

Projects

Complete waste processing infrastructure to receive, contain, process, separate, and divert your waste and recycling streams.



Welcome to your complete guide to Wastech Projects

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Company Profile

We are an Australian design, engineering and manufacturing company that services the waste management and resource recovery sectors across Australia and New Zealand.

Our extensive product range and end-to-end service offerings support a diverse range of businesses big and small, and governments local to federal, that are seeking technology-enabled solutions to effectively manage waste and resources and drive efficiency.



We have been at the forefront of Australian engineering innovation for more than 25 years and continuously strive to improve our products and services through investment in research and development, adoption of best-practice design and the procurement of high-quality technology and materials. We implement a quality-focused, lean manufacturing model in design and production so that we can reduce wastage and unnecessary use of materials.

Our commitment to sustainability also extends to our energy consumption with all our products fabricated using power sourced from our own 85kw solar array. This efficient product development process means we can pass savings onto customers while also helping the environment.

Customer Centric.

Dedicated and experienced teams for every product

When commissioning new equipment, our engineers and technicians work with our customers until the equipment is fully operational and they know how to use it. We work as one team to get the job done.

Proudly Australian.

On-site and local manufacturing capabilities

Our organisation has grown to become an award-winning and highly respected Australian manufacturing and engineering company committed to creating and supporting local jobs. With a local workforce of more than 100 people, we maintain a deep inhouse capability with Australia-wide operations.

Trusted. Reliable.

On-time project delivery backed by 24/7 service and support

Our service and support team operates out of dedicated facilities to maintain a high level of service. Our qualified technicians can attend all sites to service, repair and refurbish all products in the industry.

- 
- ✓ Infeed
 - ✓ Trommel
 - ✓ Picking Station
 - ✓ Magnet

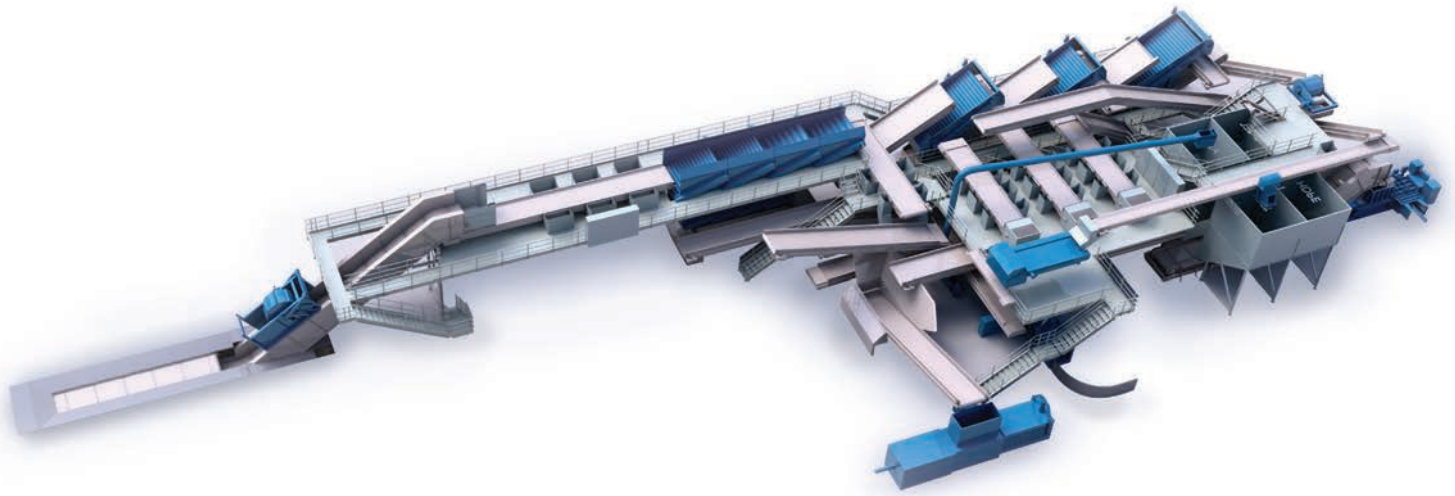
Sorting Systems

Designed to suit your budget

Wastech provides a solution to all sorting facility requirements from full system design and installation to improving and retrofitting current systems.

Catering for all product types and volumes, Wastech will work with you to design an efficient and effective system that meets your requirements on all levels. From manual picking lines to fully automated systems, Wastech will get your product sorted.

Co-Mingled Recycling



Kerbside Recycling Perfected

Our equipment partner, CPG, was one of the first to engineer and manufacture kerbside recyclable recycling systems. They have been recognised for decades as the leader in kerbside waste recycling technology, setting standards, and raising the bar on performance and efficiency across the globe. Their systems feature the proprietary cam-disc style CPScreen™ that delivers excellent separation of 2D and 3D material, paired with low maintenance and high throughput.



OCC Screen

Automatically separates cardboard from other fibres, containers and debris; proprietary technology assures ultra-efficiency and long-term durability.



Optical Sorter

The latest in optical sorting, using new high-resolution NIR/colour sensors providing the ultimate separation performance for plastics, e-waste, and other small particle applications.

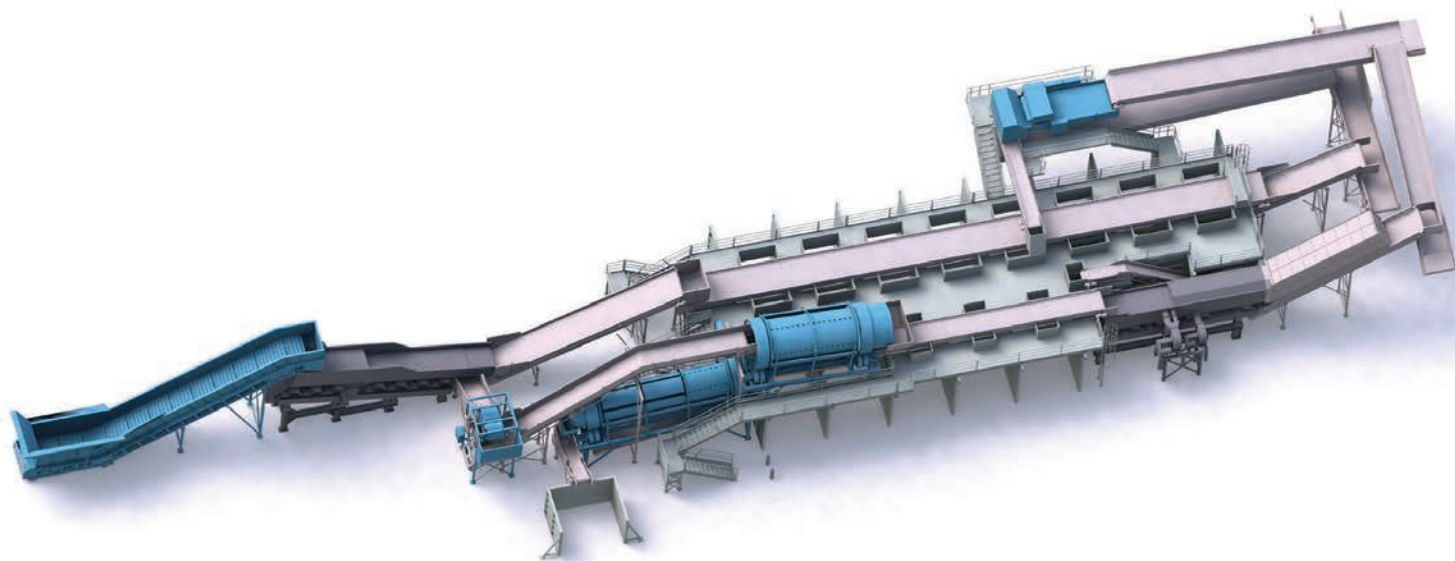


Film Vac

Highly efficient collection hoods above sorting belts to transport handpicked film, reducing labor costs and eliminating the need for transfer conveyors and additional storage.



