



Innovation at Work

EDGE FSM FINES RECOVERY



designengineeringinnovation





**FEED.
SCREEN.
SEPARATE.**

PRODUCT

HIGHLIGHTS



KEY HIGHLIGHTS

“The plant is almost paying for itself on the recovery of metals – it’s a no-brainer, really.” James Dickinson, J Dickinson & Sons.

Incorporates a ten Stage separation process

Creates products that meet stringent specifications with the ability to handle a wide range of materials

Incorporates an FMS with a bespoke hopper, Flip Flop Screen, over-band and head drum magnets, blowers and our MC1200

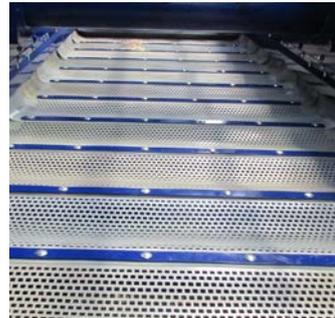
Produces 6 + fractions including; Ferrous metal, inert fines, clean heavies & RDF

Compact modular design - fits easily within an existing system

Fully adjustable components such as fan speed, belt speeds, screening angle, mesh media etc.

Turns “waste” into a valuable saleable asset

A true robust solution for the trommel fines issue



A unique combination of equipment designed to maximise the recovery of material from the waste stream whilst reducing transfer station’s operating costs. Incorporating a ten stage separation process that combines mechanical screening with “Light V Heavy” material recovery and magnetic technology, the EDGE FSM Fines Recovery plant minimizes the volume of material going to landfill. This unique separation process provides operators with a clean sellable hardcore product, inert fines, ferrous metal and a clean lights product suitable for RDF.

This new concept consists of a mobile or static feed stockpiler with bespoke hopper, our new Flip Flow screen, a selection of over-band and magnetic head drum magnets, blowers and our new material classifier. The FSM Fines Recovery plant is another example of EDGE Innovate providing solutions to meet the ever-changing demands placed on recycling facilities.

APPLICATIONS



Processing C&d Waste - England

Is the HMRC Landfill tax a huge worry?

Need a solution for the growing amount of waste that you are taking in, and the subsequent amount of trommel fines that you are producing?

EDGE Innovate have come up with a true, robust solution to the trommel fines issue. This tried and tested plant allows the customer to divert up to 50% of waste away from landfill whilst enabling waste facilities to produce fines that qualify for the low rate of landfill tax. Processing up to 25 tonnes per hour, the FSM Fines plant has the ability to divert a massive 500 tonnes per week from landfill, enabling waste management companies to make further investments in other areas of their business whilst reducing their carbon footprint.

“We have found that around 50% of the fines that we were taking to land fill is now turned into clean heavies which is of course a hard-core product that we can dispose of much easier and more cost effectively”. Mick Jones, GoWaste



