KIVERCO™
RECYCLING PLANT

MODULAR PLANT

DS150 DENSITY SEPARATOR
TECHNICAL SPECIFICATION



MODULAR

DS150 DENSITY SEPARATOR

APPLICATIONS

- Construction & Demolition Waste
- Commercial & Industrial Waste
- Dry Mixed Recyclables
- Composting
- Municipal Solid Waste
- Land Remediation Sites
- RDF/SRF Production



FEATURES & BENEFITS

- Quick set-up
- Operational in less than a hour
- No cranes required during set up
- Efficient material separation into useable fractions, using the latest in air separation technology
- Clean aggregates: Effectively removing contaminating materials including wood, plastic, paper, card
- Produce a quality RDF / SRF – by removing any heavy inert materials or metals
- Precision adjustment for maximum separation performance across a wide variety of materials and sizes
- Integrated, Super Silent Diesel Generator complete with pre-clean filter and wide core radiator for optimal performance in many environments
- Electric drive operation increases efficiency and eliminates the risk of oil leaks

ACCELERATOR CONVEYOR



DETAILS	
CONVEYOR BELT	Plain EP400 3 PLY 3+1.5
CONVEYOR BELT WIDTH	1500mm
Kiverco Belt Scraper at Tail	
Vertical & Horizontal Adjustment	
Belt Support Plate	
Disc Return Rollers	
Heavy Duty Pillow Block Bearings	

SEPARATION CHAMBER



DETAILS	
SPLITTER DRUM	1750mm Wide, Fixed Position
TWIN FAN BLOWERS WITH VARIABLE SPEED DRIVE	• To deliver maximum separation performance across the full width of the belt. • Each fan can be independently controlled and adjusted in terms of air volume and velocity as well as blower nozzle angle adjustment.
CLOSED LOOP AIR RECIRCULATION SYSTEM	To aid separation and minimise dust release
VIEWING HATCH AND MAINTENANCE ACCESS HATCHES	Grid markings on viewing hatch to set-up accelerator conveyor position depending on application

HEAVIES COLLECTION CONVEYOR



DETAILS	
CONVEYOR BELT	Plain EP200 2 PLY 2+1
CONVEYOR BELT WIDTH	650mm
Kiverco Belt Scraper at Head	
Heavy Duty Pillow Block Bearings	
Standard Right Hand Discharge *(Can be Set-Up to Left Discharge at Time of Order)*	

HEAVIES STOCKPILE CONVEYOR





DETAILS	
CONVEYOR BELT	Chevron (15mm Cleats) EP250 3 PLY 3+1.5
CONVEYOR BELT WIDTH	1000mm
INCLINE ANGLE	Fixed @ +25 degrees
Conveyor With 2 Stage Hydraulic Folding Mechanism for Transport	
Heavy Duty Pillow Block Bearings	
Standard Right Hand Discharge *(Can be Set-Up to Left Discharge at Time of Order)*	

LIGHTS STOCKPILE CONVEYOR



DETAILS	
CONVEYOR BELT	Chevron (15mm Cleats) EP400 3 PLY 3+1.5
CONVEYOR BELT WIDTH	1200mm
INCLINE ANGLE	30 degrees
Heavy Duty Pillow Block Bearings	

HYDRAULIC SYSTEM (FOR SET UP ONLY)



DETAILS	
POWER PACK	7.5kW Motor
TANK VOLUME	50L
OIL TYPE	ISO 32 Standard ISO 46 Optional
JACK LEGS	Heavy Duty Square Hollow Steel Section Front and Rear Hydraulic Jack Legs c/w Bracing Manual fold out/in to reduce transport width
HEAVIES CONVEYOR SET-UP RAMS	
SAFETY DEVICES INBUILT ON HYDRAULIC SYSTEM	

60KVA STAGE 3A GENERATOR (SUPER SILENT CANOPY)



DETAILS	
GENERATOR	400V, 50HZ
ENGINE	4.5L FPT
FUEL CONSUMPTION	@50% duty/load 9.5 L/hr Range 24.7 hrs
WIDE CORE RADIATOR	To improve performance of the engine cooling system and greatly reduce risk of overheating
PRE CLEAN FILTER	Extends the life of the air filter, reduces operating costs, separates more than 99% of particles 20 micron and larger