Construction & Demolition



Even Under The Harshest Conditions

Our Construction and Demolition (C&D) recycling systems are built to last and built to perform, even under the harshest conditions. Processing C&D requires extremely resilient equipment - we step up to the plate offering the industry the most durable conveyors and equipment. Combining heavy-duty conveyors with state-of-the-art automated screening technology, we can custom design the most rugged and effective C&D recycling system for your operation to recover concrete, wood, metals, glass, fibers, plastics, and other salvaged building components.



Trommel

Uses a revolving screened cylinder to accomplish the separation of material by size with adjustable screening capabilities, increasing system capacity and throughput.



Over-Belt Magnet

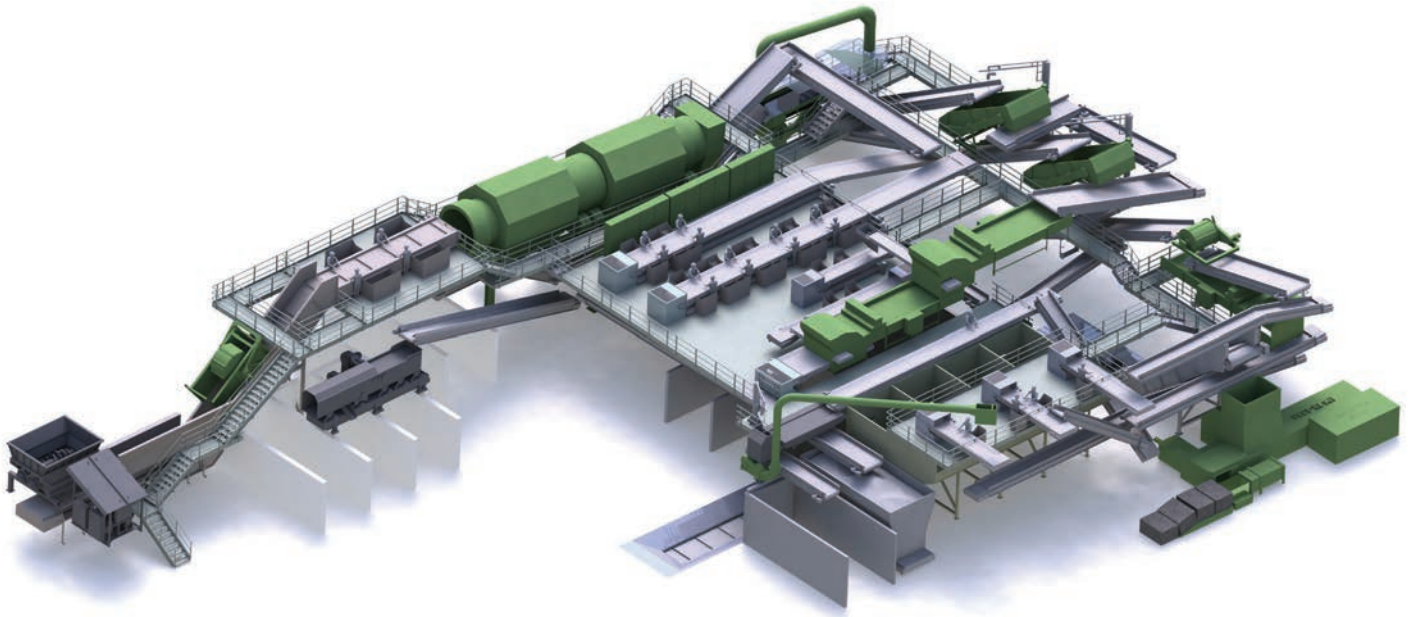
Magnet for high volume ferrous separation and recovery, tough and rugged design that performs under the harshest conditions.



Infeed Conveyor

High-quality and durable conveyor; tough and sturdy enough to perform under the harsh conditions of C&D recycling for many years.

Commercial & Industrial



Ultra Efficient Design

No matter where your material stream originates from — whether it is factories, restaurants, distribution centers, or retail shops, Wastech will collaborate with you to interpret the best equipment and system layout to recover valuable commodities in your Commercial and Industrial (C&I) system. C&I material generally consists of office waste, product packaging, production waste, and can include fibre, cardboard (OCC), wood, metals, glass, textiles, containers, and other materials. We work with our equipment partner, CPG, to provide patented technology that is key to ensuring materials are separated.



Trommel

Uses a revolving screened cylinder to accomplish the separation of material by size with adjustable screening capabilities, increasing system capacity and throughput.



Air Knife Separator

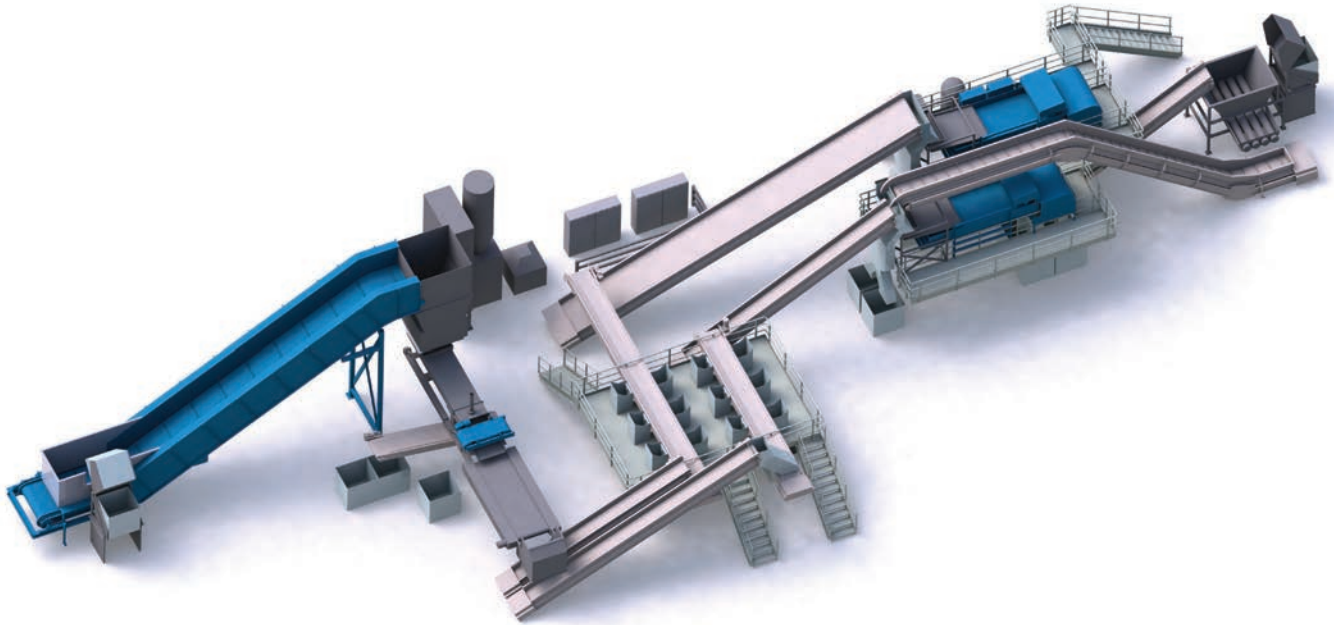
High capacity solution to remove un-pickable fractions from the stream, such as fibers, plastics, foil and other "lights"; by our partner, Impact Air.