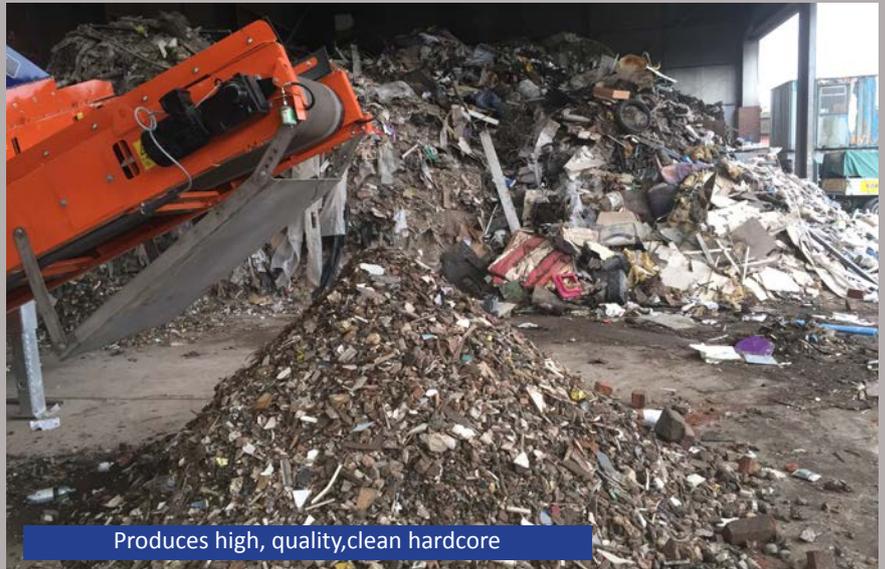
(option) Blower for fine separation



FF16X5 Flip Flow Screen

APPLICATIONS

Construction and Demolition waste
Skip Waste
Commercial and Industrial Waste
Biomass
Refuse Derived Fuel
Solid Recovered Fuel
Plastic Fractions
Ferrous/Non Ferrous
Aggregates
ANY Application where product separation is required



DESIGN FEATURES

EDGE Innovate have worked tirelessly to ensure our products are of the highest quality we only ever use parts and products that have been developed, tested and proven to provide optimal performance and reduce operating and maintenance costs. Every part is vital for uptime and performance.

1

Hopper & Feed Conveyor

- Large 4m³ (5.2yds³) hopper capacity.
- 1200mm (48") conveyor with variable belt speed.
- Forward/Reverse auger ensures an even transfer of material .

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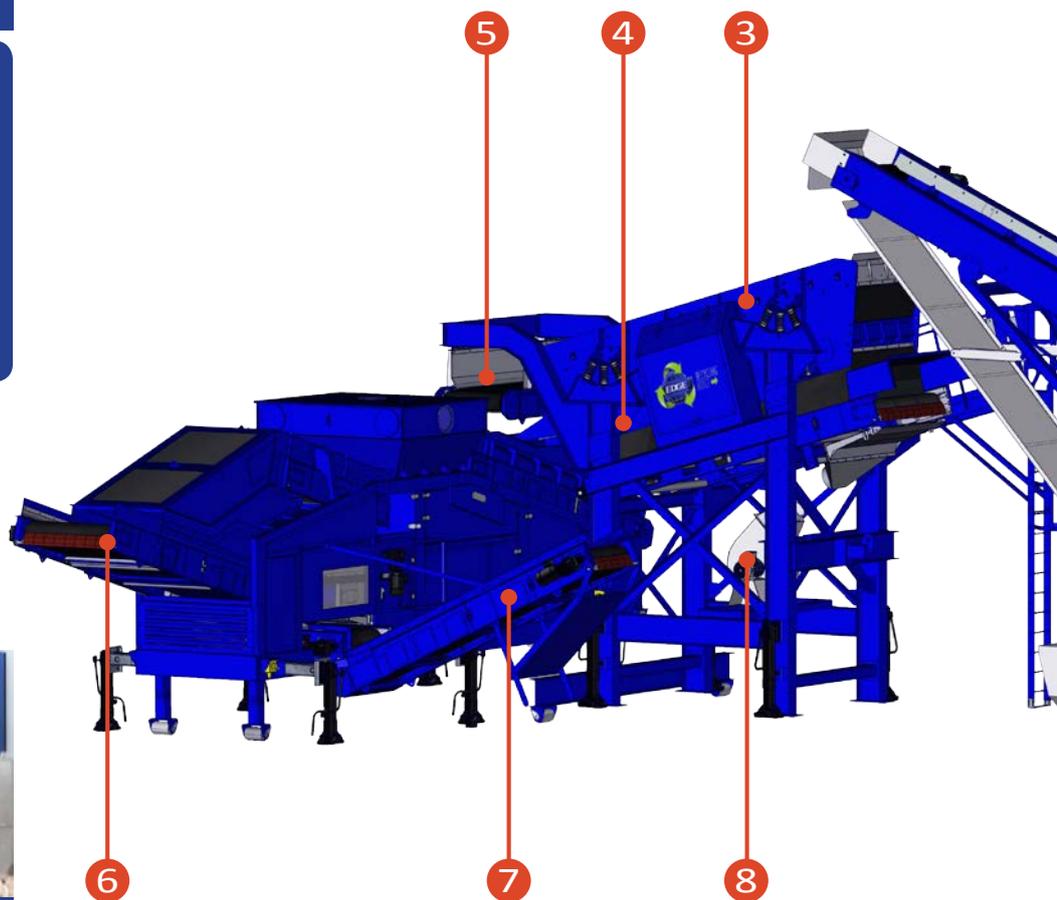
AIR KNIFE

