

MK Group Recycling & Recovery Solutions



Reliable and efficient high quality products for maximum productivity



Construction & Demolition Waste Recycling Solutions



Commercial & Industrial Waste Recycling Solutions



Organic Waste Recycling Solutions



Co Mingled Waste Recycling Solutions



Municipal Solid Waste Recycling Solutions



Wood Recycling Solutions

Yorwaste

Yorwaste handle over a million tonnes of waste each year, recycle 903,934 tonnes of material and have over 10MW of green electricity of electricity generating capacity.

M&K were awarded the contract to design, manufacture, commission & support Yorwaste's new Commercial & Industrial Waste (C&I), Municipal Solid Waste (MSW) & Construction & Demolition (C&D) Recycling Operation in Harewood after being nominated Yorwaste's preferred supplier through Yorwaste's comprehensive & rigorous tendering process.

Some of the tendering process measurement criteria included;

- process knowledge,
- system design,
- service & maintenance contracts,
- health & safety considerations
- & user training capabilities.

As part of the tendering process Yorwaste visited several reference sites and visited M&K's new technology centre in Dungannon.

Application

- Commercial & Industrial Waste (C&I)
- Municipal Solid Waste (MSW)
- Construction & Demolition Waste (C&D)

Yorwaste's Problem(s)

- poor reliability of previous system
- poor throughput of previous system
- need to increase efficiencies and flow of materials
- boost the output of saleable reclaimed materials

M&K designed, manufactured, installed, commissioned & support a recycling system that combines a number of Separating, Recovery & Shredding modules namely;

- FBS1200 Feeder c/w variable speed
- STS1225 Trommel c/w fines collection system + fe recovery
- 7 bay recovery system c/w Enviro Cabin & Air Purification System
- Shredder
- STS1225 Trommel
- MK Electrical Panel
- + a number of link conveyors.

Due to the high quality of the M&K system, Yorwaste were able to maximise the utilisation of their new building by positioning the recovery system outside, therefore maximising the floor space for feedstock & recovered material storage.

Customer Benefits

- greater throughput
- improved recycling rates
- reduced landfill costs
- reduced operating costs
- increased revenues
- increased profitability



Yorwaste key facts and figures:

- Yorwaste handle over one million tonnes of waste each year
- In 2010/11, Yorwaste recycled 903,934 tonnes of material that came into their facilities
- Yorwaste compost over 200,000 tonnes of green waste each year
- Yorwaste process and recycle over 200,000 televisions and computer monitors each year
- In 2010/11, Yorwaste produced 59,690 MWh of green electricity from the capture of landfill gas
- Yorwaste now have over 10MW of electricity generating capacity at their landfill sites
- 67% of the total area of Yorwaste's landfill sites have been restored
- The recycling rates at Yorwaste's household waste recycling centres are over 65%
- In 2010/11, Yorwaste provided grants of around £600,000 to fund community projects near Yorwaste's landfill sites.

M&K Group

M&K have been pioneers in the design, manufacture, installation and support of innovative material handling and resource recovery solutions for over 30 years. Our innovative turnkey solutions & life cycle services offering's represent the lowest sustainable cost per ton solutions available on the market.

Our key markets are recycling, energy & quarrying

Long term commitment to provide our customers with sustainable value

Substantial investments in Engineering, Manufacturing & Customer Service support our commitment to provide our customers with high quality, reliable & efficient products and service.



Globally M&K products & systems are synonymous with excellent reliability, service, parts availability, long life and excellent value.

M&K offer turnkey systems for MSW, C&D, C&I, Waste to Energy, Co Mingled & Organics Processing Solutions.

M&K supply Shredders, MRFs, Screens, Ballistic Separators, Trommels, Magnets, Eddy Currents, Air Density Separators, Conveyors, Feeders & Optical Sorting equipment.