CPSScreen™

Automatically separates small fibers from containers, and 2D from 3D material with long-lasting, patented rubber cam-style discs specially engineered to resist jamming.

E-Waste



Modern Design for Modern Waste

Electronic waste (e-waste) is one of the fastest-growing segments of our nation's waste. With new technologies emerging each day, outdated computers, mobile phones, monitors, and laptops are being discarded and are ready for "end-of-life management". E-waste contains a variety of extremely valuable metals, plastics, and minerals to be recovered, as well as very hazardous materials that must be disposed of properly. E-waste recycling is a challenge due to its inconsistent nature. With our equipment partner, CPG, we have risen to the occasion, leading the industry with innovative technology and features to overcome challenges and forge opportunities.



Inclined Infeed Conveyor

High-quality and durable conveyor, tough and sturdy enough to perform under the harshest conditions for many years.



Over-Belt Magnet

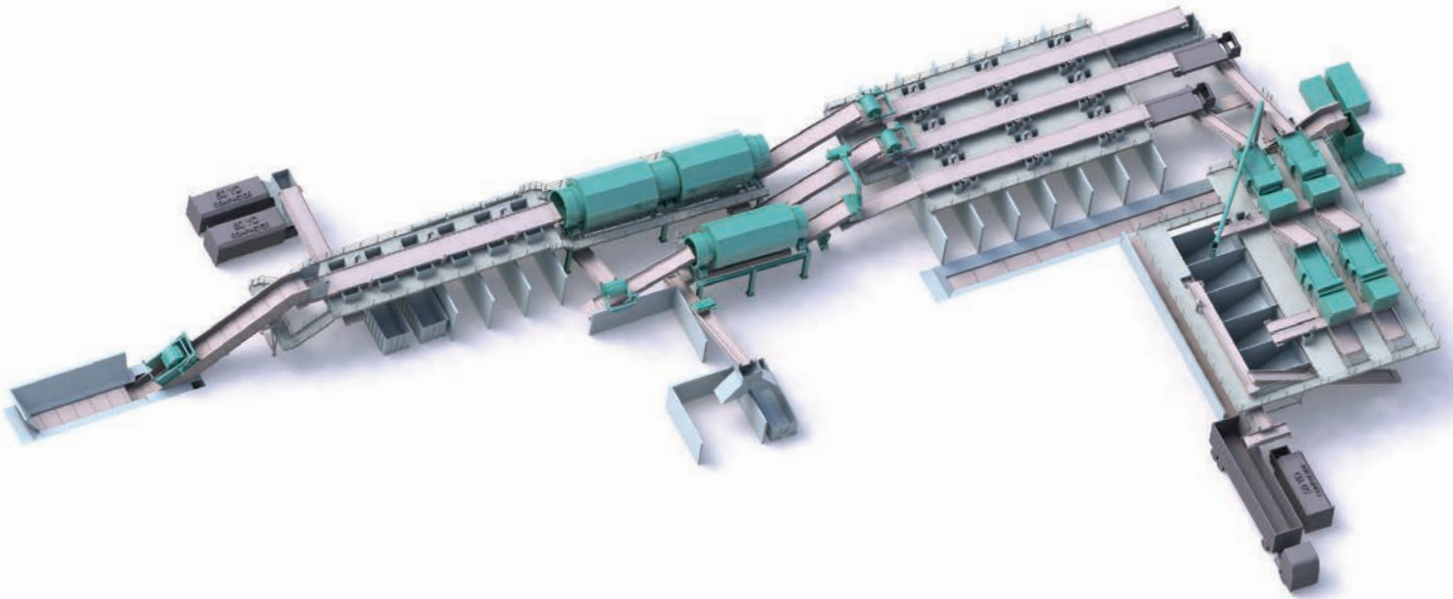
Powerful self-cleaning magnet that allows for quick and efficient separation and recovery of ferrous material from the stream.



Optical Sorter

State-of-the-art optical sorter with high resolution colour camera provides accurate separation of small particles by colour and shape; such as plastic flake and pellets, and e-waste fines.

Municipal Solid Waste Processing



Rugged & Efficient

In partnership with CPG, we provide the most advanced systems and equipment in the Municipal Solid Waste (MSW) sector. Our equipment is designed for durability and ruggedness to meet the demands of this application. It is field-proven to provide maximum throughput, recovery rates and end-product quality.

Our MSW recycling systems are also used as front-end separation systems for engineered fuels technologies, like refuse derived fuel (RDF). Our equipment makes it possible to extract at the highest recovery rates and produce the specific feed for energy conversions while removing harmful contaminants. We answer the demand for the effective treatment of waste with high returns through continuous innovation of our conversion technologies and improvement of our MSW sorting systems.



Drum Magnet

Magnet for high volume ferrous separation and recovery, tough and rugged design that performs under the harshest conditions.



Optical Sorter

Optical sorter that separates OCC and "non-fiber" contaminants from newspaper and mixed paper grades to produce 3 outputs from 1 input.



Silo Blower

After separation, the Silo Blower will transfer lighter objects such as aluminium cans or plastic containers to their storage areas where they are held until being baled.

Transfer Stations

The Complete Solution

Wastech are leaders in concept design, manufacturing and the installation of transfer station systems to suit a vast selection of waste types and geographical challenges.

