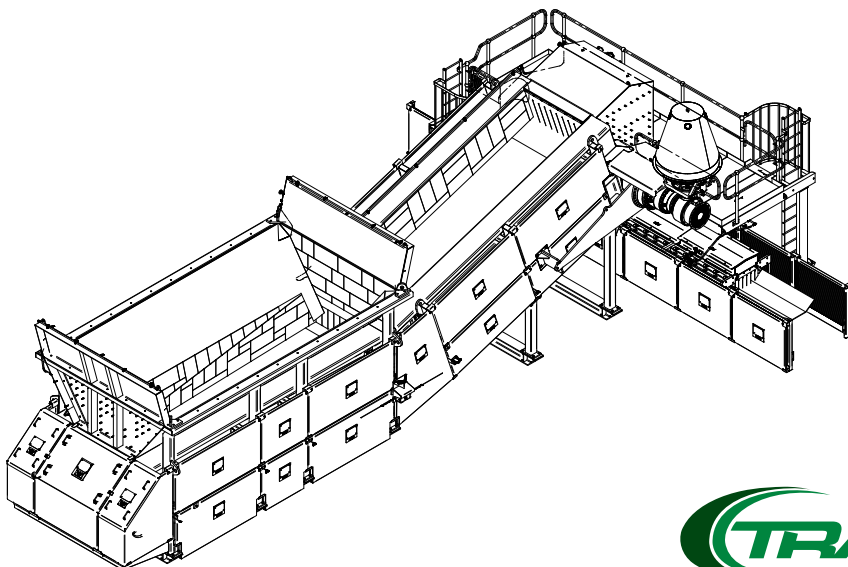




Low Profile Feeder™ (LPF)

Deliver a True Space-Saving Performance.
Increase Efficiency, Whilst Reducing Capital Costs.



Search "Low Profile Feeder"



Company Profile

Australian Engineering Worldwide

Transmin is a world-class provider of innovative engineered equipment, supplies and services to the resources and bulk materials handling industries, including; mining, minerals-processing, oil & gas, logistics, utilities, agriculture, quarrying and construction.

Proven Results

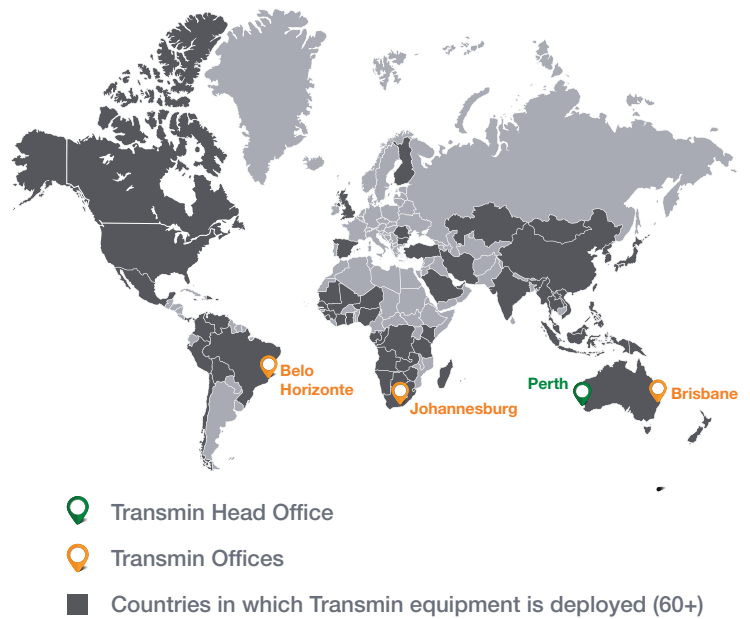
Established in Perth in 1987, Transmin sets the standard for mechanical equipment design and application, led by our specialist Engineering division, and backed by our dedicated Service and Parts divisions. Transmin's Control and Automation division delivers award-winning software solutions specialising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

Transmin's head office and major manufacturing facilities are located in Perth, Western Australia, with regional offices situated in Brisbane, Johannesburg and Belo Horizonte, Brazil. Our international network of suppliers and industry partners provides global reach and the capability required to undertake and support projects anywhere in the world. Transmin engineered equipment is currently deployed in over 60 countries.