Infrastructure

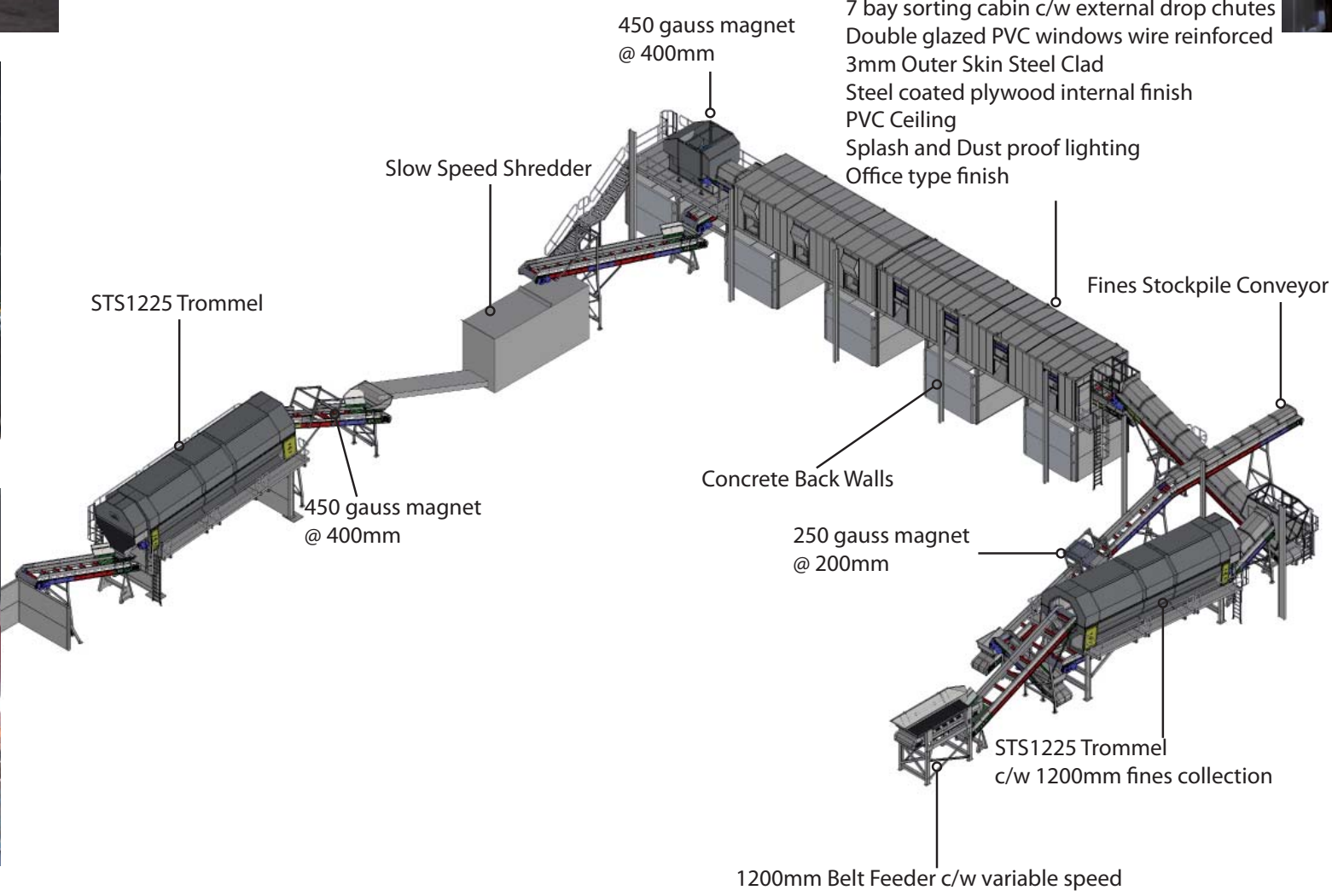
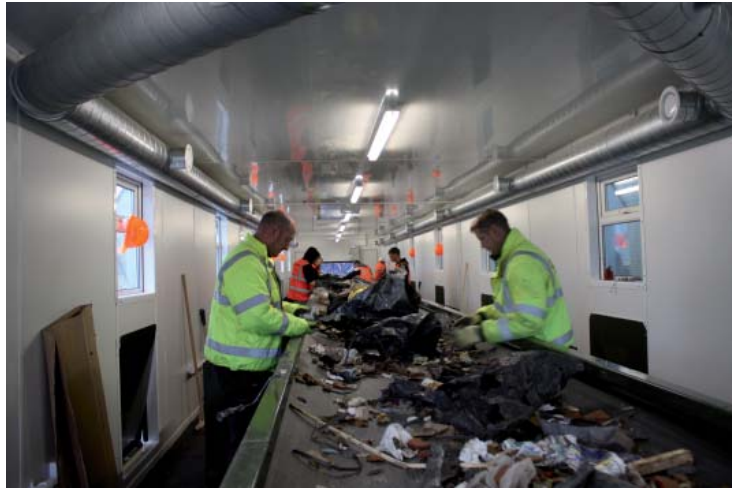
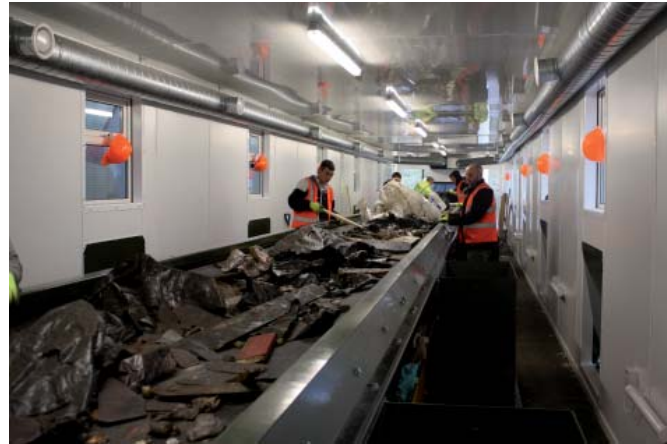
- Site: 3 Hectares (7.5 Acres)
- Industrial Buildings: 5500 sq Metres (60000 Sq. Feet)
- Spare Parts: 325 Sq Metres (3500 Square Feet)
- Office Accommodation: 325 Sq Metres (3500 Square Feet)

