covering casting ranging from 1kg to 22,000 kg in iron, 7,000kg in steel; 325kg in aluminium and 1,000kg in brass and bronze.
- Simple through to complex castings covering basic and precision castings.

Casting testing covering:

- Magnetic Particle Testing, Dye Penetration testing, Hardness Testing, Chemical analysis, Ultrasonic Testing, Phased Array.
- Sub–contract Radiography, Tensile and Impact Testing.

Machining services covering:

- Machining using CNC processes for enhanced productivity and to ensure conformance with strict customer requirements.
- Horizontal and vertical machining centres and lathes.
- Fixturing of complex components for efficient machining.
- Experience in machining a wide range of ferrous and non-ferrous materials, including work-hardening alloys and alloy white irons.

Fabrication shop services covering:

- Custom metal fabrication of small and large items.
- High quality fabrication for components and equipment.
- Fabrication examples include:
- Grain buggies
- Cattle feeders
- Contract repairs
- Plant and equipment

A family owned Australian business

Ferrous and Non Ferrous Casting • Patternmaking • Moulding • Melting and Heat Treatment Machining • Fabrication • Quality Controls

White Industries' products have a reputation for reliability, durability and performance in harsh environments. The company also has a proven track record of delivery on time and on budget, with the flexibility to accommodate short lead times.

Equipment and Resources

White Industries' manufacturing centres are located in Dalby, in the Surat Basin and Ipswich, Queensland and has offices in Brisbane Dalby and Ipswich.
The Dalby facility covers a land area of 2.35ha with an under-roof area of more than 7,600m2.
The Ipswich facility covers a land area of 12.5ha with under-roof area of approx. 22,000 m2.
White Industries' equipment and facilities at Dalby & Ipswich includes:

A family owned Australian business

• Ferrous and Non Ferrous Casting • Patternmaking • Moulding • Melting and Heat Treatment Machining • Fabrication • Quality Controls

Pattern Making

- 2 x Wadkin Disc Sanders (760 Dia)
- 2 x Bobbin Sanders
- 1 x Wood Lathe (2100 Dia Swing x 1500 long)
- 1 x Wadkin Pattern Miller (2000 Swing)
- 2 x Bandsaws
- 1 x Wadkin planer
- 1 x SCM Thicknesser
- 1 x Climate controlled room for Resin making

Coremaking

- 2 x Laempe Core Blowers; 1 x 15 Litre **and** 1 x 80 Litre (1150x800x980 high)
- 1 x Warrill CB22 25 Litre Core Blower
- 1 x U190 Shell – 500 x 500 x 400 (40kg)

A family owned Australian business

• Ferrous and Non Ferrous Casting • Patternmaking
• Moulding • Melting and Heat Treatment
Machining • Fabrication • Quality Controls

Certified System Quality ISO 9001

Moulding

- Greensand – BMD Automatic Moulding Machine with Automatic Compactability Controller, New sand facing/painting for steel. Flask Size (internal) – 1000mmL x 800mmW x 250mm/250mmD, 20 moulds/hour
- 2 x Jolt Squeeze Moulding Machines
- Jobbing – Omega 20T/hr Articulated Mixer using ester-set alkaline phenolic binder via Omega Blend unit
- Jobbing – Warrill 10T/hr Mixer using ester-set alkaline phenolic binder via Warrill Blend unit
- Jobbing - Omega 7T/hr mixers using ester-set alkaline phenolic binder
- 2 x Jobbing - Omega 2T/hr **and** 1t/hr Chromite mixers
- Jobbing – IMF 40T/hr mixer using ester-set
- IMF Hard Sand Loop – 1.16m x 1.16m x 0.5deep, 30 T/hr mixer using a blend of new& reclaimed sand using ester-set
- Jobbing - Warrill 2T/hr high intensity Chromite mixer
- Jobbing Moulding up to a max of 5m x 5m x 3m / plus 2 pits 4.5m deep

A family owned Australian business

Ferrous and Non Ferrous Casting • Patternmaking • Moulding • Melting and Heat Treatment Machining • Fabrication • Quality Controls

