



# CONNECT

Industrial Services and Supplies Pty Ltd



## A ONE-STOP-SHOP FOR ALL YOUR NEEDS

No matter what your engineering needs are, we can offer Design, Casting, Forging, Fabrication and Machining Solutions, sourced both locally and overseas, to take the worry out of the procurement process.

Connect Industrial has the experience, technical expertise, resources and knowledge to supply the best quality products available, at a world-competitive price.



*“The most efficient way to produce anything is to bring together under one management as many as possible of the activities needed to turn out the product.”*

**- Peter Druker,  
Business Strategist**

[www.connect-industrial.com.au](http://www.connect-industrial.com.au)

# CAPABILITIES

Drawing on 3 generations of experience in the foundry industry, Connect Industrial offers a complete range of casting services in Ferrous metals including:

## **MATERIALS:**

- Grey Irons
- Ductile Irons
- Steels
- Ni-Hards
- White Irons
- Manganese
- Exotic Material - Including Stainless Steels,
- And their alloys, etc



## **PROCESSES:**

- True Investment & Lost Wax - weight from 100 grams to less than 20 Kgs, medium to high volume
- Resin Sand Casting - weight < 500 Kgs, requiring good surface roughness & dimension
- Green Sand Casting - weight < 100 Kgs, economic and flexible. Small to medium volume
- CO2 hardened Sand Casting - Weight < 20,000 Kgs, common for steel casting
- Shell Molding Casting – Weight < 30 Kgs, suitable for medium to high volume iron casting
- Lost Foam Casting – weight up to 1000 Kgs, suitable for small job or products without impact requirements

We can source all your casting needs including:

- Draughting,
- Pattern Making,
- Machining to Your Specifications

No job is too big or too small.

Call us to get a quote on your job.

We can help you with the whole process to get the solution which is right for you.



# CAPABILITIES

## MACHINING:

- With local machine shops we can turn up to 6M length and swing 2M
- Horizontal bore with 2.5M table
- Vertical Bore 1M
- CNC - similar dimensions to above
- We can access much larger capacities overseas

## FORGINGS:

Forgings are TS16949 certified and supplying to Automobile Tier1 manufacturers, including ZF Germany, GKN etc. Our suppliers have 6 lines for precision hot forging. Annual capacity is 40,000 tons, current free capacity is 12,000 tons. Our forgers are used in the high volume automobile industry. So feasibility would rely on project size.

Process used can be electro-hydraulic hammer or pneumatic free drop hammers. Maximum unit weight is less than 10 tons.

We can also supply non-standard fasteners of in high volume.

## QUALITY CONTROL:

- Castings are analyzed and verified during sampling process. Once the sample is approved (chemistry, physical property, hardness, dimension), all parameters are fixed.
- Quality system uses ISO9001 principles.
- Spectrometer Analyzer is used for each melt - guaranteeing chemical accuracy before pouring. Random samples are taken from finished castings for another check. Heat numbers are recorded.
- Tensile and yield strength are provided after heat treatment of low alloy steel on request.
- Portable hardness tester and tabletop hardness tester (Rockwell & Brinell) are used in daily operations.
- Dedicated gauges and templates are designed for daily site inspections.
- Dimensions are inspected by the quality department during the process with the appropriate tooling and gauges.
- Key dimensions characteristics are charted and are subjected to 100% inspection before delivery..
- The Foundry's Quality Documents can be provided with delivery upon request.



# POWER STATIONS

## A SAMPLE OF THE VARIOUS PRODUCTS WE SUPPLY INCLUDES:

- Ash Crusher Parts - John Thomson, Megauldi, etc
- Liners - cast, rolled, hardened steel and clad
- Flytes and Shafts
- Conveyor Systems and their parts
- Gear Boxes - refurbished
- Chute Liners
- Screens
- Ball Mill Liners and Wedge Bars and their installation
- Balls and Rings
- Air Heater Baskets
- Parts to suit Raymond Mills
- Pulley, Sheave and Bogie Wheels
- Complete Impact Crushers (installed) and their wear parts
- Trunnions, Tuyers, Shafts & Kiln Sections, etc, and their installation
- Gear Cutting & Machining
- Various Valves, Pumps, Heat Exchangers and Filters
- Pipes and Bends - including Cement & Ceramic Lined
- Super Heater Parts



