

# AUSTRALIAN ENGINEERING WORLDWIDE

INNOVATIVE ENGINEERED EQUIPMENT AND SYSTEMS  
AFTERMARKET PARTS AND SERVICE  
CONTROLS AND AUTOMATION



**TRANSMIN**

# AUSTRALIAN ENGINEERING WORLDWIDE

**Transmin is a world-class provider of innovative engineered equipment, supplies and services to the resources and bulk materials handling industries.**

Established in Perth, Western Australia in 1987, Transmin sets the standard for mechanical equipment design and application, led by our specialist Engineering division, and backed by our dedicated Aftermarket division. Transmin's Control and Automation division delivers award-winning software solutions specialising in remote equipment operation and systems integrations.

The Transmin equipment range covers most bulk materials-handling applications, including; feeders and conveyors, bulk loading and unloading hoppers, rockbreakers/hydraulic boom systems, bin isolation gates, reagent preparation and processing facilities, lime preparation facilities, ball charging systems and silos.



-  Transmin Head Office
-  Transmin Offices/Agencies
-  Countries in which Transmin equipment is deployed



# TRANSMIN EQUIPMENT

## TRANSMIN INNOVATION SINCE 1987

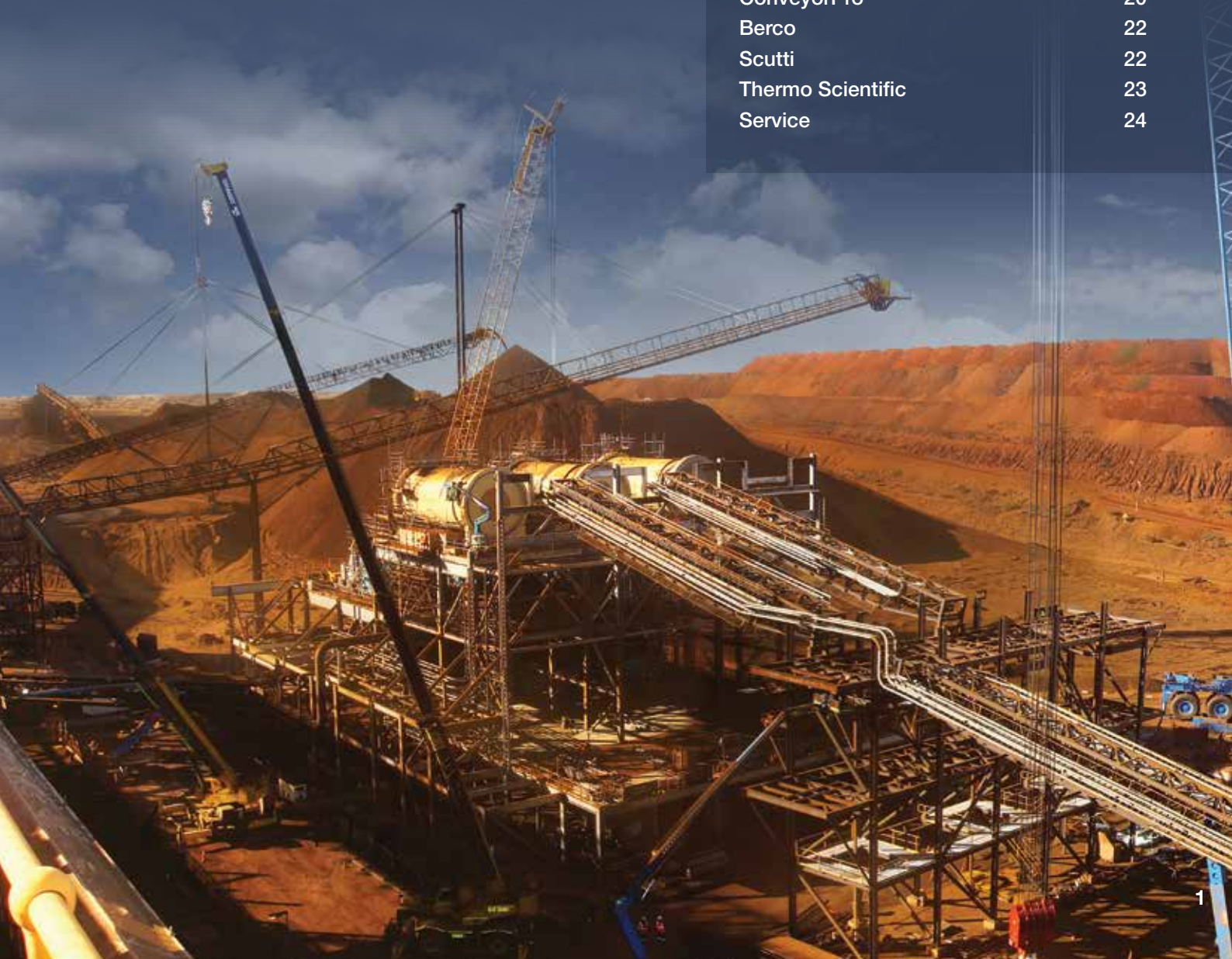
Our reputation has grown alongside our business. Since the company's inception, Transmin's commitment to innovation and integrity has laid the foundation for longstanding relationships with the world's leading mining companies.

## EQUIPMENT YOU CAN RELY ON

Heavy duty industry demands equipment that delivers reliability and performance. Transmin seeks to deliver on this demand every time.

We specialise in bulk materials handling, processing and general mining equipment - designed and engineered by experienced mechanical engineers and drafters, using the latest modeling and finite element analysis techniques.

Low Profile Feeder™ (LPF)	2
BoomerHD Rockbreaker Booms	6
RockLogic	8
Bin Isolation Gates	10
Lime Mixing & Dosing Plants	12
Flocculant Mixing Systems	14
Ball Charging & Grinding	
Media Handling	16
Bulk Storage Silos	17
Special Products & Projects	18
Aftermarket	19
ConveyorPro	20
Berco	22
Scutti	22
Thermo Scientific	23
Service	24



# LOW PROFILE FEEDER



## Reversible Feeding

**Transmin's Low Profile Feeder™ (LPF) is the original hybrid feeder delivering the advantages of both belt and apron feeders, plus additional benefits over conventional feeder technology that are unique to Transmin.**

LPF capacities vary according to application, although rates of 10,000tph are possible. The LPF is built with trusted components, proven in the most arduous applications and with a low ongoing cost of ownership.

The LPF has the unique ability to incorporate a bend transition, which means a change of direction from horizontal to 25° inclined can be achieved without the requirement of a second machine; resulting in improved space utilisation, flexibility of plant layout and elimination of transfer points between conveyors, thereby reducing civil costs.