Facilities (Industrial)

- Laser Cutting
- Fabrication
- Surface Treatment
- Subassembly
- Final Assembly
- Research & Development
- Testing/Quality Control
- Warehousing
- Global Distribution Centre

Facilities (Non Industrial)

- Mechanical Engineering
- Electrical Engineering
- Hydraulic Engineering
- Technical Support
- Procurement
- Production Control
- Quality Control
- Project Management



FBS1200 Feeder Module



Features

- Nord 2.2 Kw electric variable speed drive
- Impact Bars throughout
- Full length skirting rubber to aid material containment
- Guide rollers suitably positioned to aid Belt Alignment
- Automatic greasing
- Global aftermarket support, with standard stock parts to ensure minimum loss of production

Benefits

- Rugged, high torque system
- utilisation of quality, long-life components maximises system uptime & reduces downtime
- All transfer points with other equipment from the MK range designed to ensure the efficient transition of material, minimising spillage & downtime maximising capacity & production and therefore profitability.
- Proven technology developed over 30 years.

STS1225 Trommel Module



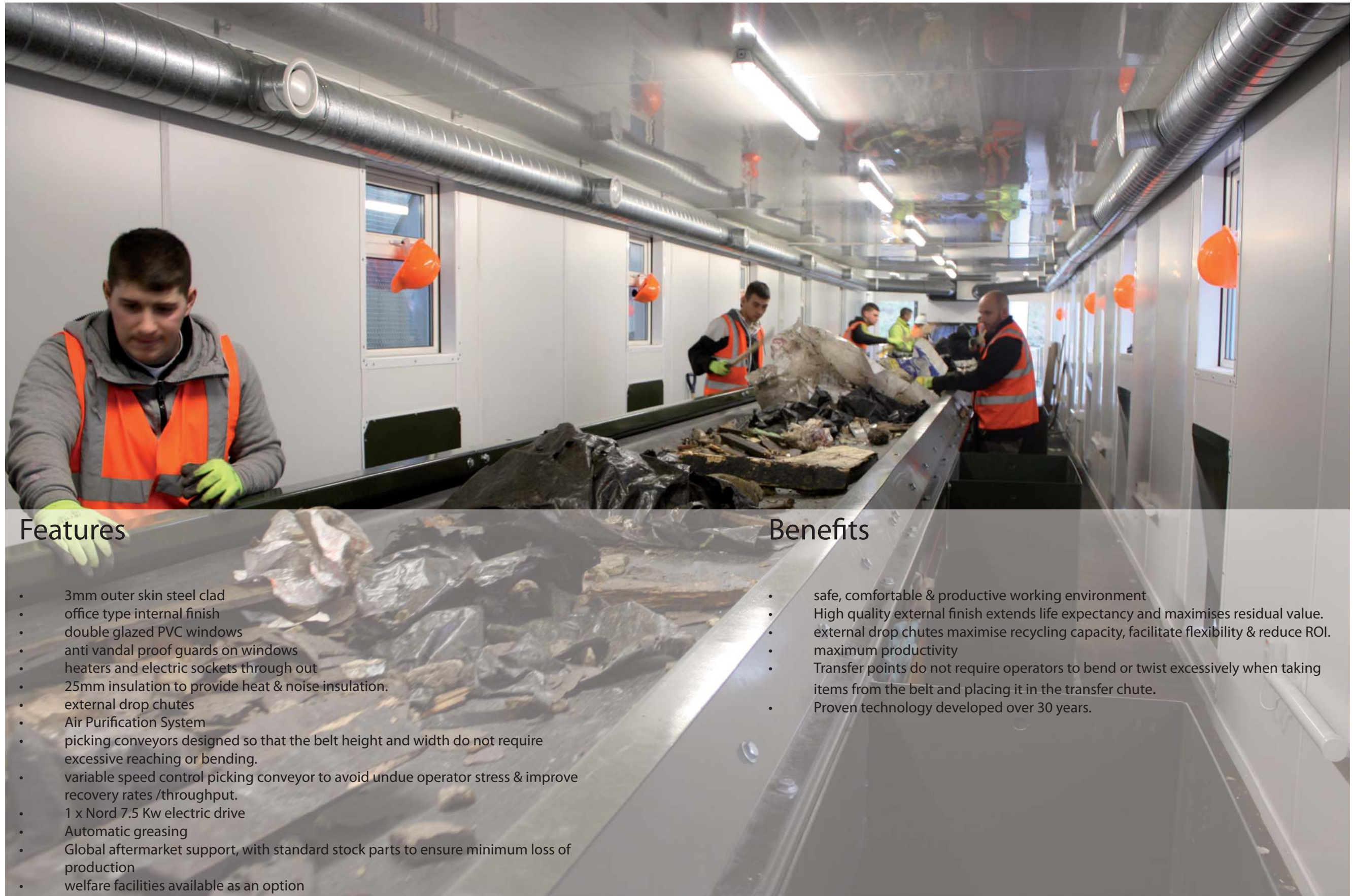
Features

- Drum Size – 11520mm x 3200mm
- Screening Size – 8000mm x 2500mm
- Screening Area – 62.8m²
- 4 x Nord 5.5 Kw electric drives (4 wheel drive)
- Dust encapsulation
- Removable screen plates (no need to change the entire drum to change mesh configuration)
- Removable bag opener knives
- Removable material lifters
- Automatic greasing
- Global aftermarket support, with standard stock parts to ensure minimum loss of production

Benefits

- utilisation of quality, long-life components maximises system uptime & reduces downtime (unit can operate on only 1 drive)
- reduced inventory holding via parts standardisation and compatibility (all mesh plates the same size)
- Environmentally friendly: low energy consumption and dust & noise control minimises the impact on the environment and improves working conditions.