The Transmin original equipment range covers most bulk materials-handling applications, including; feeders and conveyors, bulk loading and unloading hoppers, rock-breakers and grapples, hydraulic boom systems, bin isolation gates, reagent preparation and processing facilities, lime preparation facilities, ball mills, bucket elevators, and silos.

Heavy-duty mining and materials handling operations demand solutions which deliver performance.

The Transmin Low Profile Feeder™ (LPF) is a hybrid belt feeder / apron feeder which delivers the advantages of both technologies, plus additional benefits unique to Transmin, including the ability to incorporate a change of direction using a bend transition.



AS/NZS
ISO 14004
Compliant



AS/NZS 4801
Compliant



AS/NZS
ISO 14001
Compliant



AS 3992
Compliant



AS/NZS 1554
Compliant



ASME IX
Compliant

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World Class Facilities

Transmin's head office and major manufacturing facilities are located in Perth, Western Australia; with over 4000sqm of fully equipped workshop space suitable for heavy assembly and servicing. Transmin also has regional offices situated in Brisbane, Johannesburg and Belo Horizonte, Brazil.

The Low Profile Feeder™ (LPF)

Innovative Thinking

Heavy-duty mining and materials handling operations demand solutions which deliver performance.

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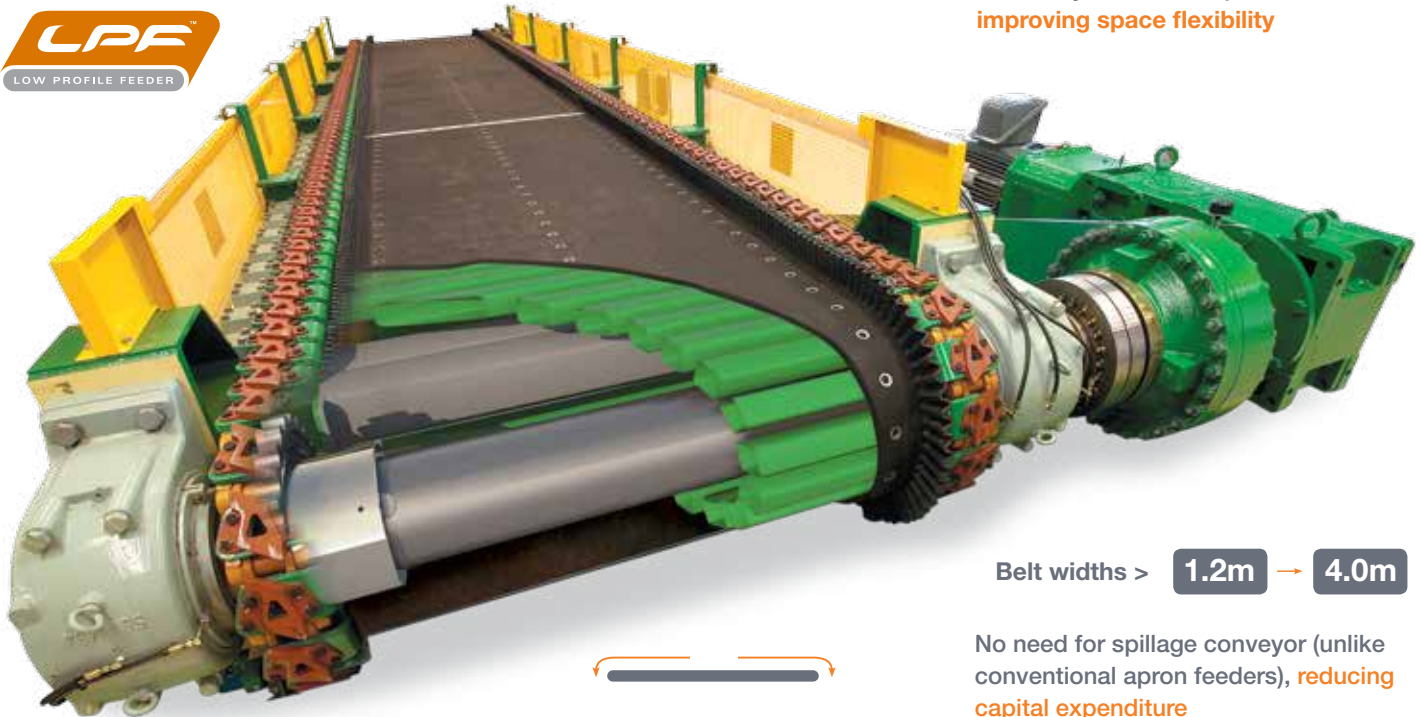
Unlike conventional heavy duty belt feeders, the belt itself is not subject to high tension forces, which means a lower profile can be achieved. In addition, unlike apron feeders, a separate spillage clean-up conveyor is not required, again saving space and the cost of civil works.