### TYPICAL INDUSTRIES

- ▶ Mining and mineral processing
- ▶ Ports
- ▶ Cement and building products
- ▶ Recycling and waste processing
- ▶ Power generation
- ▶ Fertiliser and chemical

### MATERIALS

- ▶ Various ores
- ▶ Iron ore, tailings and stockpiled ores
- ▶ Coal
- ▶ Fertilisers
- ▶ Metallic concentrates
- ▶ Filter cakes
- ▶ Wood chips
- ▶ Cement clinker
- ▶ Sewage sludge
- ▶ Refuse
- ▶ Biomass
- ▶ Construction wastes
- ▶ Aggregate

- ▶ Lengths up to 56m
- ▶ Incline angles up to 25°
- ▶ Belt widths up to 4.0m
- ▶ Weighing of material in transit
- ▶ One sided belt fastening
- ▶ Reversing capability for discharge at both ends
- ▶ Numerous installations around the world

**“In fairness, the machine was used above and beyond its initial design spec and it's never missed a beat. This thing is bullet proof.”**

STUART TAYLOR, Karara Project



✔  
**Less Spillage**

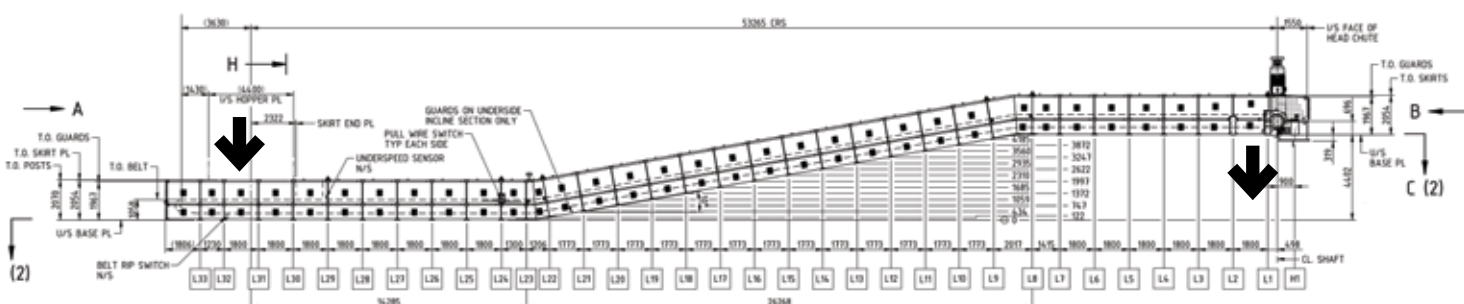
✔  
**Miss Tracking Eliminated**

✔  
**Belt Slippage Eliminated**

✔  
**Lowest Possible Profile**



FEATURES	TRANSMIN LPF™	CONVENTIONAL BELT FEEDER	APRON FEEDER
Space occupied within the plant	✔ Minimal - e.g. 3.0m wide belt, 4000tph iron ore = 1.0m vertical height	✘ Can be substantial when high belt tensions present due to large head pulley diameters	✘ Can be substantial, especially when spillage conveyors are required
Belt tracking	✔ No adjustments necessary	✘ Belts can mis-track and require adjustment	✔ No adjustments necessary
Belt slippage	✔ Eliminated	✘ Belt can slip	✔ N/A - no slip
Product spillage	✔ Minimal	✔ Minimal	✘ Pan leakage
Requirement for spillage conveyors	✔ Not required	✔ Not required	✘ Frequently required
Ease of cleaning	✔ Conventional belt cleaners	✔ Full width conventional belt cleaners	✘ Can be difficult to clean effectively
Belt change out	✔ Simple modular sections	✘ Belt splicing station required	✔ N/A
Elevated discharge	✔ Can change direction by the introduction of a bend	✘ Limited to horizontal or inclined only	✘ Limited to horizontal or inclined only
Suitability for ROM Dump Applications	✔ Consult Transmin	✘ Generally not suitable	✔ Proven for large run of mine dump applications





# FEATURES



**Flow Control Gates**  
Fixed or adjustable



**ProEdge**  
Hot vulcanised belt edge



**KwiksertPro**  
One sided belt fastening



**Elevated discharge capability**



**Wear liners to suit material being handled**



**Conventional belt cleaners are used**



**Various drive styles**



**Belt protection bars for sharp or lumpy materials**



**In process weighing**



**Various bearing lubrication options**



**Cross slats support the belt**



**Optional weather enclosure**

## FULL RANGE FROM LIGHT TO HEAVY DUTY



### Round Link Chain - RL Series

- ▶ Light to medium duties
- ▶ Standard round link chain
- ▶ Segmented or individual toothed sprockets
- ▶ No pins, bushes or bearings
- ▶ Belt widths up to 2.0m
- ▶ Agricultural, waste and general industrial



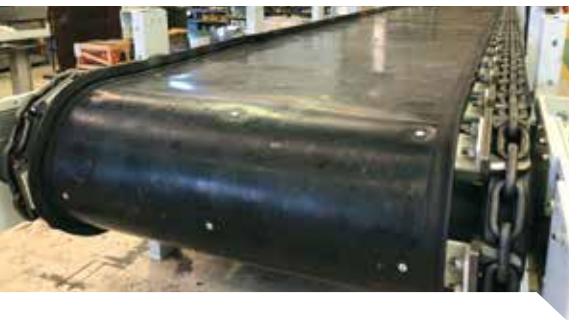
### Roller Chain - RC Series

- ▶ Medium duties
- ▶ Standard RC6 size
- ▶ Various pin, bush and bearing options
- ▶ Belt widths up to 4.0m
- ▶ Medium to heavy industrial, cement and mining



### Track Chain - D Series

- ▶ Heavy duty applications
- ▶ Standard D4 size
- ▶ D6 and D8 models available
- ▶ SALT chain, sealed for life
- ▶ Belt widths up to 4.0m
- ▶ Mining and heavy industrial



### CAPACITY CHART

STANDARD BELT WIDTH (mm)	EFFECTIVE SKIRTED WIDTH (mm)	NOMINAL CAPACITY MAXIMUM (m <sup>3</sup> /hr)
800	600	350
1200	1000	1000
1600	1400	1500
2000	1800	2000
2600	2400	3600
3200	3000	4800
4000	3800	8200

\*For confirmation on specific applications please consult Transmin direct.

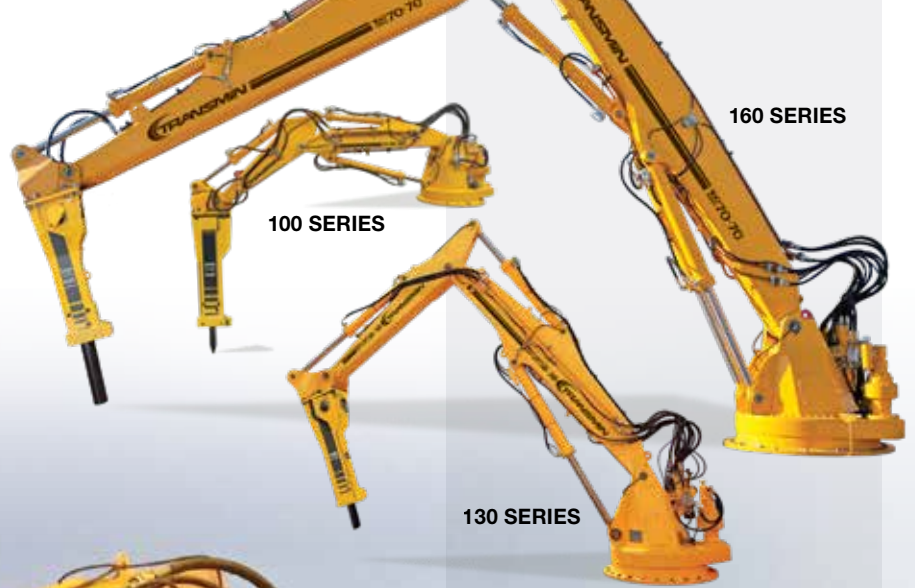
# BoomerHD ROCKBREAKER BOOMS



With many years of design evolution and experience in the world's largest grizzly and gyratory crusher applications, Transmin has enhanced its range of rockbreaking solutions to give customers a rockbreaker which is stronger, faster and has increased durability than previous models.