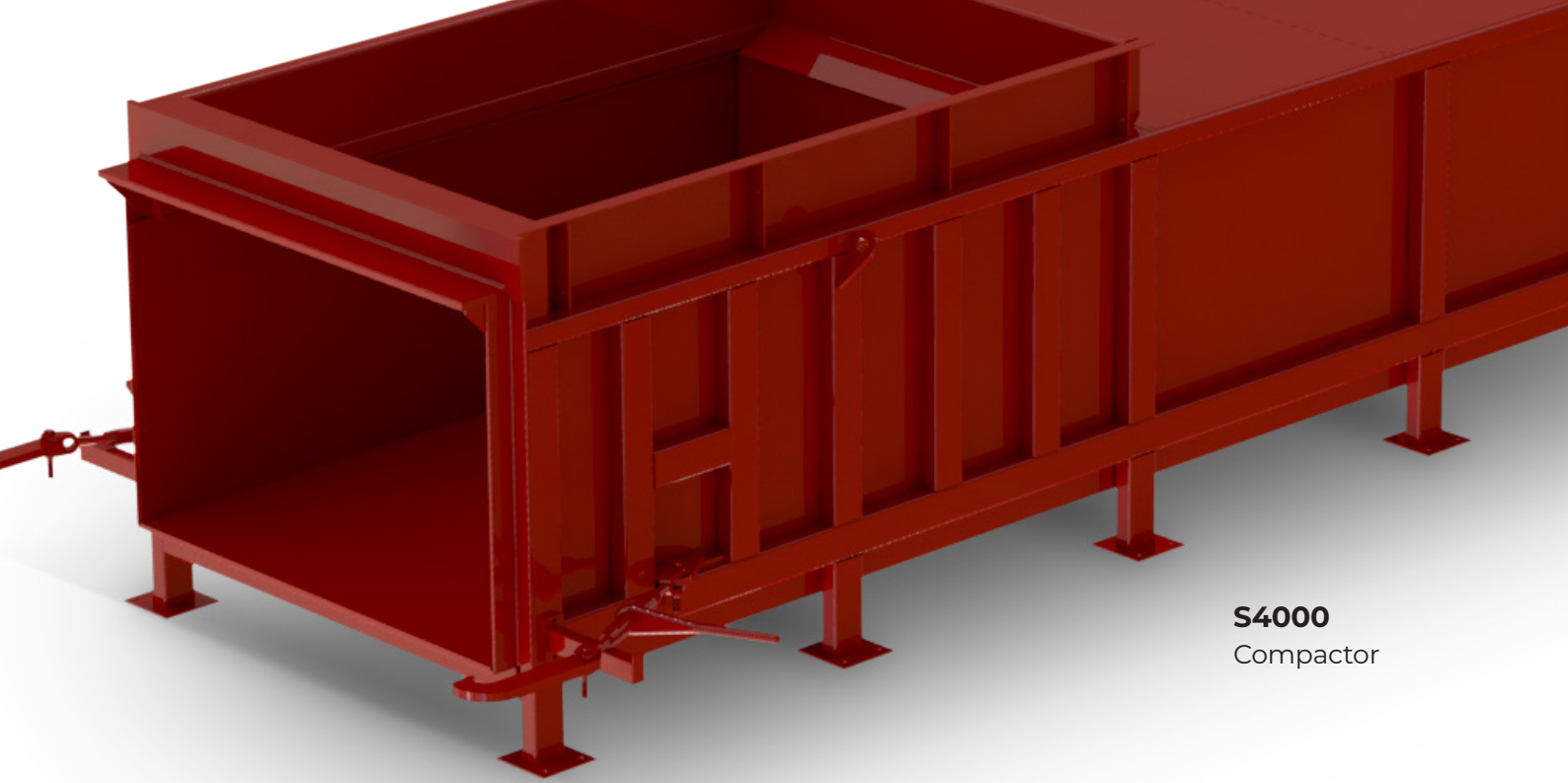
- ✓ S4000 Compactor
- ✓ Live Binweigh System
- ✓ 36m Moving Floor Pit
- ✓ Resource Recovery Area

Waste Compactors

Wastech Engineering design, manufacture and service Compactors for the Australian and International market

S8000X Compactor





S4000
Compactor

S4000

This tough compactor for small to medium sized transfer station applications is designed to cater for throughput volumes up to 320m³/hr. Compatible with all feed types including push pit, moving floor, conveyor and front-end loader.

Constructed from high tensile steel the S4000 is built to withstand high compaction force so you gain maximum payloads and reduced freight cost. With a clear top opening and chamber volume of 4m³ the S4000 can accept large product loads.

Compatible with 31-60m³ containers and transfer trailers the S4000 comes with its own stand alone hydraulic power pack and oil cooler.

Material	S4000 High Tensile Steel
Chamber Volume	4.0m ³
Working Capacity	Up to 320m ³ /hr (subject to pump size)
Clear Top Opening	L2550 x W1730mm
Trailer/Container Penetration	460mm
Pack Blade Face Size	W1700 x H1900mm
Cylinder Size	178mm Bore Diameter, Rod 102 mm Diameter
Pressure	130 bar (max 150)
Overall Dimensions	L6200 x W1900 x H1400mm
Cycle Time	60 or 45 seconds (30kW Power)
Motor Size	22kW (45A) or 30kW (60A)
Compaction Force	340 kN
Weight	5,800kg (approx.)

S8000X

The biggest compactor of its type on the market for medium to large sized transfer stations. Designed to cater for a high throughput of up to 480m³/hr. Compatible with all feed types including moving floor, push pit, conveyor and front-end loader.

Constructed from high tensile steel the S8000X is built to withstand high compaction force so you can gain maximum payloads and reduced freight cost. With its generous clear top opening and a chamber volume of 8.0m³ the S8000X can accept large product loads.

Compatible with 60m³ transfer trailers and comes with its own stand alone hydraulic power pack and oil cooler.

S8000X High Tensile Steel	S9000X High Tensile Steel
8.0m ³	89.0m ³
Up to 480m ³ /hr	Up to 540m ³ /hr
L2800 x W1850mm	L3200 x W1850mm
1500mm	1500mm
W2000 x H1060mm	W2000 x H1060mm
254mm Bore Diameter, Rod 102mm Diameter	254mm Bore Diameter, Rod 102mm Diameter
120 bar (max 150)	150 bar
L8500 x W2200 x H2000mm (trailer height)	L11900 x W2200 x H2000mm (trailer height)
45 seconds	60 seconds
45kW (90A)	55kW
700kN	700kN
11,000kg (approx.)	12,000kg (approx.)

Transfer Trailers

Maximum Payload, Minimum Tare Weight



The Wastech 'Clearline' rolled wall body design provides greater durability and integral strength to withstand the high compaction forces in waste transfer station applications. The Clearline Trailer is built to withstand the high piercing forces during compaction of industrial type wastes.

This Wastech designed trailer incorporates the use of high tensile steel plate in the body, reducing tare weight and increasing payload. Additionally, the seamless internal walls along with the hydraulic eject blade, safely and efficiently ejects the waste load at the landfill.





- ✓ 53 - 65m³ Triaxle
- ✓ 65 - 75m³ Quad Axle
- ✓ 114 - 120m³ A-Double
- ✓ 106m³ Pocket Road Train
- ✓ 130m³ Road Train
- ✓ 70m³ Top Load Moving Floor Trailer



Technical Specifications

Material	High Tensile Steel (5mm floor, 4mm walls and roof)
Rear Door Cycle Time	15 Secs. (Hydraulic Operation)
Preferred Hydraulic Pump Size	80l / min
Working Pressure	2,100 PSI
Cylinder Type	5 & 6 Stage Telescopic Cylinder with Centre Support
Eject Blade Cycle Time	Eject: 140 secs. Retract 150 secs. (5 Stage Cylinder - Single Trailer)
Doors	Top or Side Hinged Rear Doors (Hydraulic or Manual)
Tare Weight	From 11,100kg - Single Trailer (subject to options)



Bin Change Over Systems

Don't Wait, Just Change!

Are you sick of waiting for the hook lift truck to arrive to change over the compactor bins? By using WasteTech's purpose built, semi-automated bin change over system, it removes the need to rely on the truck arriving when you need it quickly.

The system greatly reduces the bin change over time, on-site labour, and allows your site to keep receiving waste rather than halting operations until the bin is emptied and returned. Suitable for most bin configurations from sizes 12-60m³.

Bins & Skips

All Sizes, All Payloads

Designed and manufactured to suit your specific requirements, Wastech open top skips come in a full range of sizes and volumes. We pay special attention to the strength of the top wall beams and floor supports to maximise your bin longevity.