Hybrid design combining belt and apron feeder technology **delivering high capacity tonnage**

Lowest possible profile for a high capacity feeder **delivering major plant space saving potential**



Change of direction from horizontal to inclined can be achieved in a single machine, reducing the number of conveyor transition points and **improving space flexibility**



Belt widths > **1.2m** → **4.0m**

No need for spillage conveyor (unlike conventional apron feeders), **reducing capital expenditure**



Sprocket driven eliminating tracking and belt slipping issues with the ability to reverse without risk of miss-tracking, unlike conventional belt feeders

Proven industry standard components driven by tractor chains carried on standard heavy duty rollers

Typical Materials Handled

A huge variety of materials are handled efficiently and reliably with many advantages over traditional belt or apron feeders. Materials include; various ores, iron ore fines, tailings, stockpiled ores, coal, fertilisers, metallic concentrates, filter cakes, wood chips, cement clinker, sewage sludge, refuse, biomass, construction wastes and aggregate.



A Revolution in Feeder Technology

Chains

Twin strand heavy duty sealed and lubricated (SALT) chain is used, which is readily available and familiar to operations and maintenance personnel. Master link connections or endless configurations can be used, coupled with hydraulic tensioning if required.

Lowest Profile

The lowest possible profile available in a high capacity feeder, typically no more than 1.0m from belt top surface to underside of footplates.

Hybrid Design

Combining proven belt and chain technology, belt tracking or belt slippage problems are eliminated.



Heavy Duty Belting

Heavy duty mining specification belting is used with highly abrasion resistant covers. Special steel mesh belting is also available. Both edges of the belt have flexible sidewalls of either the 'Flexiwall' style or smooth faced edging strips.

Cross Slats

The cross slats support the belt and carry the loads. Each slat is securely bolted to the chains at both ends.

Belting and Joint

The belt is securely bolted to the cross slats and ensures a smooth surface. The belt joint can be a conventional vulcanised type or special mechanical design developed for the LPF™.

Change of Direction

A change in conveying direction from horizontal to inclined can be achieved without the requirement of a second machine, improving space utilization, flexibility of plant layout and saving on excess capital costs.

Carrier Rollers

Low Profile Feeder™ chains are carried by standard heavy duty track type rollers. The above heavy duty Low Profile Feeder™ unit was fitted with D6 chain for rigorous conditions. Larger sizes are available.