Made up of three models; 100, 130 and 160 Series\* these rockbreakers are some of the largest rockbreakers in the world and are deployed in the toughest conditions imaginable. Engineered for large-scale mining and minerals processing plants, these rockbreakers offer longer periods between maintenance requirements and achieves lower life cycle costs.

\* Larger 200 Series available on request.



## ROCKBREAKERS

- ▶ Suitable for all conditions; arctic, tropical, underground and high elevations
- ▶ Remote control available via the RockLogic automation package
- ▶ Recommended for use with Epiroc hammers however suitable for all hydraulic attachments
- ▶ Training packages available





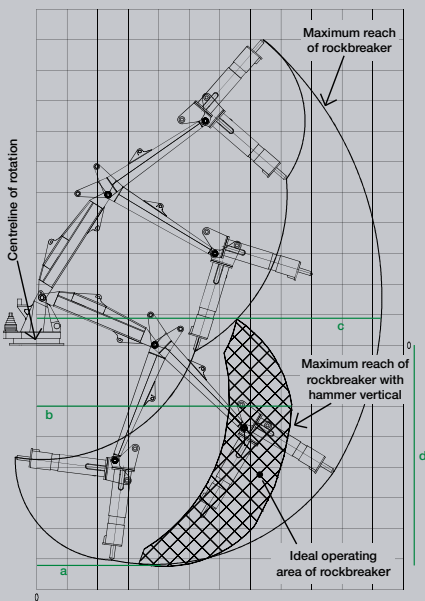
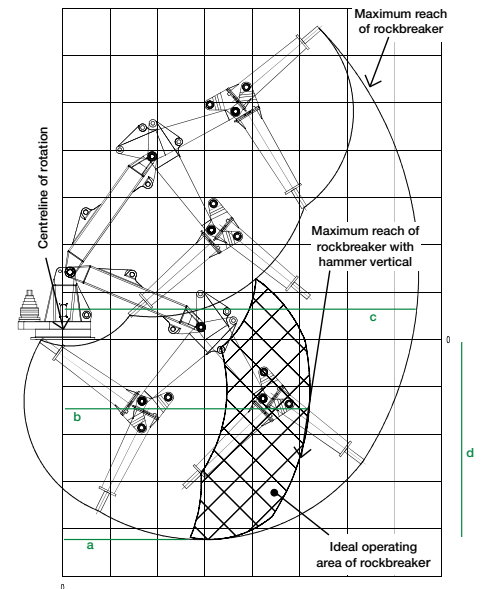
## 100 Series

The Transmin 100 Series Rockbreakers are designed and manufactured to provide a strong, economical boom systems with heavy duty slew bearing for typical mining and quarrying applications such as jaw crushers and grizzly's.

100 SERIES	
Vertical Reach*	up to 6.9m
Horizontal Reach	up to 10.6m
Rock UCS	60~320MPa

\* Hammer orientation vertical

MODELS	30-20	30-30	40-30	40-40
Horizontal reach from C/L of mount with hammer vertical (b)*	5.9m	6.9m	7.8m	8.8m
Maximum horizontal reach with hammer extended (c)	7.7m	8.7m	9.6m	10.6m
Vertical reach below base RL (d)*	4.4m	5.4m	5.8m	6.9m



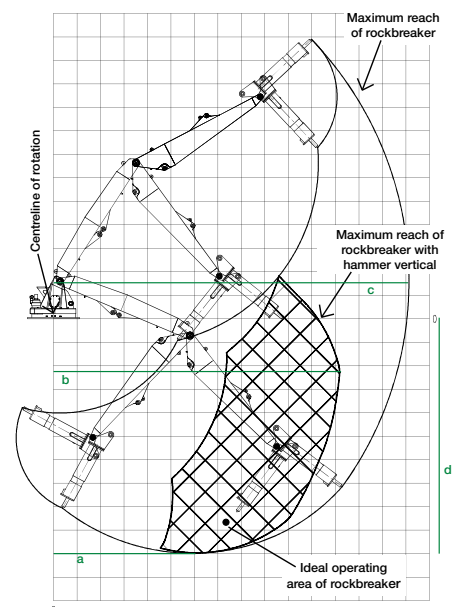
## 130 Series

The Transmin 130 Series Rockbreakers will take all that you can throw at them while delivering excellent performance. Placed over a large grizzly or crusher the Series 130 Rockbreaker will clear any blockages with ease.

130 SERIES	
Vertical Reach*	up to 8.7m
Horizontal Reach	up to 13.8m
Rock UCS	100~320MPa

\* Hammer orientation vertical

MODELS	40-40	50-40	50-50	60-50
Horizontal reach from C/L of mount with hammer vertical (b)*	9.0m	9.9m	10.9m	11.9m
Maximum horizontal reach with hammer extended (c)	10.9m	11.8m	12.8m	13.8m
Vertical reach below base RL (d)*	7.0m	7.3m	8.3m	8.7m



## 160 Series

The Transmin 160 Series Rockbreaker comes with a standard 270°, or optional 360° slew, along with twin high strength planetary gearboxes. These huge machines make light work of the world's biggest gyratory crushers and grizzly screens.

160 SERIES	
Vertical Reach*	up to 11.8m
Horizontal Reach	up to 17.5m
Rock UCS	160~320MPa Plus

\* Hammer orientation vertical

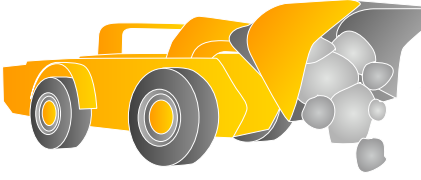
MODELS	60-60	70-70
Horizontal reach from C/L of mount with hammer vertical (b)*	13.1m	15.1m
Maximum horizontal reach with hammer extended (c)	15.1m	17.5m
Vertical reach below base RL (d)*	9.9m	11.8m



## ROCKLOGIC

# INTELLIGENT ROCKBREAKER CONTROL

The RockLogic™ Intelligent Rockbreaker Control System maximises safety, increases productivity and reduces downtime and maintenance costs through the systems' advanced suite of control modules.



Plant & Vehicle

Operation Workstation (Remote location)



E-Stop



Instr

Inform

- ✔ **Improve safety and productivity with remote operation.** Reduce personnel fatigue and heat stress. Remove personnel from flyrock, dust, noise and vibration hazards.
- ✔ **Control multiple rock breakers from one centralised remote location.** For high output mines, multiple rock breakers at different crushing stations can be controlled efficiently from one control centre, improving staff utilisation.
- ✔ **Improve rock breaker efficiency with automated movements.** Go to park and deploy positions with the press of a button, minimising crushing delays.
- ✔ **Eliminate site damage with collision avoidance.** Prevent unnecessary downtime by eliminating damage to rock breaker and surrounding plant equipment with customised collision avoidance software.

- ✔ **Increase throughput via improved communication between equipment with plant & process integration.** Signals to and from vehicles and plant equipment to automatically retract the rock breaker for continuous crushing operation.
- ✔ **Reduce the rock breaker operating costs with preventative maintenance.** Smoother rock breaker movements, cylinder sensing, data logging and collision avoidance minimises component wear and dramatically reduces on-site maintenance costs.
- ✔ **Integrate your safety procedures with SafeLogic.** A tailored programmable safety system with accommodation for isolation gates and E-Stops saves lives. Available as a standalone product.
- ✔ **ZoneLogic - an economical version of the full automatic system.** Suitable for retrofitting to all existing rock breakers. Provides configurable slew limiting. Create slow down zones to restrict rock breaker speeds. Available as a stand alone product.