Available in sizes from 6 to 60m³, Wastech bins and skips can be constructed from mild steel or high tensile material to suit application.



Glass Crushing, Cleaning & Screening

Complete turnkey solutions for crushing glass into reusable products

The Wastech designed Glass Crushing, Cleaning and Screening plant, takes MRF glass, Full bottles or glass cullet and turns it into a crushed product for many different applications such as:

- Sand blasting
- Backfilling
- Road base
- Polymer concrete
- Sand replacement

Our glass plant uses heat to clean the glass, which in turn, removes the organic content and allows our glass sand to be used in applications where odour needs to be minimised.

Each Glass Crushing Plant is custom designed and can be tailored to suit various throughputs between 5-20 TPH.

Extra equipment such as Grizzly Screens, Bottle Breakers, Magnets and Eddy Currents can also be added to suit customers specific applications.



BEFORE



AFTER



Crushing & Screening

PILOT CRUSHTEC

Wastech Engineering is pleased to represent Pilot Crustec International in Australia and New Zealand markets. Pilot Crustec is South Africa's leading supplier of quarrying, mining and glass crushing equipment and offers a range of process solutions, including

- Mobile and semi-mobile crushing
- Screening
- Recycling
- Sand washing
- Stockpiling
- Compacting and material-handling solutions

Mobile heavy-duty product range includes vertical & horizontal shafts, impact crushers, screen, and conveyors.



Moving Floors

Fast, Safe & Efficient

Moving floors are an efficient and cost effective means of moving large volumes of waste in receival pits. They are designed to replace the outdated and often dangerous means of moving product in a pit via push blade, dozer or front end loader.

Wastech Moving Floors are hydraulically powered and floor speeds can be varied to suit high throughputs during peak loading periods.

- Fast & efficient means of moving waste along a receival pit
- Ability to handle large volumes during peak periods
- Opportunity for resource recovery in shallow pits
- Significantly reduce safety issues, operational costs and vehicle queuing time

- ✓ Municipal Solid Waste
- ✓ Solid Insert Waste
- ✓ Green Waste
- ✓ Recyclables

Product Depackaging

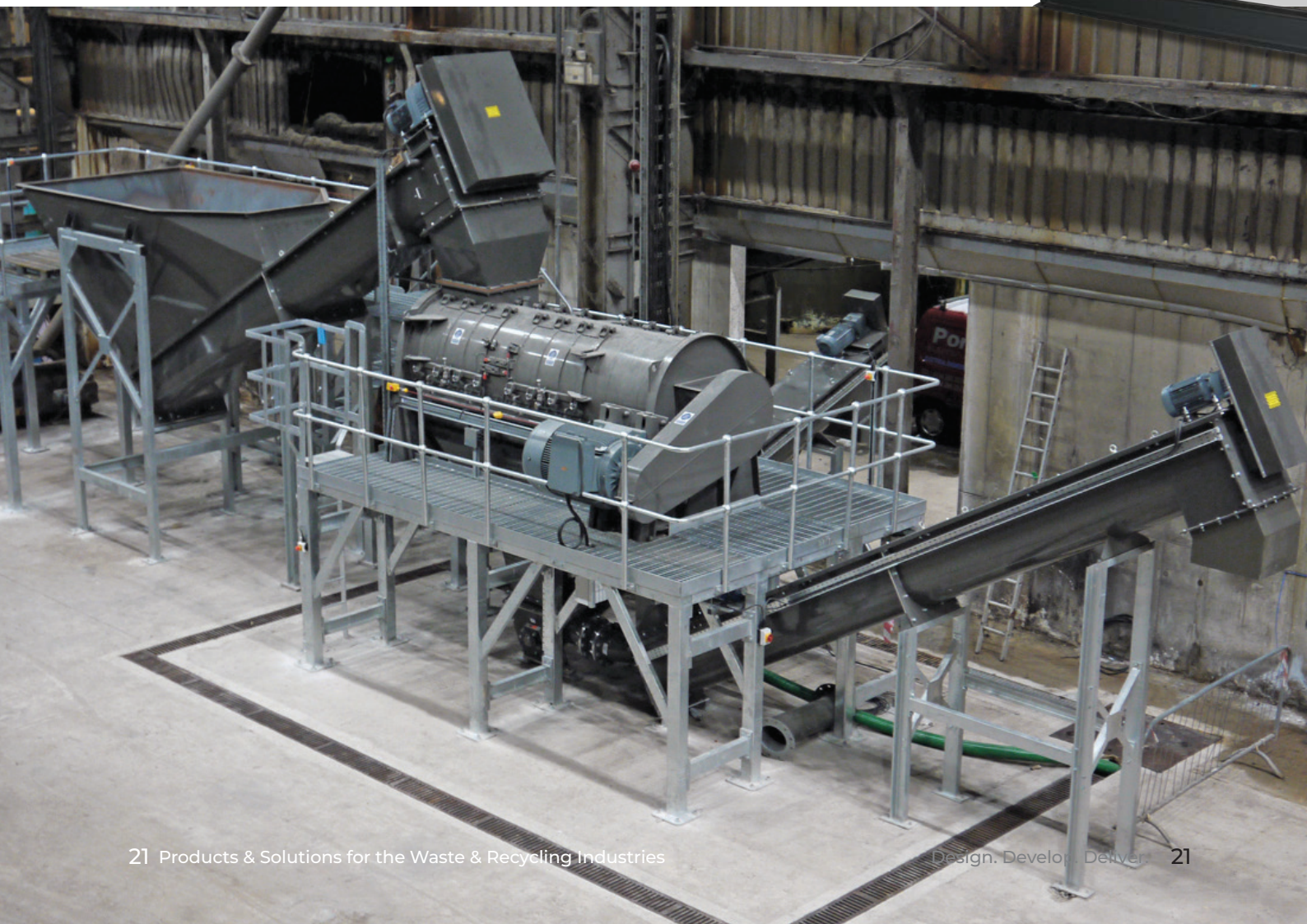


The Atritor Turbo Separator is the most versatile packaging separation machine capable of separating liquids and solids from numerous types of packaging and container.

The Turbo Separator has been developed to remove products from their packaging, releasing them for recycling or disposal. Through a combination of centrifugal forces, self-generated air flow and mechanical action, typically 99% or more of dry or liquid materials can be removed from their packaging. When compared with other methods of packaging separation, the Turbo Separator achieves higher separation efficiencies with lower power consumption which results in reduced running costs.