Mill Liners



Wedge Bars



Roll Crushers



Scraper Blades



Air Heater Baskets



Journals

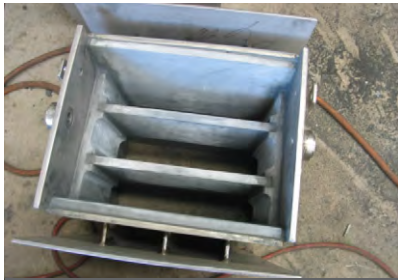


Ash Crusher Roll Supports



Connecting Link

# POWER STATIONS



Burner Entry Nozzles



Burner Entry Pipes



Roll Crusher Segments



Sag Mill Liners



Crusher Liners



Burner Elbow



Deflector Liners



Vane Segments



Double Back Bends



Ceramic Lined Pipes



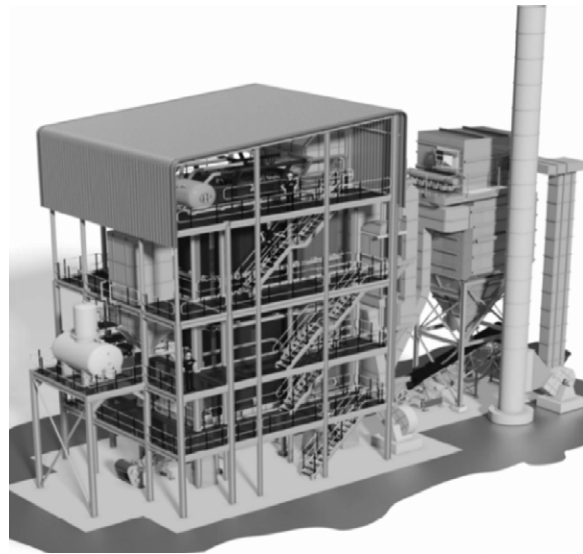
Flytes

# BOILERS

- New and Leased Boilers
- Boiler refurbishment
- Stokers
- Grates
- Ash Extraction Systems
- Heat Exchangers (Titanium, St/St, etc)
- Refractory
- Cyclones
- Pumps
- Valves
- Filters
- Various types of chains