**BENEFITS**

- ▶ Improve safety by eliminating hazards
- ▶ Improve production capacity/throughput
- ▶ Increase rock breaking efficiency
- ▶ Improve staff utilisation and reduce reliance on fifo
- ▶ Reduce downtime and maintenance costs
- ▶ Complete integration with site operations
- ▶ Operation from remote operation centres.



# BIN ISOLATION GATES

Developed primarily for the needs of the iron ore industry, Transmin designs and manufactures some of the largest bin isolation gates in operation with opening apertures up to 12.0m long by 3.0m wide and materials after the primary crusher.

Most designs feature hydraulic operation using Transmin in-house designed cylinders and hydraulic power units. In addition, electric and pneumatic actuation has been supplied on the more lightly loaded duties.

Transmin also has the capability to design special gates including single or double clam shell type gates, diverter or traveling gates.

## SINGLE OR DOUBLE SLIDING PLATES

Dependent upon the size of the aperture to be isolated, Transmin designs feature either a single-gate plate or double-gate plates, closing from each end and overlapping in the center.

Gates over approximately 3m long will utilise double plates to optimise the cylinder size to isolate even the largest apertures.

## WEAR LINERS

Wear liners are fitted for maximum durability and to protect the high wear edges and changes in direction of material flow.

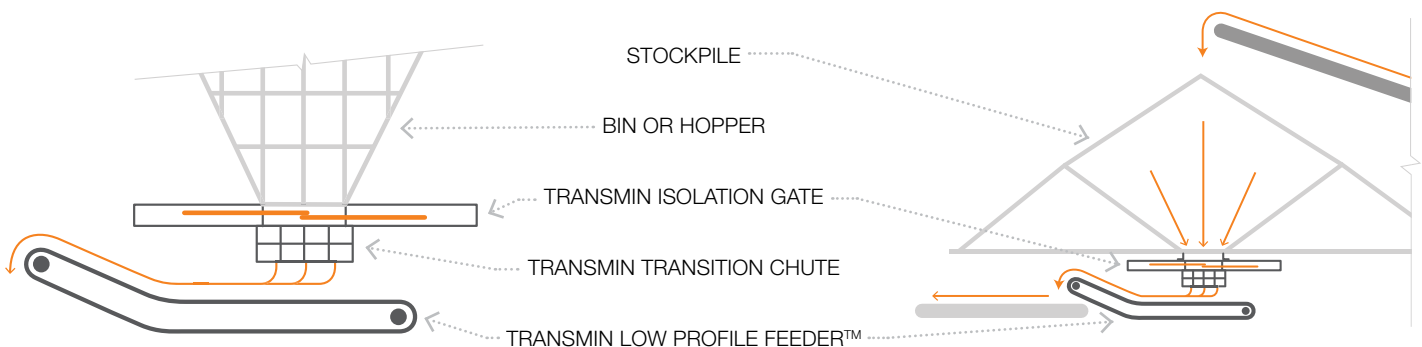
## FEATURES

- ▶ **Complete Isolation Safety**  
Isolation gates are primarily fitted to safely isolate downstream equipment such as Low Profile Feeders, belt feeders, screens and apron feeders, so they can be removed or worked on during maintenance site campaigns.
- ▶ **Hydraulic Power Units**  
Unique hydraulic power packs with simple local control panels can be built to Transmin or client specifications.
- ▶ **Diverse Custom Options**  
Transmin can customise our range of gates to suit a myriad of applications including diverter or high capacity flow conditions of aggressive materials.



## APPLICATIONS

Primary applications include stockpile outlets, dump hoppers and screen feeding bins.

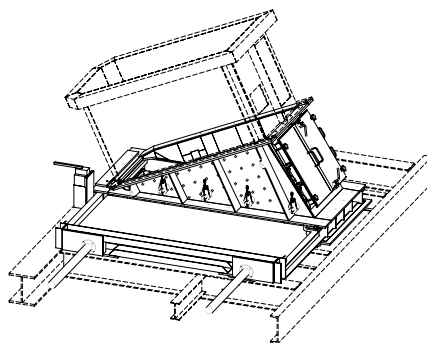




## Diverter Gates



## Local Operator Panel



## Maintenance Gates

Designed as a platform to allow maintenance personnel quick and safe access for maintenance such as high wearing areas in chutes.

## Hydraulic Power Units



# LIME MIXING & DOSING PLANTS



Since inception in 1987, Transmin has been designing systems to handle, store and process lime products, predominantly to the gold, minerals processing and water industries.

We are the largest specialist supplier of lime plants in Australia. 100's of successful installations have been completed in Australia and Overseas.

Generally, customers will be using hydrated or quicklime (Calcium oxide) within their process to control pH. Transmin has supplied numerous installations from simple lime silos to complete turnkey lime slaking facilities.

We have developed a range of efficient cost effective slaking systems comprising of roller mounted ball mills Classification is carried out where necessary by cyclones included within the circuit.

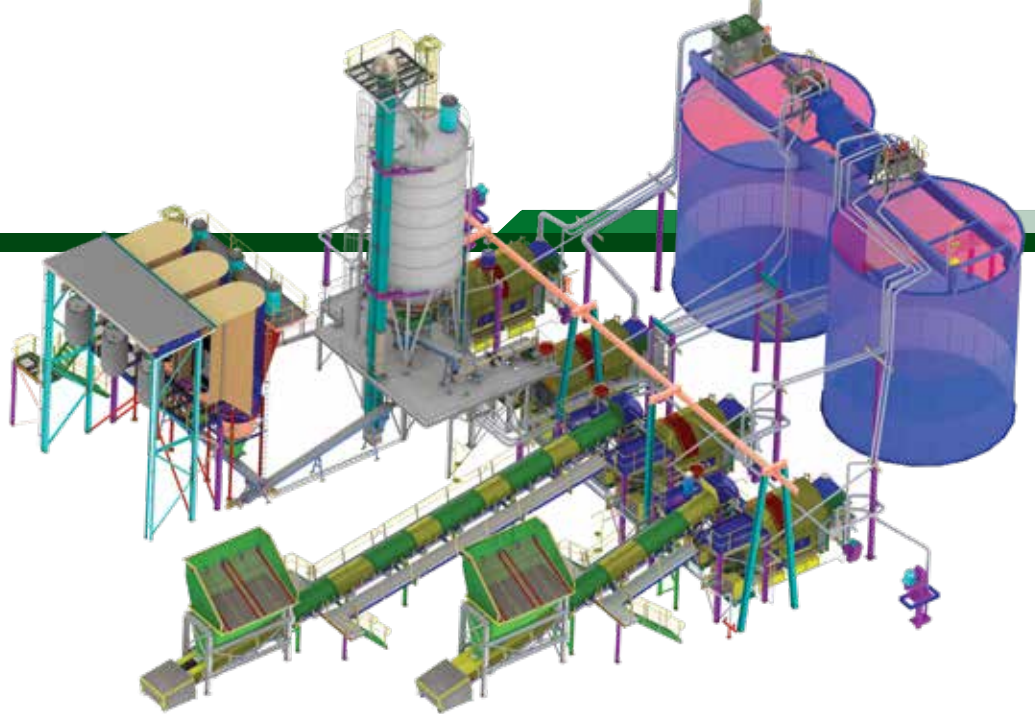
A full turnkey service is available from concept development through design, manufacture, installation and commissioning including electrical controls and civil works.

In addition to supplying systems for lime, Transmin has also successfully adapted the concept for cement, dolomite, soda ash, magnesium oxide and other mineral powders and reagents.