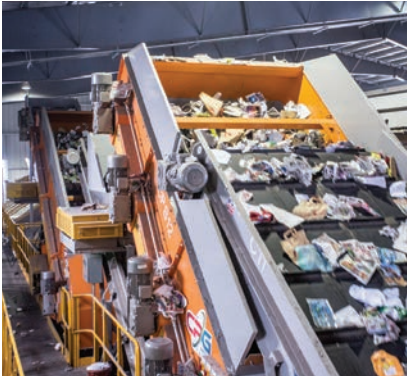
Features Include:

- Separation rate from 0.6TPH to over 20TPH
- Shaft speeds variable between 100rpm to 1000rpm to enhance efficiency
- Models available in carbon steel or grade 304 stainless steel to suit application
- Custom designed and engineered to meet specific separation requirements
- Revolutionary tubular design allows for efficient product change without cross-contamination, even where strict purity standards must be maintained

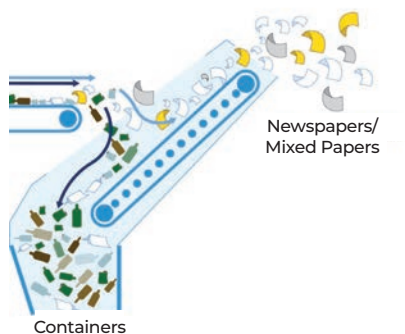


Separation Equipment

CPScreen™



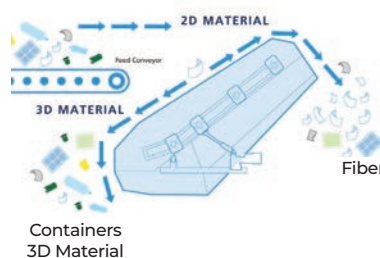
- Automatically separates small fibres from containers, and 2D from 3D material
- Small screen openings minimise loss of small fibres to container line and maximise capture rate
- Low maintenance, belt-driven screen that is resistant to jamming and wrapping
- High throughput



NEWScreen™



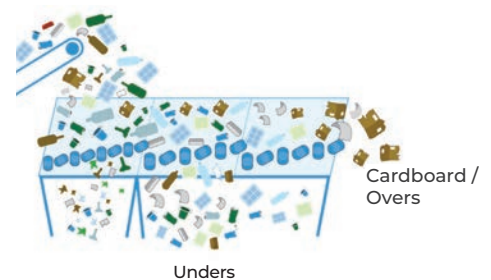
- Automatically separates large fibre (ONP) from mixed paper, containers and debris
- Patented rubber finger discs accurately size material for increased recovery rates
- Lowest disc cost per ton of material
- Shaft and disc designed for reduced wrapping
- High throughput



OCCScreen™



- Effectively separates old corrugated (OCC) from other mixed fibre, containers and debris
- Discs specially engineered to have consistent spacing at all points to prevent jamming
- Aggressive rubber discs separate both by size and rigidity, allowing the screen to separate rigid chip from similar sized "soft" newspaper



Separation Equipment

Glass Breaker Screen™ Scalping Screen



- Breaks and separates glass and fines
- Lowest operating-cost screen with the longest lasting discs in the industry
- Opening size between discs do not change with time; minimises loss of aluminum and PET
- Minimises contaminants to dramatically improve marketability of other materials

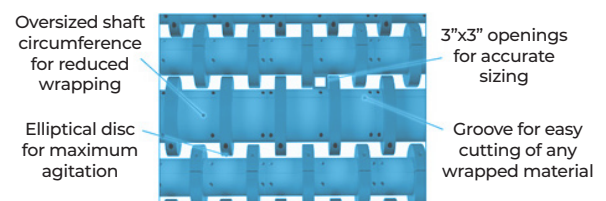
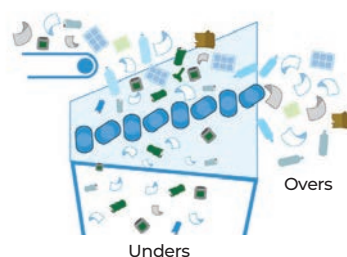
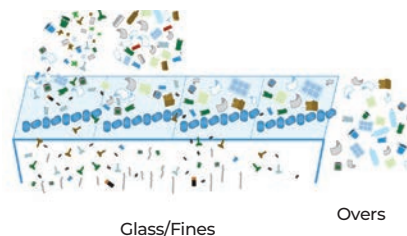


- Size-separates material, allowing separation machines downstream of sizing screen to work more efficiently – small containers can be routed past ONP screens or large containers can be routed past eddy current separator
- Low maintenance screen with long lasting steel discs

CP Auger Screen™



- Accurate separation of nesprint and large fibre from material stream
- Oversized shaft circumference mitigates wrapping
- Simple design keeps total number of discs and use of rubber to a minimum
- Non-pinching motion eliminates jamming
- High amplitude design agitates containers away from paper
- Design for safety: Foolproof lock out tag out mechanism with larger access door
- One-bolt disc are easy to change

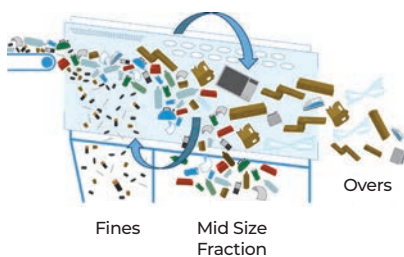


Separation Equipment

Trommel Screen



- Separates material by size and shape
- Processes up to 100 TPH of MSW, C&I, and C&D material, with bag opening option
- Increases system throughput capacity
- Heavy duty design and build
- Options for brush or air cleaning system



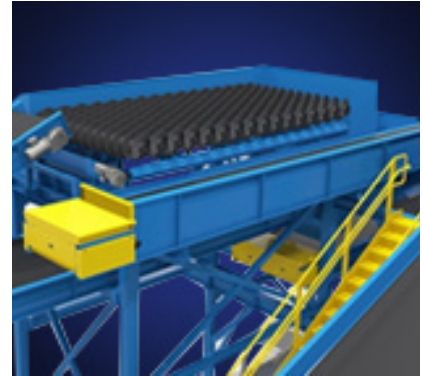
CP LightsOut™ Air Drum Separator



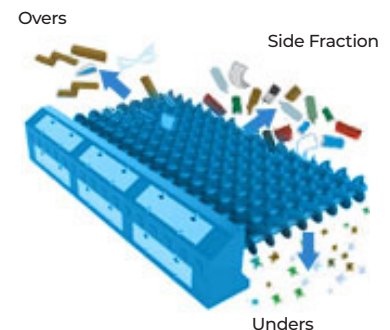
- Cost-effective of light material from glass
- Low operating cost tonne, no wear parts
- Turnkey equipment, ships ready to plug and play
- Separates light material such as film, fibre, and grit from glass
- Processes high volumes of material with surge protection
- No wear surfaces
- Separation chamber has no blockage
- Easy to tune and adjust
- Quiet and no vibration
- Throughput up to 30 TPH



CP Auger Screen™



- Sizes material by using a series of cantilevered augers
- No wrapping or jamming
- Reduces manual sorters
- Low maintenance, minimal wear
- Three cuts: Overs, Unders, and Sides
- Reliable sizing at high volume