- Proven technology developed over 30 years.

Recovery Cabin Module



Features

- 3mm outer skin steel clad
- office type internal finish
- double glazed PVC windows
- anti vandal proof guards on windows
- heaters and electric sockets through out
- 25mm insulation to provide heat & noise insulation.
- external drop chutes
- Air Purification System
- picking conveyors designed so that the belt height and width do not require excessive reaching or bending.
- variable speed control picking conveyor to avoid undue operator stress & improve recovery rates /throughput.
- 1 x Nord 7.5 Kw electric drive
- Automatic greasing
- Global aftermarket support, with standard stock parts to ensure minimum loss of production
- welfare facilities available as an option

Benefits

- safe, comfortable & productive working environment
- High quality external finish extends life expectancy and maximises residual value.
- external drop chutes maximise recycling capacity, facilitate flexibility & reduce ROI.
- maximum productivity
- Transfer points do not require operators to bend or twist excessively when taking items from the belt and placing it in the transfer chute.
- Proven technology developed over 30 years.

Shredding Module



Features

- Simple and robust construction
- Self cleaning
- Hydrostatic, high-torque, asynchronous drive system
- Variable speed functionality
- Bi-directional/reversible operation
- Optimised shredding programs
- Safety system that protects shredder from damage
- PLC controlled monitoring
- Automatic Lubrication
- High quality components throughout
- Global aftermarket support, with standard stock parts to ensure minimum loss of production

Benefits

- High capacity
- Low operating cost
- Low wear costs
- Low maintainence
- Mimised fire hazard
- Modular in design - can be incorporated in to an existing process
- Minimal wear/maximum availability

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Process more material, minimise downtime, build profitability