Certified System Quality ISO 9001

Melting / Pouring

- 1 x 3T 1000KW 500Hz Induction Furnace with porous plug gas diffuser for Argon degassing
- 2 x 2T 1000KW 300Hz Induction Furnaces with porous plug gas diffuser for Argon degassing
- 1 x 750kg 400KW 1200Hz Induction Furnace
- 1 x 150kg 200KW 1200HZ Induction Furnace
- 1 x 2.5T Induction Furnace
- 1 x 5T Induction Furnace
- 1 x 40kg Aluminium (80kg Phos Bronze) Push-out Induction
- Multiple x ARL/Thermo Atomic Emission Spectrometer – 20 spectral lines
- 1 x 6.5T Bottom Pour Ladle with porous plug gas diffuser for Argon degassing
- 1 x 5T Bottom Pour Ladle with porous plug gas diffuser for Argon degassing
- 1 x 2T Bottom Pour Ladle with porous plug gas diffuser for Argon degassing
- 1 x 1T Lip Pour Ladle with porous plug gas diffuser for Argon degassing
- Various other Lip Pour Ladles
- Overhead cranes to 10 tonne capacity

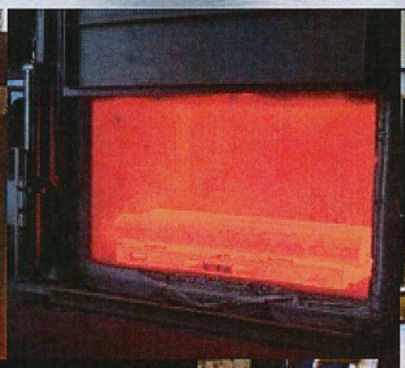
A family owned Australian business

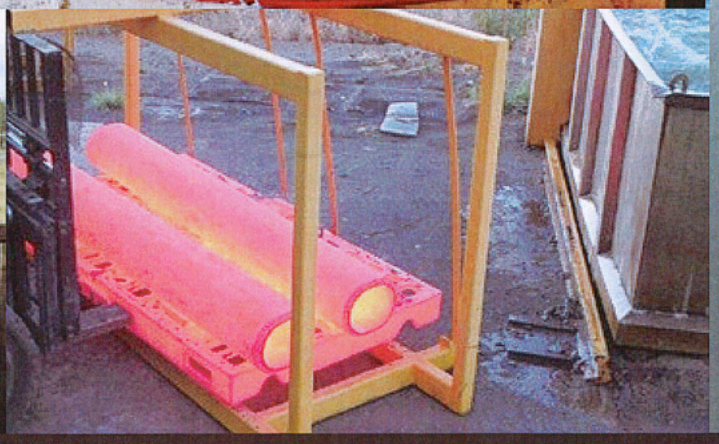
Ferrous and Non Ferrous Casting • Patternmaking • Moulding • Melting and Heat Treatment Machining • Fabrication • Quality Controls

Certified System Quality ISO 9001 SAI GLOBAL

Heat Treatment

- 1 x Single tray Bogie Hearth Oven, natural gas fired, 600-1100°C, 1.4mW x 1.4mD x 1.1mT
- 1 x Double Tray Oven, natural gas fired, 600-1100°C, 2.8mW x 1.55mD x 1.4mT
- 1 x Double tray Bogie Hearth Oven, natural gas fired, 100-1100°C, 1.77mW x 4.2mD x 1.58mT
- 1 x Aging oven 3.6m x 2.4m x 1.7m
- 1 x Stress Relieving oven 7.8m dia and 4.2m H (extended lengths to 10m)
- 1 x Single Tray Top-Hat Oven, natural gas fired, 600-1100°C, 1.4mW x 1.4mD x 0.9Mt
- 1 x Double Tray Tempering Oven, natural gas fired, 200-600°C, 2.8mW x 1.55mD x 1.4m
- 2 x Single tray Bogie Hearth Tempering Ovens, natural gas
- 1 x Single Tray Bogie Hearth Normalise, Anneal, Temper over, natural gas up to 4.2m x 4.0m x 2.0m
- Fired 100-700°C, 1.7W x 2.1D, 1.55T.
- 1 x Water Quench Tank 25,000L with agitation and cooling tower
- 1 x Water Quench Tank 7,000L **and** 1 x Water Quench 3m x 3m x 8T





A family owned Australian business

• Ferrous and Non Ferrous Casting • Patternmaking • Moulding • Melting and Heat Treatment Machining • Fabrication • Quality Controls