ELECTRIC CONTROL PANEL & MACHINE WIRING



DETAILS	
IP66 RATED ELECTRICAL CONTROL PANEL	• Mild steel enclosure IP66 (1200mm x 800mm x 300mm) • 80A door interlocked main isolator switch • Manual/Off/Auto selector switch • Start/Stop illuminated push buttons for manual control and auto control • Multi-pin sockets on side of control panel to interlock to other modular plant

POWER REQUIREMENTS SUMMARY



DETAILS	
ACCELERATOR BELT	5.5 kW Drive Motor
HEAVIES COLLECTION CONVEYOR	0.75 kW Drive Motor
HEAVIES STOCKPILE CONVEYOR	2.2 kW Drive Motor
LIGHTS STOCKPILE CONVEYOR	2.2kW Drive Motor
SPLITTER DRUM	2.2kW Drive Motor
FAN BLOWERS	2 X 11kW Motors
HYDRAULIC SYSTEM	7.5kW Motor **For setup only
TOTAL OPERATING POWER CONSUMPTION	36kW

ELECTRICAL CONTROL SYSTEM OPTIONS



FACTORY FITTED OPTION	DETAILS
LOW LEVEL POSITION OPERATOR PANEL	Includes generator start/stop
DUAL POWER / MAINS CHANGEOVER	This enables mains electric or generator input
E-STOP SYSTEM LINK CABLE TO LINK BACK TO AUXILIARY EQUIPMENT UP TO A MAX. LENGTH OF 25M.	NB: If longer cable required please specify cable length please state length and request price

GENERATOR OPTIONS



FACTORY FITTED OPTION	DETAILS
REVERSIBLE (CLEAN FIX) FAN	
REMOVE COMPLETE GENERATOR AND ANCILLARIES	
WINTER SPEC OPTION	Battery wrap heater, oil sump heater, engine jacket coolant heater, anti-condensation heater for alternator, heat tracing for fuel pipework and injector pump, an appliance inlet 16AMP 2P+E on a separate enclosure with local isolation and with separate circuit protection for each heater