## BENEFITS

- ▶ **Processing**  
Slaking and grinding mills of the roller mounted or vertical type. Grind performance to suit client process requirements.
- ▶ **Receival**  
Intake of lime via bulk bag or pressurised vehicle.
- ▶ **Storage**  
Single or multiple silos dependent upon site storage requirements.
- ▶ **Wetting**  
Pre-wetting prior to mill for control of dust.
- ▶ **Limestone**  
Separate limestone grinding facilities available.
- ▶ **Milk of Lime Storage**  
Tankage is either site built or supplied complete.





## Hydrated Lime Mixing Facilities

Simple and cost effective, Transmin has a range of components available to custom design a hydrated Lime Mixing Plant to meet any requirement.

Depending on the system capacity and the preferred method of storage, the system can accept product from pressurised road tanker or bulka-bag, with total storage capacity to suit the plant's individual needs. Transmin's extensive range of bag breakers, pneumatic transfer systems and pre-wetting units will ensure reliable trouble free operation.

High accuracy mixing can be achieved using loss-in-weight or weigh screw feeder systems to dose the lime in to the slurry mixing tank.



## Full Lime Slaking Plants

For those installations requiring a greater production of Milk of Lime (MOL) a complete Lime Slaking Plant may be the preferred option. These systems will typically receive quicklime from a pneumatic road or rail tanker and total site storage can range from fifty to several thousand tonnes of dry quicklime.

The dry product is automatically metered into the Lime Slaking Ball Mill by the integrated PLC control system. This system maintains the water set point and adjusts the feed rate of quicklime to maintain an efficient Slaking reaction temperature. Depending on site requirements, either an open or closed loop grinding system can be offered.

As part of the package, a full compliment of agitated mixing, storage and ageing tanks is available, complete with transfer pumps, piping, valving and level control instrumentation and monitoring. An option for automatic MOL pipeline flushing is also available.

High efficiency pre-wetting units and fume extraction scrubbers are a standard feature of all Transmin Ball Mill slaking plants.

## Other Lime Applications

- ▶ Flue Gas Desulphurisation (FGD) lime dosing systems.
- ▶ Dry lime dosing onto Mill Feed Belts for pH control.
- ▶ Heap Leach MOL dosing for pH control.
- ▶ Calcined lime grinding, conveying and storage systems for lime manufacturers.
- ▶ Large capacity lime ageing tanks.
- ▶ Sea container unloading facilities - separate brochure available.
- ▶ Limestone feeding, grinding & mixing systems.
- ▶ Water treatment pH Control.
- ▶ Waste water treatment neutralisation.

## Roller Mounted Ball Mills

Transmin Roller Mounted Ball Mills are a low cost, easily installed and maintained solution for many small capacity wet grinding operations. Designed for either closed or open circuit grinding.

Also available is the new Trunion drive model with a simplified drive mechanism incorporating a Trunion ring on the front face.

F80 = 2mm P80 = 75µm		
MILL MODEL	STANDARD DRIVE (kW)	QUICKLIME AVERAGE THROUGHPUT (t/h)
1.0 x 1.5	11	0.45
1.2 x 3.0	45	2.0
1.6 x 3.6	90	5.5
1.8 x 3.6	132	8.0
2.0 x 4.0	132 + 75 <sup>#</sup>	12.0
2.2 x 4.4	185 + 75 <sup>#</sup>	18.0

\*Other sizes/duties are available upon request.  
<sup>#</sup>Primary and secondary drive sizes.

# FLOCCULANT MIXING SYSTEMS

**Flocculant preparation has been a mainstay of Transmin's business and extends to multiple reagent systems including guar, starch, depressant, coagulant and frother preparation systems. Transmin has experience in the preparation of liquid solutions for reagents such as soda ash, magnesia, ammonium sulphate, fluorosilicate, xanthate, PAC and other liquids.**

Transmin's bulk material handling expertise and the technical knowledge of some of the world's largest manufacturers of polyacrylamide flocculants, has resulted in the development of a range of fully automated Polymix flocculant preparation systems.

Each system has identical standardised control and mechanical design philosophies with changes in tank and equipment sizes and capacities. This high degree of standardisation reduces delivery lead times and allows for optimised spares inventory support.

Utilising this knowledge gained on Polymix systems, Transmin has expanded its range from 4kg/h throughput all the way upto 472kg/h throughput. These high capacity systems are used for the treatment of large volumes of tailings generated by mines.

The high throughput systems can utilise large capacity storage silos filled by bulk tanker truck delivery. Capacities for silos are often chosen for 7 or 14 days worth of dry polymer storage.

Further to dry storage, storage of the mixed polymer solution is done in large capacity tanks, usually sized with 6 to 12 hours of storage capacity.

Other storage durations can easily be accommodated, depending on customer preference.