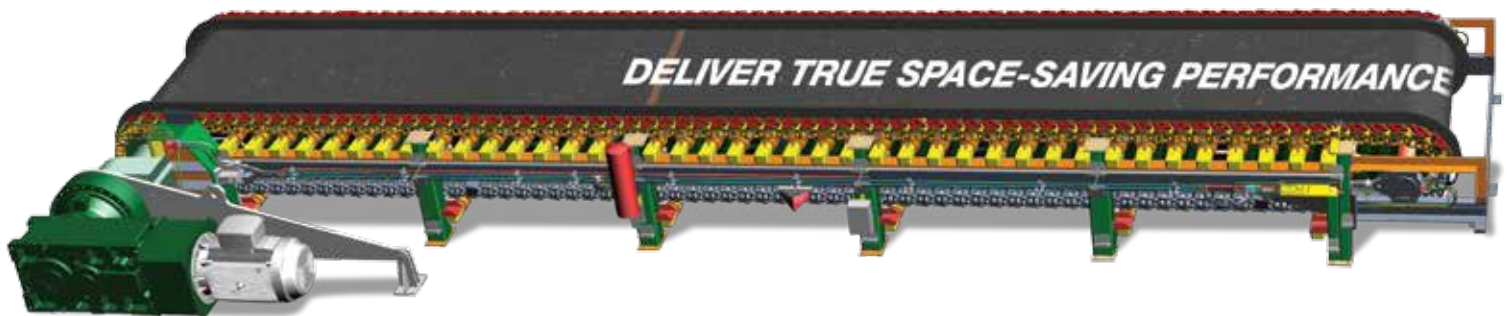
The Low Profile Feeder™ (LPF)

Selection Data

Please consult Transmin for confirmation of selection. Capacity range covers materials of various types of particle sizing. Non standard widths are available for special orders.

MODEL CONFIGURATION			
MODEL DESIGNATION	STANDARD BELT WIDTH (mm)	EFFECTIVE SKIRTED WIDTH (MM)	NOMINAL CAPACITY MAXIMUM (m ³ /hr)
DX-12	1200	900	1200
DX-18	1800	1500	2000
DX-24	2400	2100	2200
DX-30	3000	2600	2900
DX-36	3600	3200	3500
DX-40	4000	3600	+ 4500

*Capacities in excess of 4500m³/hr are achievable, please consult Transmin direct.



PRODUCT COMPARISON			
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	Belt cannot slip ✓	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 ✗
Utilises Industry Standard Components	Yes - belting, tractor chains, rollers and sprockets ✓	Yes - belting, idlers and pulleys ✓	Yes - tractor chains, rollers and sprockets ✓
Belt Change Out	Simple modular sections ✓	Belt splicing station required	N/A
Direction Change	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	Suitable for smaller Run Of Mine applications only	Generally not suitable ✗	Proven for large Run Of Mine dump applications



Note the lower height compared to a conventional belt feeder.

- ✔ *No Spillage*
- ✔ *No Mis-tracking*
- ✔ *No Belt Slippage*
- ✔ *Lowest Possible Profile*

Stockpile Reclaim

The Transmin LPF can be easily fitted into the restricted space beneath large stockpiles. The unique low profile is the lowest possible profile available in a high capacity feeder.

Car Dumper Applications

A viable alternative to conventional feeders beneath rail lines and car dumpers at receive facilities in the port or mine.



Bulk Loading/Unloading Hoppers

Receival, Storage and Feeding of Bulk Materials

Head Chutes

Transition head chutes into downstream plant and equipment can be customized to suit.

Hydraulic Tensioning

Hydraulically sustained chain tensioning is available instead of the standard mechanical screw mechanism if preferred

Inlet Plough

An adjustable inlet plough can be incorporated to assist in smoothing the burden height which results in a more consistent feed from the machine, especially at very low capacity applications.

Inlet Hopper Liners

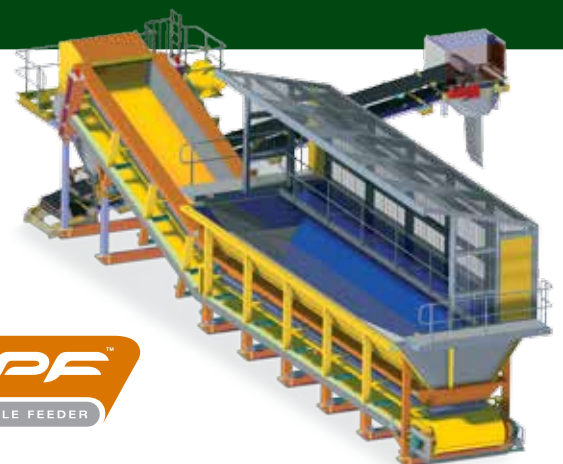
Hoppers can be provided with a variety of abrasion resistant liner plates or low friction materials if required.