Heat Exchangers



Refractory Bricks



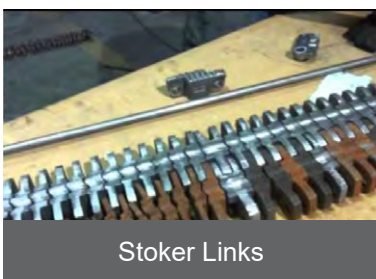
Cyclones



Louvres & Brackets



Firebars



Stoker Links



Valves



Ceramic Fibre Wool



Sprockets



Dome Valves



Tumble Wheels



Boiler Gates

# BOILERS



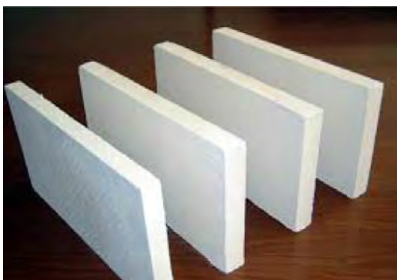
Drag Chain Links



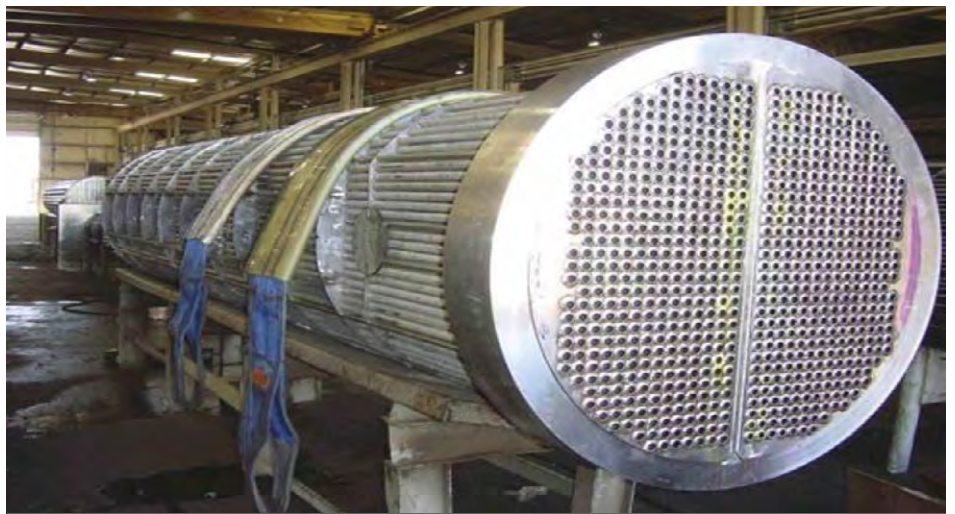
Water Heaters



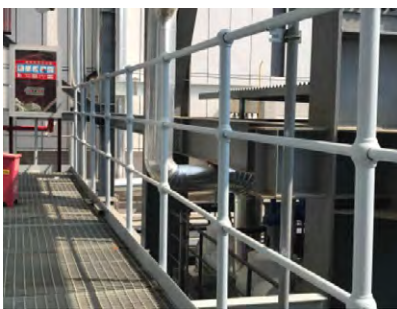
Globe Valves



Refractory Board



Boiler Tubes



Grates and Railings



Heat Exchangers

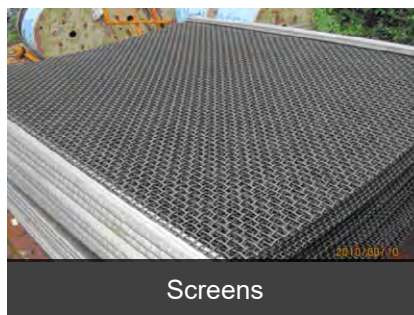
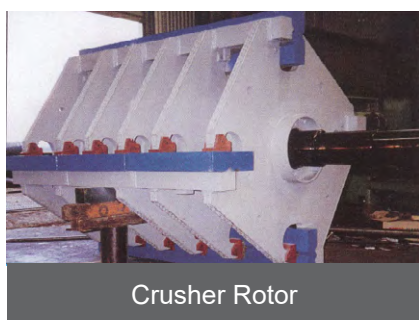


Biomass Gasifier

# QUARRIES AND MINES

We supply:

- Impact Crushers
  - Conveyor Systems and their parts
  - Hammer Mills (various)
  - Roll Crushers
  - Sizers
  - Gear Boxes - refurbished
  - Chute Liners
  - Screens
  - Liners – Manganese, Ni-Hard and Hi-Cr
  - Clad Liners
  - Shutes
- Conveyor Pulleys – new and refurbished
  - DZ Wear Liners (similar to Domite)
  - Wheels – Pulley & Sheave
  - Trunnions, Tuyers, etc
  - Sag Mill Liners



# CEMENT AND GENERAL

We supply:

- Kiln Sections and their installation
- Conveyor Systems and their parts
- Hammer Mills (various)
- Tuyres
- Trunnions
- Gear Boxes - refurbished
- Shafts, Bearings & Housings
- Grates



Trunnion Rollers



Rotor Shaft



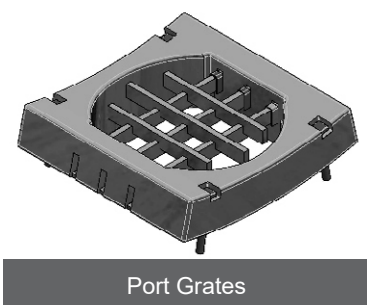
Gear Box (for repair)