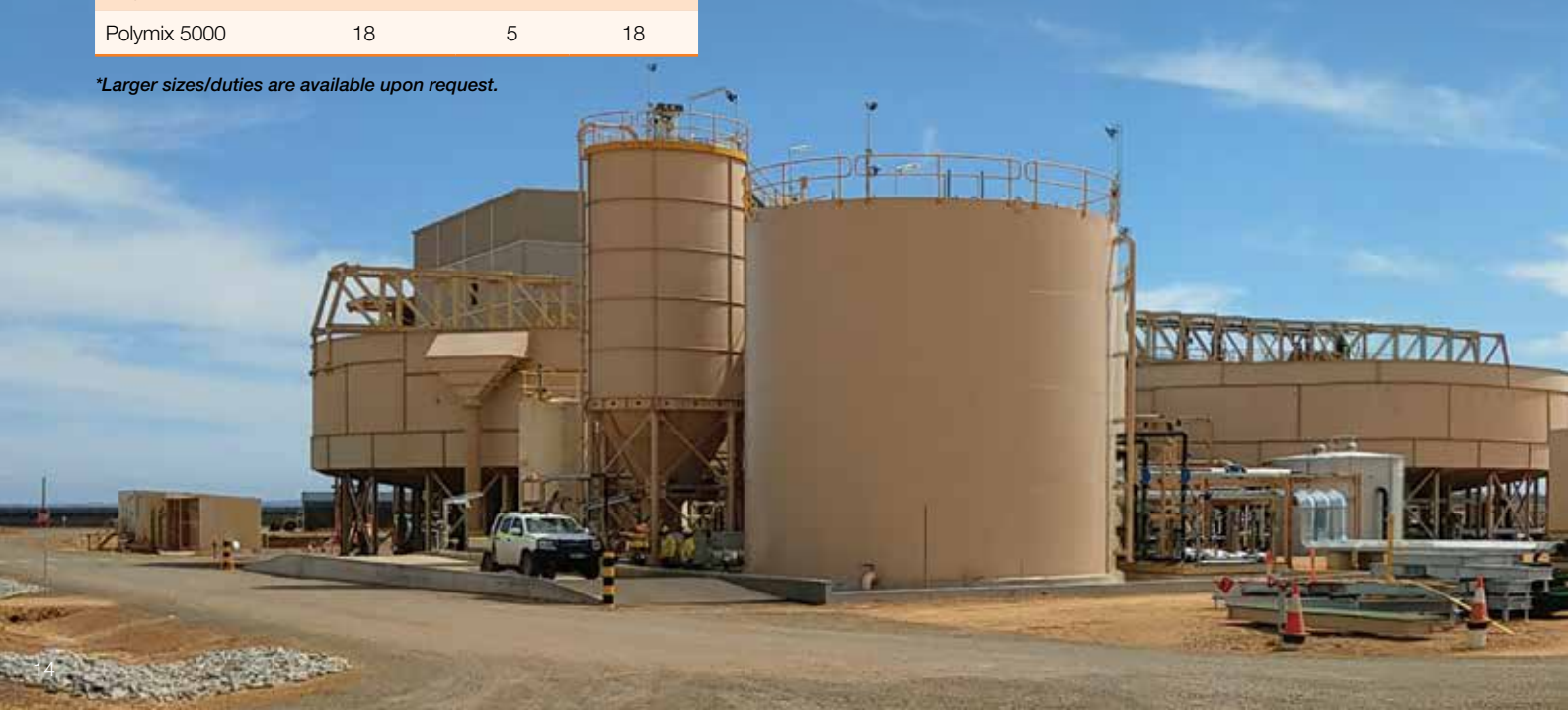
## FEATURES

- ▶ Simple modular construction and efficient design ensures easy maintenance, fault finding, parts replacement and reliable operation.
- ▶ Heated Cone within dry feed system ensures flocculant powder is suitably dry to ensure efficient pneumatic conveying to wetting head.
- ▶ Automated control with minimal operational involvement other than loading bulk or single bags into the storage hopper at pre-set frequencies. Larger systems use tanker truck fed silos.
- ▶ Remote monitoring of system is easily connected.
- ▶ Safe and easy hopper loading bag breaker with bag loading bay and access ladder to the hopper inlet.
- ▶ Sensible layout and design results in minimal splashing of flocculant solution, with platform layouts



VOLUMES			
MODEL	FLOCCULANT THROUGHPUT (kg/h)	MIX TANK (m <sup>3</sup> )	STORAGE TANK (m <sup>3</sup> )
Polymix 1000	4	1	2
Polymix 2000	7	2	4
Polymix 4000	11.5	4	8
Polymix 5000	18	5	18

*\*Larger sizes/duties are available upon request.*





enabling an easy and safe wash down for tank surfaces. Efficient spatial design of system ensures minimal plant footprint.

- ▶ All mechanical equipment is sufficiently rated for external operation, and is sufficiently shrouded from wash down.
- ▶ Optional flocculant dosing pumps and control packages with dry run protection if required.
- ▶ Polymix control panel positioned on the flocculant access platform as an integral part of the modularised package, providing easy access and observation of system control.
- ▶ Simple external operator adjustments for required process control exist on the main control panel as well as a fail-safe emergency stop facility.
- ▶ Blower ducting is joined by simple couplings for flexibility of installation and easy pipe removal for maintenance and cleaning.

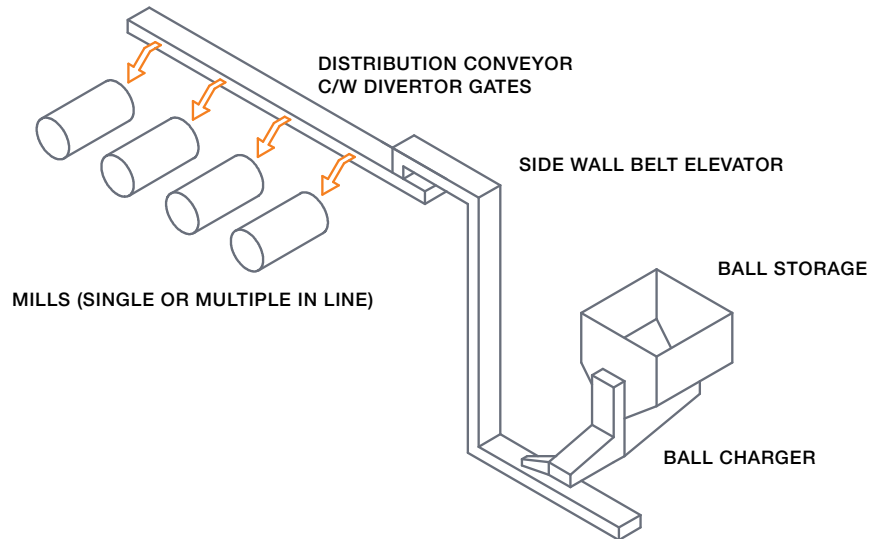


# BALL CHARGING & GRINDING MEDIA HANDLING

Transmin has a range of systems available to safely store and feed balls from simple kibbles through to complex handling systems comprising of storage hoppers connected to ball feeders of the cassette or 'star feeder' type. These devices can feed directly into mill feed chutes or conveyors which are often the most cost effective solution.

For larger plants we incorporate side wall 'pocket belt' conveyors to elevate the balls within the plant and then transfer to flat belt conveyors incorporating multiple mill feed stations in the form of pneumatic ploughs and gates to feed multiple mills on demand. Recent projects have included feed conveyors over 100m long with up to five outlet ploughs.

## COMPLETE BALL HANDLING SYSTEMS



## BENEFITS

- ▶ **Standard Design**  
Transmin has four standard designs that are safe and compact to use with FEL, drum or bags of balls.
- ▶ **Self Clearing**  
A self clearing mechanism is utilised to prevent jamming of balls.
- ▶ **Meter Rate**  
The capability to infinitely vary the ball metering rate.
- ▶ **Alarm Facility**  
The ball chargers feature an alarm facility to indicate feeder empty or blocked chute.
- ▶ **Modular Construction**  
Designed in modular sections comprising storage hopper, kibble chute and either slot or star feeder means all duties can be accommodated.
- ▶ **Weighing System**  
Balls of any size are accurately weighed during the operation with feed controlled by the plant command center.

# BULK STORAGE SILOS

**Transmin offers a large, diverse range of silos and bins to suit any application handling materials, including; fly ash, bitumen, cement, quicklime, hydrated lime, flocculant, talc, aged lime, flour, salt, sawdust, magnesium oxide and sugar. Each silo system is designed and engineered to produce maximum efficiency and discharge for each particular process.**

Transmin also offers turnkey packages incorporating Transmin designed silos or bins, together with mechanical equipment for feeding and/or discharging stored product.

Fabrication materials include mild steel, stainless steel, concrete, fibreglass and bisalloy. Transmin have successfully supplied and installed silos, bins, hoppers and storage tanks ranging from two cubic meters up to 3000 cubic meters holding capacity.

Whatever the situation, Transmin can engineer the solution.



# SPECIAL PRODUCTS & PROJECTS

## Roller Mounted Ball Mills

Transmin Roller Mounted Ball Mills are a low cost, easily installed and maintained solution for many small capacity wet grinding operations. Designed for either closed or open circuit grinding.



F80 = 2mm  
P80 = 75µm

MILL MODEL	STANDARD DRIVE (kW)	QUICKLIME AVERAGE THROUGHPUT (t/h)
1.0 x 1.5	11	0.45
1.2 x 3.0	45	2.0
1.6 x 3.6	90	5.5
1.8 x 3.6	132	8.0
2.0 x 4.0	132 + 75 <sup>#</sup>	12.0
2.2 x 4.4	185 + 75 <sup>#</sup>	18.0

\*Other sizes/duties are available upon request.  
#Primary and secondary drive sizes.



## Circle Feeder

When difficult materials need to be discharged from bins and hoppers to a number of outlet streams, the circle feeder becomes a viable option.

## Bin Activators

Transmin has a standard range of vibratory bin activators from 914mm diameter to 3660mm diameter, plus the capability of designing bespoke models for difficult materials or odd sizes. The unit shown is 3,660mm diameter and is fitted to a large lime silo at a nickel processing plant.