Skirts

A variety of skirting options are available depending upon the material characteristics.

Bulk materials are often received into process by truck, rail or ISO sea containers which require extensive and costly excavations to provide a below ground intake pit or hopper to receive the incoming materials. Transmin's Bulk Loading and Unloading Hoppers are surface mounted devices capable of accepting feed from rear and side tipping trucks or rail cars, which save on civil works and installation time, incorporating Transmin's unique Low Profile Feeder™ technology.

- ▶ Receival, storage and feeding in one machine.
- ▶ The ability to have a horizontal hopper of a length to suit the application followed by an inclined section means the hopper capacity can be the maximised for best possible efficiency.
- ▶ Various models are available for light, medium and heavy duty applications incorporating either roller or track type chains.
- ▶ Various features and options are available including low friction or wear liners and weather or dust enclosures.
- ▶ Capacities from 50tph to thousands of tonnes per hour.

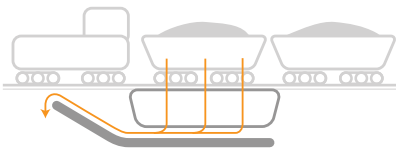


Incorporating Transmin LPF™ Technology



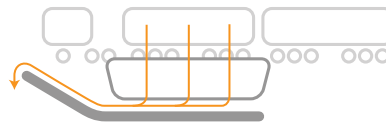
Direct rail wagon – receipt and transfer

Applications



Direct Rail Wagon

- ▶ Receipt and transfer.



Direct Side Tipping Truck

- ▶ Receipt and feed.

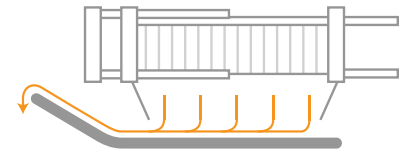
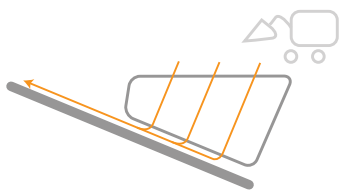


Plate Filter Press Discharge

- ▶ Eliminates belt slippage and mistracking. Saves space



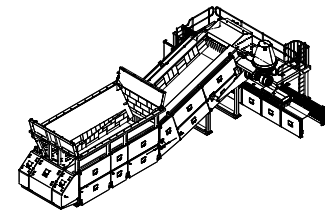
Direct Dumper Receipt

- ▶ Incorporating LPF™ on incline.



Direct Truck Receipt

- ▶ Incorporating LPF™ with change of direction.



Standard Reclaim Feeder

- ▶ Front end loader feed from both sides.



LPF™ beneath rail line at a port installation handling iron ore at 3000tph.



Bulk loading and unloading hoppers are ideal for reclaim via front end loaders.



1500tph concentrate feeder at Bunbury Port.

Transmin Parts & Service



Transmin and other OEM Equipment

Aside from the Low Profile Feeder, Transmin has the capability to repair and service a wide range of mechanical and hydraulic equipment - both Transmin equipment and third party OEM equipment.

The range of equipment we service includes;

- ▶ Feeders and Conveyors
 - Belt Feeders
 - Apron Feeders
 - Screw Feeders
 - Vibratory Feeders
 - Circle (Table) Feeders
- ▶ Hydraulic Boom Systems & Attachments
 - Hammers
 - Grapples
- ▶ Mineral Sizers & Crushers
 - All makes and models
- ▶ Hydraulic Cylinders
- ▶ Ball Mills
- ▶ Ball Chargers
- ▶ Bin Activators
- ▶ Bin Gates
- ▶ Bucket Elevators
- ▶ Industrial Shredders
- ▶ Lime Preparation Plants
- ▶ Flocculent & Reagent Processing Plants
- ▶ Rotary Valves
- ▶ Belt Scales
- ▶ Density Gauges
- ▶ Tilt Switches



Transmin Genuine Parts



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

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