Certified System Quality ISO 9001 SAI GLOBAL

Finishing

- Table Shotblasters
- Tumble Shotblasters
- 1 x Hanger Shotblaster
- Preheat facilities
- Pneumatic cannons for riser removal & Georg Fischer De-gating Tool
- Arc air facilities
- Light & Heavy Fettling capabilities
- Various Workstations including Pedestal Grinders
- 1 x Blast Room 22m L x 9m W x 7m H with approx. 70+ load capacity
- 1 x Paint Booth 22m L x 8m W x 7m H – equipped with scrubber & baking facility
- 1 x Clansman G30P semi-robotic Grinder Manipulator & Turntable

A family owned Australian business

Ferrous and Non Ferrous Casting • Patternmaking • Moulding • Melting and Heat Treatment Machining • Fabrication • Quality Controls

Certified System Quality ISO 9001

Machining

- 2 x Mazak Multiplex 6300 CNC Lathe with GL400 Robot (380 diameter swing)
- 5 x Mazak / Mori Seiki 5 axis Multi-tasking Machines with up to 2m swing, 5T and twin Pallet
- 2 x Mazak Megatum Nexus 900m, 900 dia swing with live tooling
- 2 x Mazak SQT CNC Lathe (450 diameter swing x 750mm long)
- 2 x Mazak FH8800 Multi Pallet Horizontal Spindle CNC Machining Centre (1200 x 1200 envelope) and 1 x 6 pallet
- Key seater – Internal splines and keyways
- 1 x Mazak V550 Twin Pallet Vertical CNC Machining Centre (1000 x 500 envelope)
- 2 x Okuma MA40HA Twin Pallet Horizontal Spindle CNC Machining Centre (550 x 550 envelope)
- 1 x Okuma LB25 Long Bed CNC Lathe (450 diameter swing x 750mm long)
- 1 x Doosan V740 Vertical CNC Lathe (750 diameter swing)
- Various Centre Lathes up to 6.2m long, Mills with horizontal & vertical spindle mills up to 90T-6m dia and Drills
- 1 x Automated Robot Cell (pin & bush) including 2 x Okuma, Bar Stock cutting & Heat Treatment
- Overhead cranes to 25 tonne capacity.
- 1 x SODV Schiess, vertical boring, large items up to 10m dia
- Vertical Borers 4ft to 8 ft dia

A family owned Australian business

• Ferrous and Non Ferrous Casting • Patternmaking
• Moulding • Melting and Heat Treatment
Machining • Fabrication • Quality Controls

Certified System Quality ISO 9001 SAI GLOBAL

Fabrication

- 1 x 100 ton Press Brake (3.7m long bed)

- 1 x 200 ton Press
- 1 x Guillotine (Cuts 6mm Plate 3.7m long)
- 1 x Guillotine (Cuts 3mm Sheet 2.4m long)
- 1 x Panbrake (Folds 2mm Sheet x 2.4m long)
- 1 x 1200mm Long Sheet Rolling Machine
- 1 x Bandsaw (Cuts from 250mm sq. down)
- 1 x Plasma with 25mm Stainless Steel Cutting Capacity
- 5 x GMAW Welding Machines
- 3 x MMAW Welding Machines
- Overhead cranes to 10 tonne capacity

A family owned Australian business

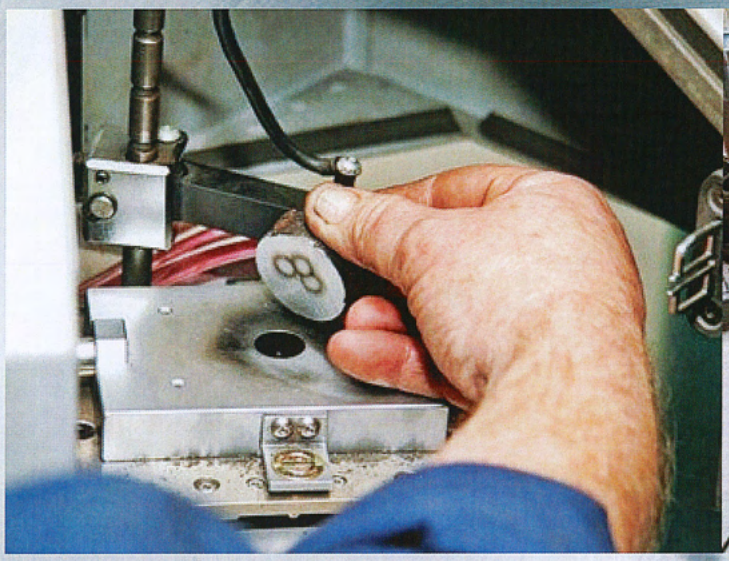
• Ferrous and Non Ferrous Casting • Patternmaking
• Moulding • Melting and Heat Treatment
Machining • Fabrication • Quality Controls