## Loss-in-weight Feeders

The continuous loss-in-weight (LIW) principle involves weighing the entire feeding system (hopper, feeder and bulk material) by means of a static type scale system, and controlling the discharge feed rate of the bulk material by means of a variable speed motor. Material is discharged from the system via screw or rotary feeder, with the measured "loss in weight" per unit time (dv/dt) compared to the desired (set) feed rate. The hopper is then quickly recharged (manually or automatically), and the loss-in-weight control action repeats. The fill rate of the LIW system should be typically 10 to 15 times greater the targeted discharge rate.

# VALUE, EXPERIENCE & TRUSTED SOLUTIONS

**Transmin with its 30 years of proven bulk material handling machinery builds, has become a respected Australian owned company that can work with you to make your project run smoothly on time and budget.**

With support from engineering, drafting, parts supply and our maintenance staff that have hands on experience from building the equipment from the ground up, though to continuous improvement programs to grow with changing needs and technology improvements. Transmin is looking toward the challenges of the next 30 years.

## AFTERMARKET AGENCIES



thermoscientific

# CONVEYORPRO



## CONVEYORPRO EVERYTHING CONVEYORS

**The Transmin - ConveyorPro range includes machinery, equipment, parts, servicing and engineering all under one roof. If you're looking for 'everything conveyors' - look no further.**

Backed by Transmin's 30 year-long history and trusted reputation, the ConveyorPro Range has been carefully compiled to include everything from belt, chain, idlers and pulleys, to cleaners, tools, calibration and detection systems.

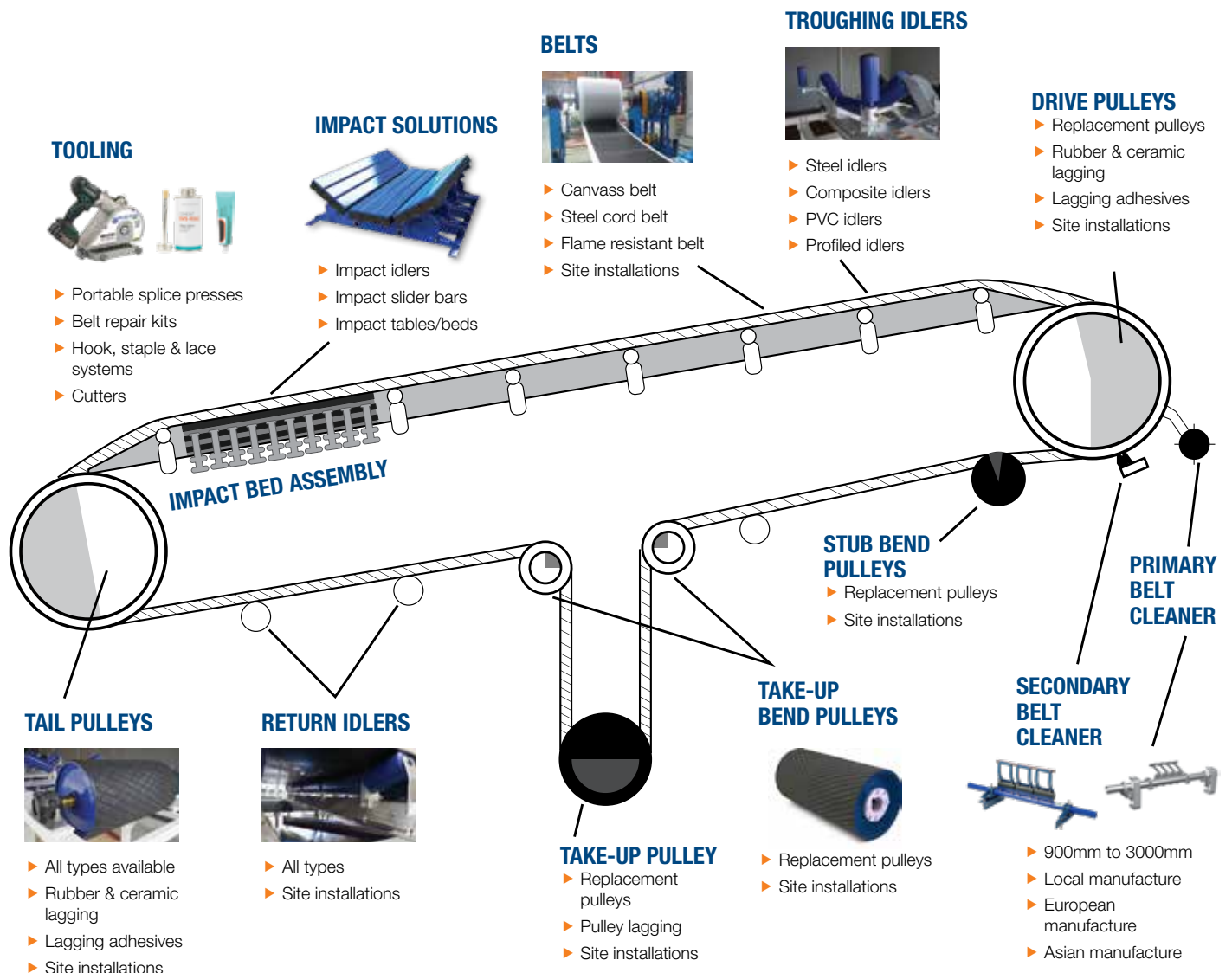
Outside of the ConveyorPro brand, we've partnered with a selection of trusted industry names including Berco, Thermo Scientific, and RotaVal to bolster our range across a number of industry sectors.

### THE COMPLETE RANGE

- ▶ Belt cleaners, scrapers, tracking
- ▶ Belt supplies, types, conveyor types
- ▶ Belt tooling, belt lifters and cutters
- ▶ Mechanical splicing kits
- ▶ Hot vulcanisation kits
- ▶ Idlers and rollers
- ▶ Impact tables
- ▶ Modular/overland systems
- ▶ Pulleys and lagging
- ▶ Others

### WHY CONVEYORPRO?

- ▶ Competitive Pricing - ConveyorPro can reduce your annual spend and save you time and money.
- ▶ High Performance, High Quality - Certified JIS, ISO, DIN, MSHA, AS, CSA.
- ▶ Industry leading lead times - Shortest lead times, Delivery options available to suit your needs.
- ▶ Customer Care - ConveyorPro supports your conveying needs - starting with our professional parts interpreters continuing through to our technical service department.



Since, 1920, Berco have been an established name in track and undercarriage chain. High-quality materials and careful manufacturing processes ensure that Berco undercarriage components are reliable, durable and wear at a predictable rate. Longer life and controllable wear mean that you achieve maximum undercarriage performance at the lowest operating cost. Berco call it “Best Undercarriage Value”.

## BPR<sub>2</sub> BENEFITS

### Mining Lubricated Chains

Performance upgrade of the BERCO product for large mining CAT\* crawler dozers D8 to D11 and large fix plant feeders.

- ▶ The BPR2™ system uses a metal ring plastically deformed as a mechanical locking element. This ring is pressed into the groove between the pin and the link, blocking the joint to specific predetermined end-play levels.

- ▶ Completely new and improved seals, designed by Berco with materials suitable for extreme working temperature range.
- ▶ Optimised pin grants increased link interference and track robustness.
- ▶ Carburized bushing with improved geometry to extend track life.



# SCUTTI



Scutti, was established in 1967 by Mr. Nicola Scutti, the company's early days were spent in focusing on manufacture of silos for cement throughout the European market place. During the following years the company has been characterised for harbour silos and dry bulk storage solution.

## BULK STORAGE SILOS

Scutti has a large selection of standard silos ranging from 20 to 3000m<sup>3</sup>. Silo structures are designed to EUROCODE 3 Part 4-1 standards, to ensure compliance and safety with each seismic and wind requirement. Options include silo safety devices, dust collectors and screw conveyors.