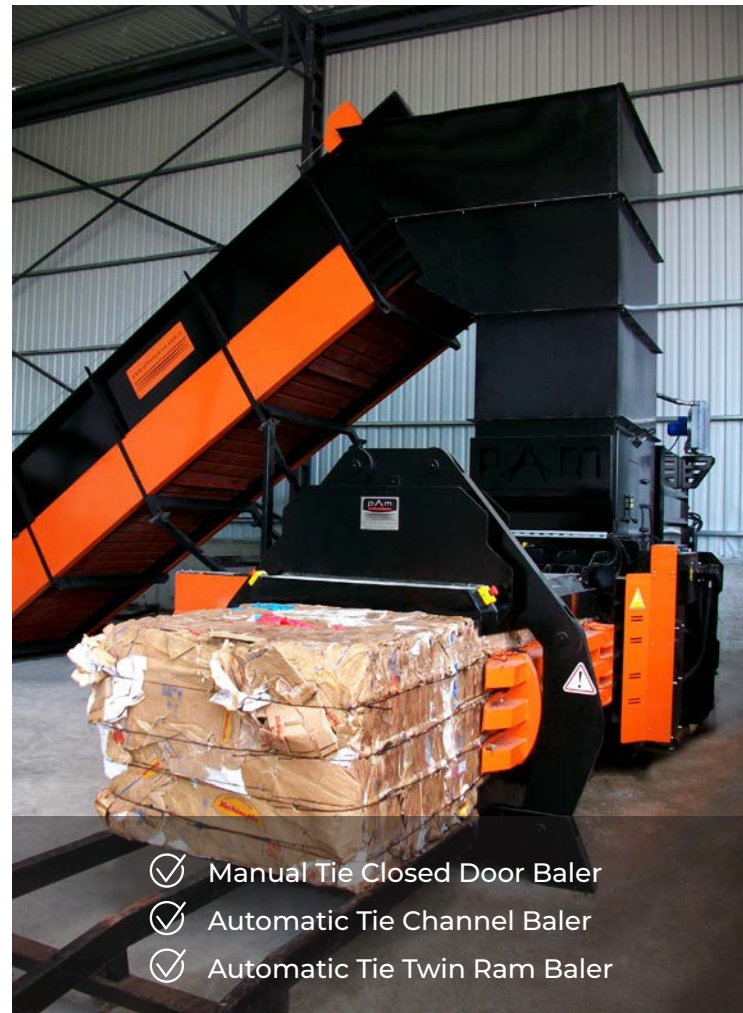
Horizontal Balers

Performance & Innovation

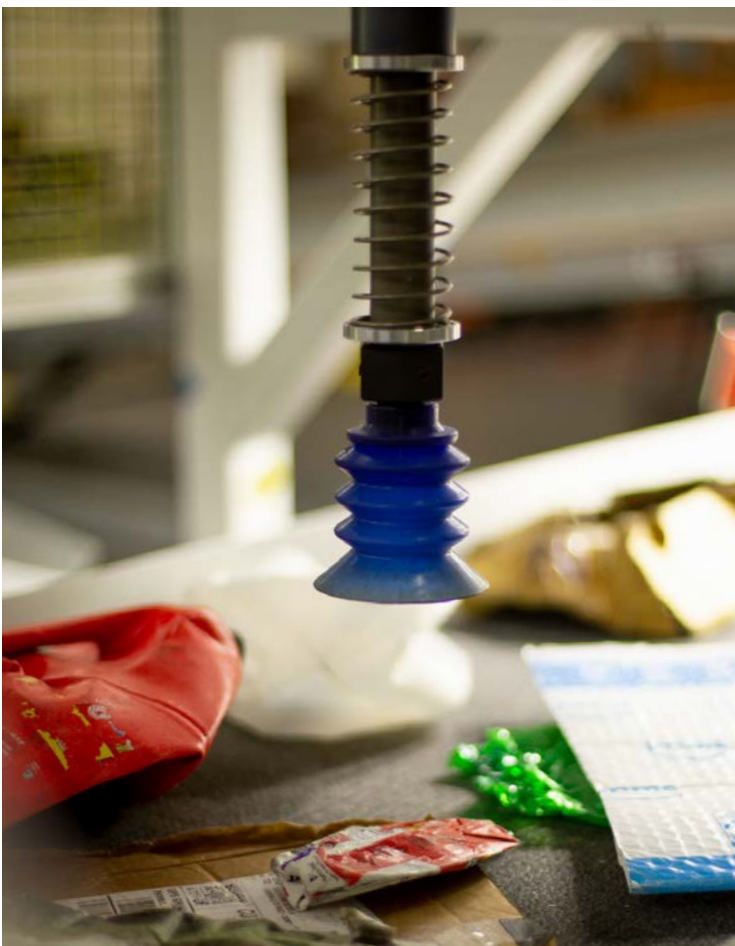
Wastech offers a full range of Balers sourced from quality suppliers across the world, allowing us to supply a full range of closed door, channel and two ram balers. All machines are fully compliant to Australian Standards and are backed by our comprehensive national service and maintenance offering.

Suitable Materials:

- Old Corrugated Cardboard (OCC)
- Paper (Mixed, Newsprint, Magazines)
- Municipal Solid Waste (MSW)
- HDPE (Containers)
- PET (Containers)
- Mixed Plastic (Shrink Wrap, Extrusions)
- PMMA (TV & Computer Screen Yokes)
- Aluminium Cans
- Steel Cans
- Custom Material



- ✓ Manual Tie Closed Door Baler
- ✓ Automatic Tie Channel Baler
- ✓ Automatic Tie Twin Ram Baler



Robotic Sorting

AMP ROBOTICS is leading the way in industrial artificial intelligence (AI) to change the economics of material recovery. AMP's breakthrough technology automates the identification, sorting, and processing of material streams to extract maximum value for material recovery facilities (MRFs) that process single stream, mixed waste, construction & demolition and e-waste. Ideal on waste lines and to replace Quality Control after optical sorting to increase purity levels in order to meet current stringent requirement.

Benefits:

- Higher Revenue
- Lower Cost
- Better Safety
- Greater Efficiency
- Improved Monitoring
- Fast Implementation

Air Separation

Solutions & Products

Impact Air Systems provides a vast range of pneumatic conveying, dust control and material separation solutions throughout a wide variety of industries. Our products and systems provide convenient solutions for a number of waste extraction situations or recycling operations, making the process efficient and cost effective. Our service and maintenance division ensure the systems are always in full working order to keep your machine downtime at an absolute minimum.

Products Include:

- Zigzag Classification Unit (ZCU)
- Air Drum Separator
- Airknife Separation
- Zig-Zag Density Separation
- Film Vacuum System
- Pneumatic Transfer Lines
- Dust Extraction Systems



Fire Prevention Systems

Fire Rover is the Premiere Fire Prevention System

Advanced Fire Detection

Analytics With Human Verification

Early detection is achieved through the use of military-grade thermal detection and high-definition video. All information is fed into sophisticated false alarm filtering analytics before final verification by human agents.

Remote-Controlled Suppression

Verified threats are immediately addressed by a targeted suppression that concentrates firefighting agent at the base of the fire and minimizes disruption and cleanup.