Certified System Quality ISO 9001

Inspection & Testing

- In-house Magnetic Particle (yoke, dry powder)
- Hardness Testers
- Atomic Emission Spectroscopic Chemical Analysis
- Dimensional/Visual
- Subcontract mechanical testing
- 4 x ARL 3460 Metals Analyser

Certified System
Quality
ISO 9001
SAI GLOBAL



People and Technology *for the future*

Skills development is a strong focus for White Industries with staff undertaking regular training on safety, production and machine operation skills.
Continuous improvement and innovation is a driver for the business.
Examples of this are:

- Use of Lean manufacturing principles in all operations.
- Annual visits to national and International Trade Exhibitions to assess the latest developments in automated moulding and foundry equipment as well as CNC machining and finishing equipment. Recent investments include a new furnace and USR sand reclamation equipment that reclaims over 90% of sand – delivering efficiency and environmental benefits.
- A proactive investment program in automated equipment to maintain a lead in productivity and efficiency of operation.
- A philosophy of 'investing for the future' in skills and equipment to maintain the long term competitiveness of the business.
- White Industries is a member and major sponsor of the Dalby Chamber of Commerce and is a Bronze Sponsor of Toowoomba and Surat Basin Enterprise

Dalby Chamber of Commerce & Industry

TSBE

Track Record

White Industries works with leading companies in all of the industry sectors it services. Examples of past work include:

- Materials development for GET mining components,
- Conversion of fabrications to castings for heavy transport suspension components,
- Cast material recommendations to suit customer applications,

- Providing advice to design engineers to ensure economic manufacturability of dragline rigging components.

- Development of a range of high precision cast turbocharger housings for world-renowned OEM,

- Axle-box, Brake and wheel components for rail rollingstock,

- Working with OEM/Tier 1 customers to deliver on time with conditional clauses.

- The ability to react to short lead times when required by customers.

- Production of pump components for leading OEMs.
  - Management Systems
  - Workplace Health and Safety

The company has a WHS policy that ensures that all employees, contactors and visitors are safe-guarded in all activities and areas, and that a safe workplace is provided. White Industries encourages reporting of all safety-related issues.

Some of our valued customers include;

SKF
MTQ Engine Systems Australia
Downer
WEIR MINERALS
Simplicity AUSTRALIA
KSB
ZEMEK ENGINEERING
FLOWSERVE
PENTAIR
RioTinto
RW ROGERS WILLEX
CONDAMINE DRILLING GROUP
RME
Finch THE GRAIN HANDLING SPECIALISTS
POWERTRANS Powerhaul Pty Limited
FLSmidth
QUEENSLAND IRRIGATION SERVICES
DRAKE making light work of heavy loads
Honeywell
JJ Richards & Sons Pty Ltd Total Waste Management
AURIZON
CQMS RAZER Mining's Edge
2MT
DAWN Quality Tools Vices & Clamps
BUNDABERG WALKERS

White Industries uses SYNCHRO

Quality System

White Industries has a Quality Management System endorsed to ISO 9001:2008. Comprehensive in-house Quality Procedure data sheets complement this endorsement. These data sheets cater for the standard type of workflow, together with any job/customer specific requirements.

Certified System ™
Quality
ISO 9001

Environmental Management System

White Industries has an environmental policy that minimises impacts on the environment. Manufacturing processes are continually being improved to minimise waste and any potential impact in the environment. Investment in new equipment is helping to reduce energy usage.

Risk Management System

Risk assessments are undertaken for all projects. The company has been operating for over 50 years and is financially strong.

Insurances

White Industries carries the following insurances:

- WorkCover.
- Public and product liability insurance.
- Customer patterns

Technology

White Industries uses Synchro 32 ERP software which provides full traceability of work and manages a library of past work. The company also uses 3D design software for pattern and mould manufacturing.