## SCREW CONVEYORS & FEEDERS

Screw conveyors for dry powders, available in different sizes with tubular or U Trough design. The wide range of heavy duty components allow the installation of Scutti screws conveyors in many industrial fields.

## DUST FILTERS

Scutti dust collectors are available in a wide range of models and capacities and are recommended for dry inactive powders. The cleaning system is available by air or mechanical vibrating system with static or dynamic execution.





Transmin is an authorised Australian distributor of the Thermo Scientific range of conveyor belt scale systems, tramp metal detectors, mercury free tilt switches and control units and density gauges. Our dedicated technician is available for site services including installation, calibration and servicing.

## BELT SCALES

The Thermo Scientific Ramsey belt scale range has delivered reliable performance and provided unmatched versatility for over 50 years.

All belt scale systems in the range allow you to monitor production output and inventory, or regulate product loadout, while providing vital information for the effective management and efficient operation of your business.



## TRAMP METAL DETECTOR

The Ramsey Oretronic IV Tramp Metal Detector minimises lost production by providing an economical and reliable means to protect expensive crushers, conveyors and other process equipment from damage caused by tramp metal.

It can detect all types of metallic scrap, including bucket teeth, manganese

steel mantles, bore crowns, car scrap chains, tools and more. Because the Thermo Scientific Ramsey Oretronic IV is insensitive to materials with high magnetic permeability and electrical conductivity, it can be used in applications where conventional metal detectors produce an unacceptable false alarm rate.

## DENSITY GAUGES

Thermo Scientific's 3rd generation of Digital Density Gauge, the DDG3 is a non-contacting nuclear density gauge that offers accurate process material density measurements within a ruggedised housing designed for challenging applications.

The DDG3 offers flexibility, durability and precision in order to enhance the efficiency of industrial processes. The new gauge is designed to withstand varying conditions and ensure the protection of the source.



## WEIGH BELT FEEDERS

Thermo Scientific are one of the world's largest providers of conveyor weigh belt feeders. Their rugged construction and leading edge designs have ensured reliable performance and provided unmatched versatility for over 50 years.

Transmin are an official distributor of Thermo Scientific Weigh Belt Feeders throughout Australia. The Thermo Scientific range includes the Ramsey 90.125 and 90.150 weigh belt models.

Each model provides a consistent flow of material, offers increased sensitivity for more accurate weighing of the lightest materials, and permits quick and easy cleaning and maintenance.

Each system has four major components: integrator, weighbridge, belt speed sensor and load cell digitizer.

# SERVICE

## ONSITE/OFFSITE CAPABILITIES

**Transmin's dedicated and highly trained service division supports mining and materials handling operations right across Australia. We provide comprehensive onsite and offsite servicing of both Transmin and third party OEM equipment.**

Transmin provides a range of strategic site maintenance and optimisation services, including:

- ▶ Shutdown and maintenance planning
- ▶ HAZOP assessments
- ▶ Risk based inspections
- ▶ Systems de-bottlenecking
- ▶ General engineering support services

For major equipment overhauls and refurbishments, Transmin can accommodate all manner of site equipment at our facilities in Malaga, Perth. Transmin has over 4000sqm of fully-equipped workshop facilities suitable for heavy assembly, fabrication and dedicated servicing of mechanical and hydraulic equipment.

The range of equipment we service includes:

- ▶ Feeders and Conveyors
  - ▶ Belt Feeders
  - ▶ Apron Feeders
- ▶ Hydraulic boom systems
- ▶ Mineral sizers and crushers
- ▶ Bin gates
- ▶ Bucket elevators
- ▶ Belt scales;
- ▶ Density gauges
- ▶ Tilt switches



## APRON FEEDER CAST ALLOY PANS

Transmin range of custom manganese steel apron feeder pans can improve your pan life, saving down time and improving run life, cast for exact fit and tolerance these pans are easy to fit ever time. Using either our standard sizing or custom made to fit your exiting design to suit any arrangement, configuration or engineering specifications. Combined with our Berco range of chains, undercarriage parts and specialist Feeder maintenance teams Transmin offers a bones up range to your feeder rebuild and part requirements.

## APRON FEEDER SERVICING

Transmin has been servicing and rebuilding feeders since the early 1990's putting us on a world stage with our equipment in every corner of the globe, with this history we have built a wealth of knowledge in every aspect of these

machines from our specialist technicians on the front line trouble shooting, to engineering drafting and parts supply.

Our team of onsite servicemen are trained and experienced for every level of feeder maintenance from maintenance audits and alignments to full shut teams for full ground up rebuilds including gantt and time line support. On all brands and makes of feeders.

Transmin is a distributor for Berco chain and under carriage parts as well as our own line of cast alloy pan liners that can be custom made to suit any arrangement configuration or engineering specifications.

## ISOLATION GATE REFURBISHMENT

Transmin designs and fabricates single-gate plate and double-gate plate isolation gates for safely isolating downstream equipment such as screens, feeders

and conveyors so they can be removed or worked on during maintenance site campaigns.

Transmin onsite servicemen are trained and experienced for every level of refurbishment from fixing minor leaks to full back to bones strip down and replacements.

## SERVICING & ROTABLE HYDRAULIC CYLINDERS

With Transmin designing and fabricating machinery for over 30 years our experience in coming up with the best way to refurbish and restore equipment has become part of our story.

Our highly knowledgeable team at Transmin repair and refurbish hydraulic cylinders including: re chroming, machining, replacement rods and seals.

All carried out to OEM standard giving you as close to new as possible.



"Yes, I would recommended Transmin to other business and colleagues. I continue to use Transmin for not only feeder work and spares, but also for our crusher and conveyor spares."

### CHARLIE GROAT

SHUTDOWN PLANNER  
NORTHERN STAR RESOURCES,  
KANOWNA BELLE

## COMMITMENT TO SAFETY

**Transmin was a finalist in the WA WorkSafe Awards in 2014 and 2015.**

Transmin is committed to achieving a high standard of workplace health and safety, including mental health and well-being. Our aim is to prevent personal injury and/or harm by creating and maintaining a safe, healthy and productive working environment for all our employees, clients, contractors, sub-contractors.

## EXPERTISE & EXPERIENCE

Transmin is a leader in engineered solutions for bulk materials handling and processing for the mining and minerals industries throughout Australia and internationally. With more than 30 years of experience, Transmin sets the standard in innovative mechanical equipment design and application. This expertise together with our full engineering and fabrication capabilities enables us to offer you the right service for your equipment.



**HEAD OFFICE**

**Western Australia**

**Local Call:** 1300 127 091

**International Call:** +61 (0) 8 9270 8555

**International Fax:** +61 (0) 8 9249 6116

**Email:** wasales@transmin.com.au

**Address:** 33-37 Denninup Way Malaga  
Perth, Western Australia, 6090

**Queensland & Northern Territory**

**Local Call:** 1300 800 609

**International Call:** +61 (0) 7 3736 3340

**International Fax:** +61 (0) 8 9249 6116

**Email:** qldsales@transmin.com.au

**Address:** 76 Dulacca Street  
Acacia Ridge, Brisbane  
Queensland, 4110

**INTERNATIONAL OFFICES**

**South Africa**

**Email:** sales.rsa@transmin.com.au

**South America**

**Email:** sales.sa@transmin.com.au

**North America**

**Email:** sales.ca@transmin.com.au

**India**

**Email:** sales.in@transmin.in

**www.transmin.com.au**



Committed to being a  
world class supplier and service provider  
recognised for integrity pure innovation