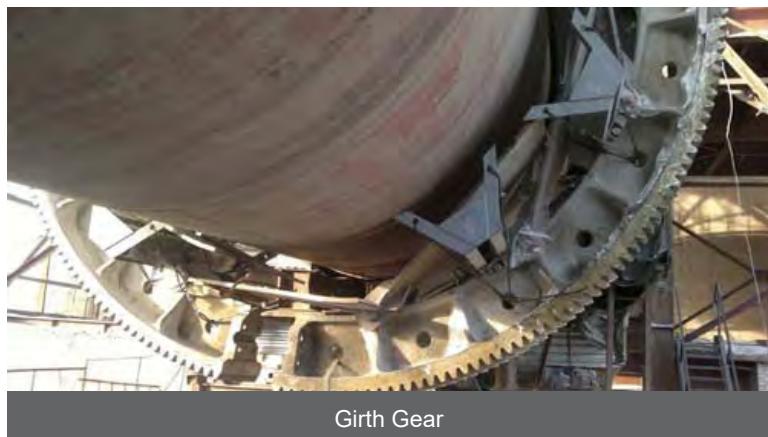
Shell Section



Hammer Mill



Port Grates

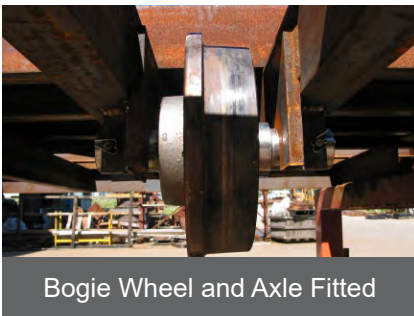


Girth Gear

# BRICKYARDS

We supply:

- Kiln Parts and their installation
- Refractory
- Kiln Carts
- Bogie Wheels
- Axles
- Conveyor Systems and their parts
- Hammer Mills (various)
- Roll Crusher Parts
- Impact Crushers
- Screens
- Grates



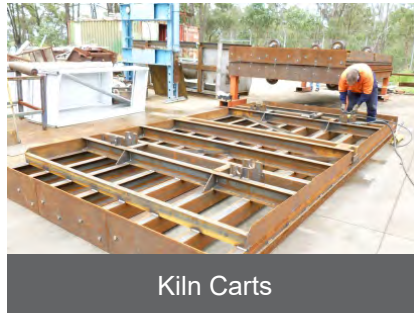
Bogie Wheel and Axle Fitted



Kiln Parts



Impact Crusher



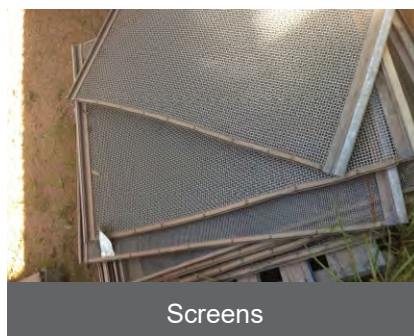
Kiln Carts



Outer Grid Plate



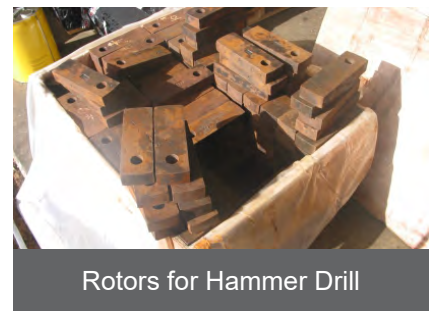
Refractory Bricks



Screens



Hammer for CVR Mill



Rotors for Hammer Drill



Inner Grid Plate



Bogie Wheels



Hammers for JCS Mill

# HIGH PERFORMANCE CONVEYOR PULLEY MANUFACTURE & REFURBISHING SERVICE

## BUILD SPECIFICATIONS

Pulley and pulley components can either be manufactured to client supplied drawings and specifications or supplied to specifications based on inhouse design. Note that all contracted design services are offered complete with engineer's certification and design data sheets.

## EXTENT OF MANUFACTURE

We can supply full replacement pulleys complete with shell, shaft, bearings, surface treatment and lagging etc  
OR

Manufacture can be limited by client's scope of works  
OR

OR

Pulley replacement components (i.e. shell or shaft etc)

## MANUFACTURE QUALITY

We offer a high level of quality assurance throughout the procurement and production processes.