A family owned Australian business

• Ferrous and Non Ferrous Casting • Patternmaking • Moulding • Melting and Heat Treatment Machining • Fabrication • Quality Controls

Certified System
Quality
ISO 9001

Contact Details

Firm Name: White Industries

Street address:

- *Site 1* - **18130 Warrego Hwy Dalby, Qld 4405**
- *Site 2* **-Karrabin Rosewood Rd Karrabin, Qld 4306**

Phone: 07 4672 5800

Email: info@whiteindustries.com.au

Web Address: www.whiteindustries.com.au

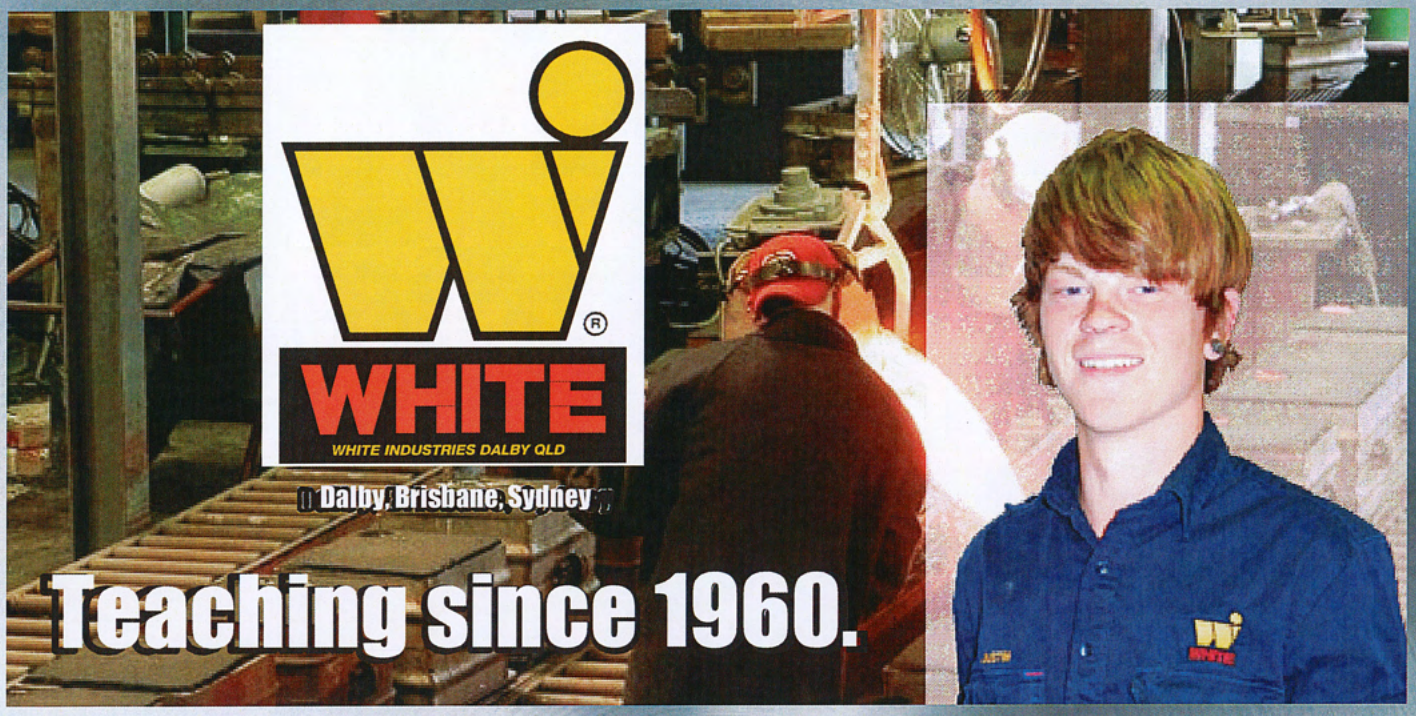
Postal Address: PO Box 350, Dalby, Qld. 4405

Year Established: 1960

ABN: 21 665 826 470

A family owned Australian business

• Ferrous and Non Ferrous Casting • Patternmaking • Moulding • Melting and Heat Treatment Machining • Fabrication • Quality Controls


WHITE
WHITE INDUSTRIES DALBY QLD
Dalby, Brisbane, Sydney
Teaching since 1960.

WHITE
Teaching since 1960.