On Guard — 24/7

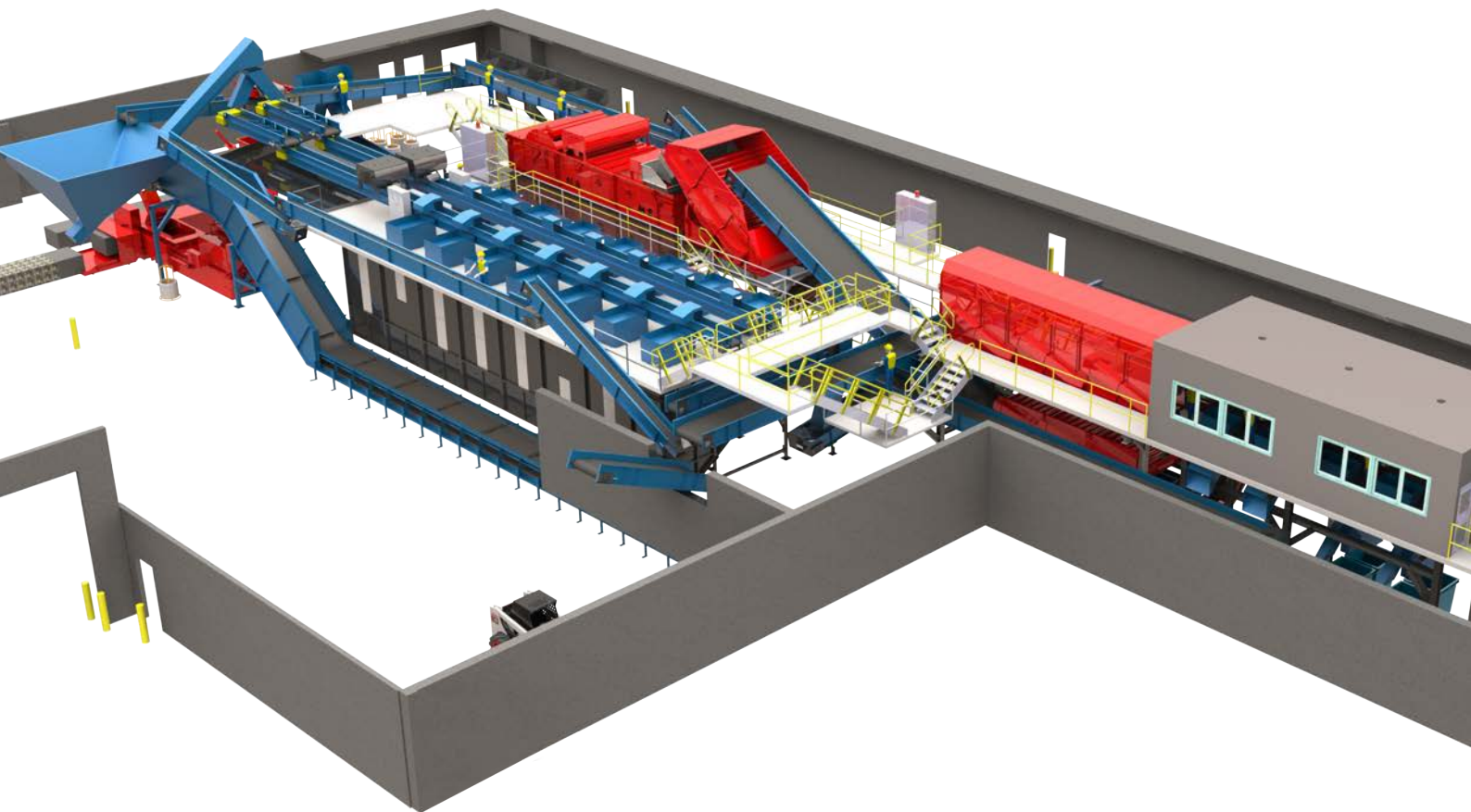
The Fire Rover system is supervised 24/7/365. Any disruptions are addressed promptly, and all equipment is included in the comprehensive maintenance and service program.



Fire rover can be integrated into a factory layout or kept outside for ease of use

Fire Rover Specifications

Cannon length	Cannon radius	Container size	Water tank size
45 metres	90°	20 foot	3,785 litres



3D CAD Design

A perfect preview of your site

Want to see what your transfer station or sorting system is going to look like before it's built? Wastech offers 3D concept design and advice that enables you to design your site with the best standards and efficiencies in mind.

From moving floor pits and conveyor fed systems to complete transfer stations and large scale sorting facilities; Wastech has the experts to construct a perfect rendering of your facility.

Our Partners

CPG

Seen as one of the leading equipment suppliers and integrators, the CP Group has installed more than 400 Material Recovery Facilities around the world. CP partnered with Wastech in 2012 to strengthen its offering to the Australian market by delivering end to end solutions from concept design to installation and ongoing service and maintenance. Together we can solve all your complex sorting challenges across a broad range of material types and throughputs.



PAM Horizontal Balers

As the leading Turkish Horizontal Baler manufacturer, PAM combines European hi-tech design with low manufacturing costs to produce quality balers at an affordable price. They produce a range of automatic and semi-automatic-tie balers which are suitable for baling many types of materials. PAM balers are fully supported by local spare parts and servicing.



Atritor Turbo Separator

Acknowledged as the best de-packaging system in the world, the Turbo Separator is changing the way we treat waste product and recover it to turn into a valuable resource. The Turbo Separator is extremely versatile in its ability to separate many types of product from packaging. The process means less waste goes to landfill, which reduces the cost for the user.



Pilot Crushtec

Pilot Crushtec International has established itself as an international leader of mobile and semi-mobile crushing, screening, recycling and material handling solution provider. Their product range includes, vertical shaft impact crushers, horizontal shaft impact crushers, screens and conveyors. In 2020, we partnered with Pilot Crushtec to bring their products to the Australian market



Impact Air Systems

Impact Air Systems provides a vast range of of pneumatic conveying, dust control and material separation solutions throughout a wide variety of industries. Our products and systems provide convenient solutions for a number of waste extraction situations or recycling operations, making the process efficient and cost effective. Our service and maintenance division ensure the systems are always in full working order to keep your machine downtime at an absolute minimum.



AMP Robotics

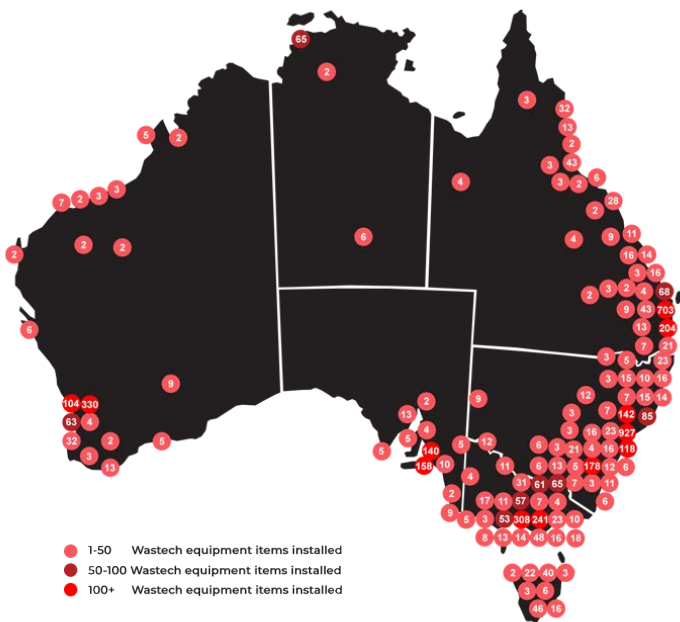
AMP Robotics is leading the way in industrial artificial intelligence (AI) to change the economics of material recovery. AMP's breakthrough technology automates the identification, sorting, and processing of material streams to extract maximum value for material recovery facilities (MRFs) that process single stream, mixed waste, construction & demolition and e-waste. Ideal on waste lines and to replace Quality Control after optical sorting to increase purity levels in order to meet current stringent requirement.



Fire Rover

Fire Rover is the one and only portable fire suppression system that effectively and efficiently prevents fire 24/7. Fire Rover is equipped with the FLIR A310F thermal camera, Watchdog's award-winning video surveillance system and a powerful foam dispensing unit. Fire Rover is the only system that can assure you, you'll never have to worry about fires again. The moment a rise in temperature is detected, our central station is alerted, analyzes the situation and if needed, dispenses the foam to cool the hot spot or suffocate the fire.





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