MACHINE OPTIONS

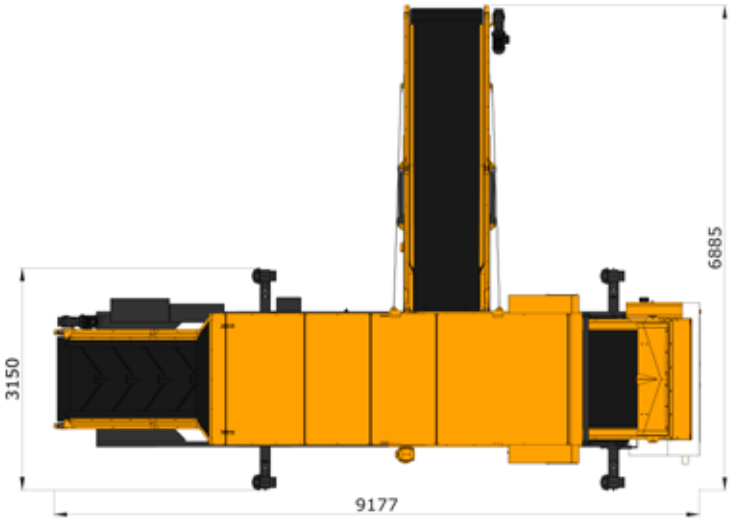


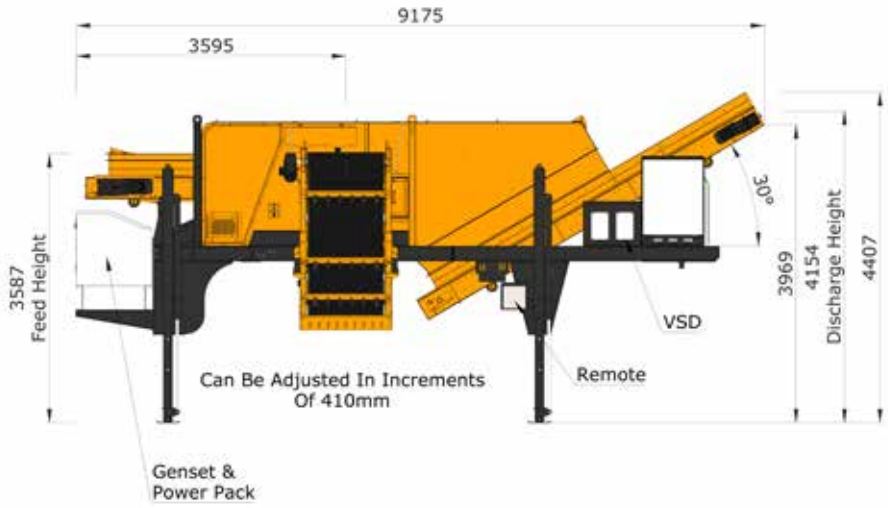
FACTORY FITTED OPTION	DETAILS
UNBRAKED WHEELED SITE AXLE	Comes with 5th wheel coupling kit
LIGHTS DISCHARGE CONVEYOR PVC TARP COVER & DISCHARGE DRAPE	
STAINLESS STEEL SEPARATOR DRUM	Prevents magnets sticking to the separator drum
MAGNET HEAD PULLEY ON HEAVY STOCKPILE CONVEYOR	Ferrite magnet
MAGNET HEAD PULLEY ON LIGHTS STOCKPILE CONVEYOR	Ferrite magnet
IN-FEED CONVEYOR EXTENSION	Mandatory option required when collection of mid-sized direct from FT620
CUSTOM PAINT COLOUR FOR THE BASE MACHINE	Standard RAL codes only

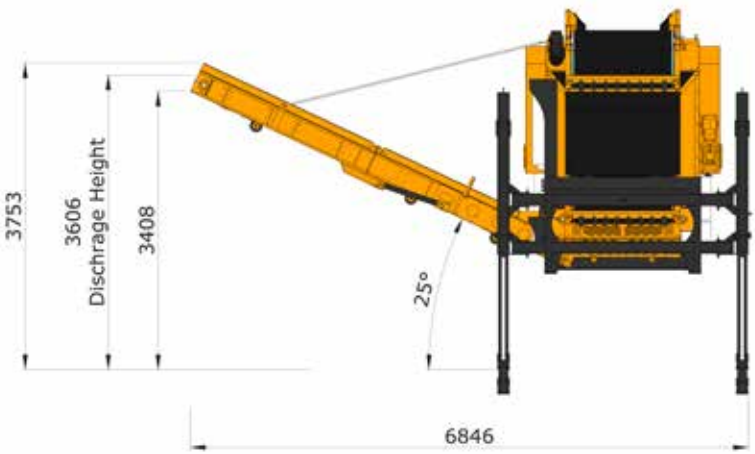
OPERATING DIMENSIONS

- Operating Length: 9,200mm
- Operating Width: 7,000mm
- Operating Height: 4,500mm
- Weight: 11,000kg









TRANSPORT DIMENSIONS



KEY POINTS

- Hydraulic jacking legs to lift and lower whole machine from transport position to working position. Machine can be lowered onto a low loader transport trailer without the need for any crane / lifting equipment.
- Three stage height adjustable jacking legs gives the ability to adjust feed-in height to suit the feeding machine and discharge heights for greater stockpile capacity.

TRANSPORT DIMENSIONS	
Transport & Operating Length:	9,200m
Transport Width:	2,900m
Transport Height:	3,700m *(on a 600mm low loader)*
Min feed in height:	2,386mm
Max feed in height	3,586mm
Min heavies stockpile height:	2,258mm
Max heavies stockpile height:	3,458mm
Min lights stockpile height:	2,764mm
Max lights stockpile height:	3,964mm ** Subject to material type*
Input material size:	Up to 150mm* (6')
Throughput:	Up to 150m³/hr*