WHITE
Metal Cast Component Solutions

WHITE
WHITE INDUSTRIES DALBY QLD
Dalby • Brisbane • Sydney
Metal Cast Component Solutions

WHITE INDUSTRIES
History and Growth

White industries was established in 1960 as a jobbing repair shop catering to the local farming community. Producing aluminium and bronze castings for local spare parts supply companies.

Since those early days the company has progressively grown to a stage where it now occupies a 2.4 Ha site with well over 6,500m2 of floor space.

White Industries has an impressive record in the provision of metal cast components and machining solutions. Our large modern manufacturing plant is constantly updating its equipment and facilities to be able to support your business with the best products and consistent results.

During the 1990s, CNC machinery was introduced to our machine shop, thus continuing to provide customers with a "One Stop Shop".

In the 2000's Whites purchased their BMD (German manufactured) automated greensand moulding line and increased melt capacity. In the following decade White Industries has continued to invest heavily back into the plant, with sand reclamation, articulated sand mixers for jobbing and recently acquired a new 3 tonne dedicated steel- melting induction furnace.

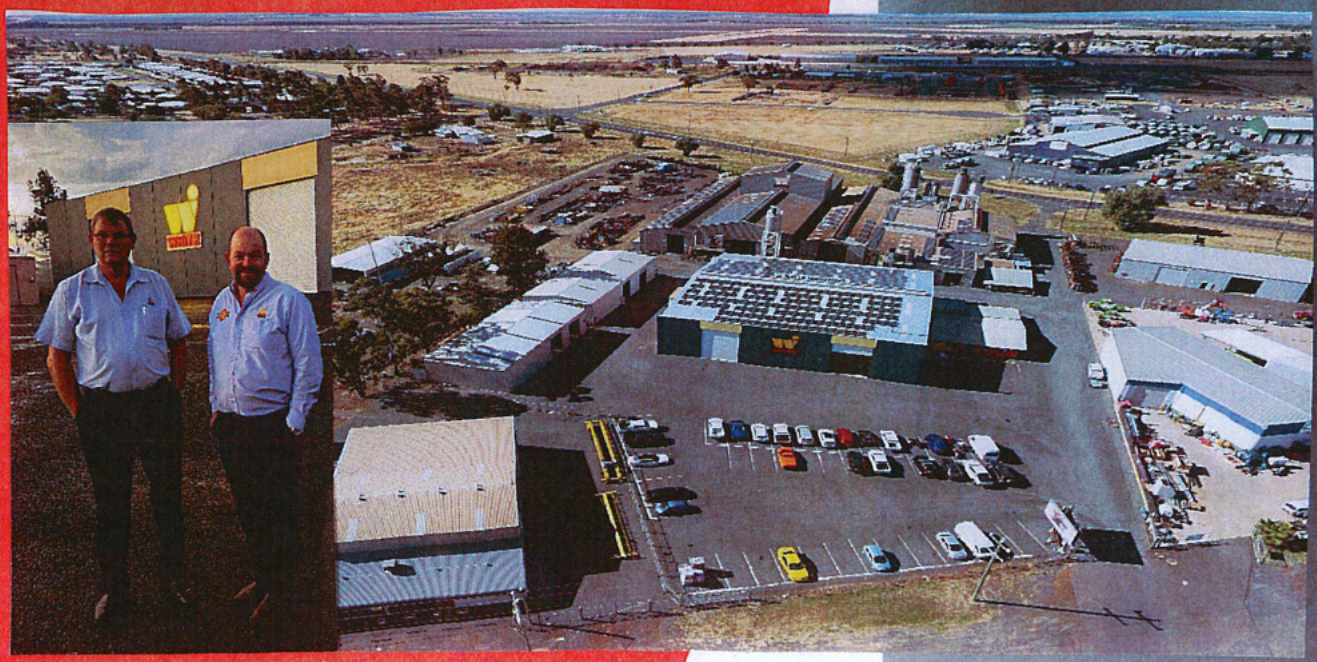
Looking forward – White Industries will continue to invest heavily in new and improved production equipment and methods.

Whites + Continuous Improvements = A consistently higher quality casting for you.

WHITE
WHITE INDUSTRIES DALBY QLD

Certified System
Quality
ISO 9001
SAI GLOBAL

HEAD OFFICE
18130 Warrego Highway
DALBY
PO Box 350 DALBY Qld 4405
Tel: 07 4672 5800
Fax: 07 4672 5899
info@whiteindustries.com.au



www.whiteindustries.com.au