When a new pulley order is entered into the job control and scheduling system, it is assigned both a job and serial number.

At every stage of procurement and manufacture, hold and check points are applied to ensure that any individual pulley meets the customer's specification in every detail.

On completion of manufacture and final quality check, pulley I pulley components (shell/shaft) are hard stamped to ensure traceability throughout the life .of the pulley.

## CLIENT INSPECTION

We understand that some clients prefer to witness crucial assembly processes such as locking element torque settings and bearing clearance settings. In this instance, we work with clients to achieve their ultimate satisfaction and allocate dates in advance for such inspections.

## TRANSPORT

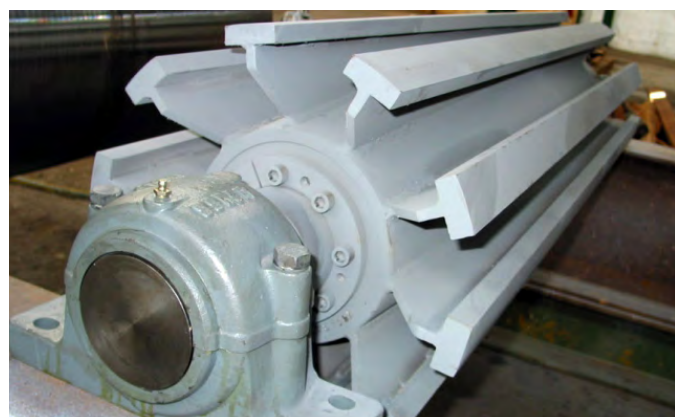
We take extreme care with packing, out-loading and handling of pulleys to ensure that no transit damage occurs.

All pulleys are transported on fabricated steel skids and are designed specifically for fork truck handling.

Where pulley mass is deemed to be excessive for available fork trucks, skids would be supplied with crane lift points (4 places). In this instance, skids are made with engineer's certification.

Where pulleys are supplied with bearings and bearing housings would be adequately supported to eliminate brinelling during transport. Where pulleys are supplied with rubber or polyurethane lagging, pulley shells are supported on soft packing.

When pulleys are supplied with ceramic lagging, the entire pulley lagging is wrapped with a protective sheath. Where pulleys are supplied complete with shafts but without bearings or drive pulleys are supplied complete with shafts, bearing journals and drive extensions are wrapped with suitable protection.



## DOCUMENTATION SUPPLIED WITH PULLEYS

1. Material Certification
2. Check Sheets & "As Built" Dimensions
3. Heat Treatment Data
4. NATA Ultrasonic Testing (UT) Shaft Material Certification
5. NATA UT & Mag Particle Shell Seam & Circ Weld Certification
6. Design Data Sheets (If Applicable)

### NOTE:

Client purchase order numbers and serial numbers are included on all relevant documentation.

### PULLEY REFURBISHMENT SERVICE

We offer a complete pulley rebuild service including dismantling and assessment, and preparation and submission of pulley assessment reports.

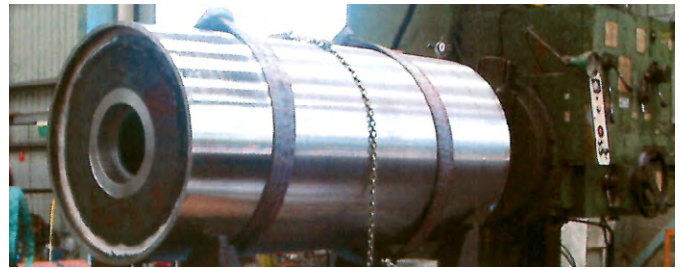
Furthermore, we make recommendations with respect to the likely economical repair or replacement of pulley or pulley components.

### WARRANTY

All manufactured pulleys or pulley components are warranted against faulty materials and/or workmanship for a period of 12 months from date of commissioning or 18 months from date of supply (whichever is sooner).

### NOTE:

Warranty claims must be related to the integrity of the manufacture of a pulley or related components and not associated with operational causes. Where failure cause is not clearly evident, an independent consultant would be contracted to assess all aspects of failure and report accordingly.



# CONNECT

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