- Designed to separate Lights from -12mm fines screened from the flip flow deck.
- Separated combustible material such as polystyrene to provide an inert fines product that will meet lower landfill tax rate specifications dependant on material being processed.

7

HEAVIES DISCHARGE CONVEYOR

- The MC1200 heavies discharge conveyor consists of a 800mm (32") wide belt, electrically driven via a 3Kw motor.
- Optional magnetic head drum is available to extract ferrous metal that may have been missed by the overband magnet.



2



Feed Conveyor Magnets

- Options of overband and magnetic head drums available.
- Extract valuable ferrous metal from the waste stream.
- Stainless steel chutes transfer metals to skips below.

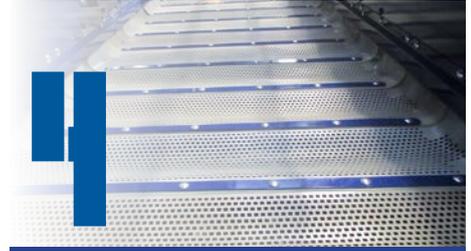
3



Oversize Top Deck

- A high performance 3D scalping screen.
- Fitted with 4 number side tensioned screen media panels.
- Option of wire mesh, punched rubber, punched plate, bofor bars, finger or rod bar screen media.

4

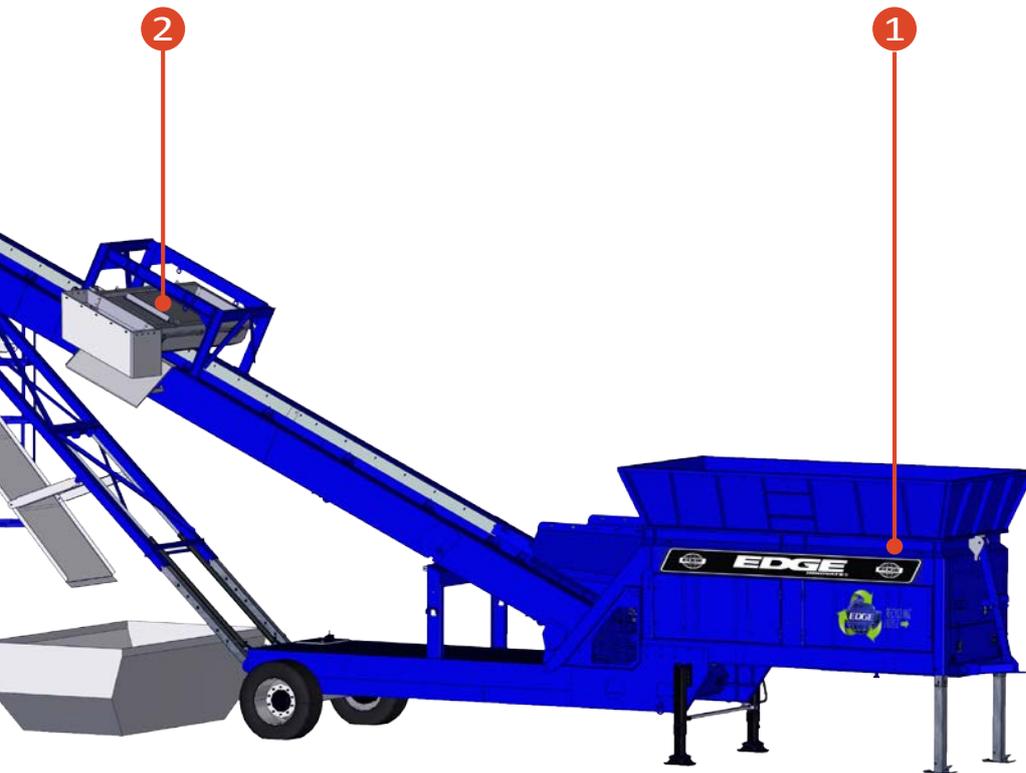


Bottom Deck

- Consists of an innovative Flip Flow screen.
- As the screen shaft rotates the bottom deck floating frame moves back and forward and up and down on relative fixed cross members.
- Enables the screen mats to alternately compress and stretch.

2

1



5



FF16X5 Oversize Conveyor

- Screened oversize material is diverted via a 800mm (32") conveyor
- A self lubricating grease system comes as standard along with a 3 ply belt.

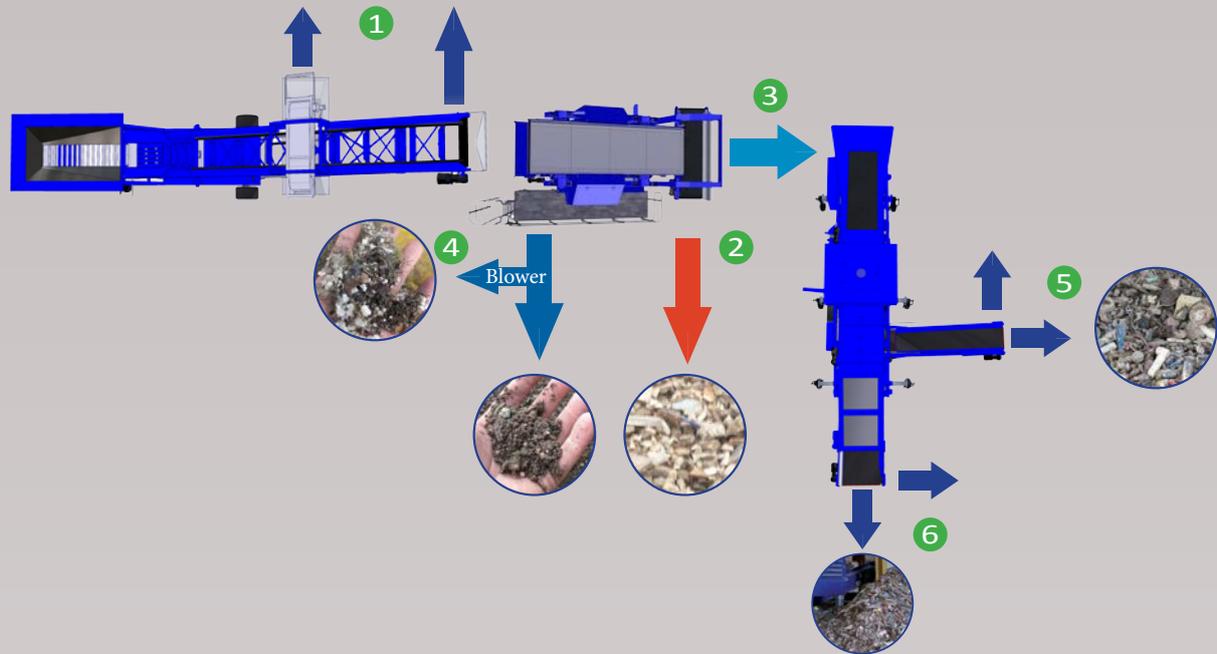
6



LIGHTS DISCHARGE CONVEYOR

- A 1200mm (48") wide belt with a discharge height of 2.75 (96yds³)
- Option of a magnetic head drum to extract ferrous metal that may have been missed by the Feed conveyor magnets

STAGES OF SEPARATION



FERROUS METAL

- Significant improvement on ferrous metal extraction from the waste stream can be facilitated by an over-band magnet and magnetic head drum with stainless steel chutes.



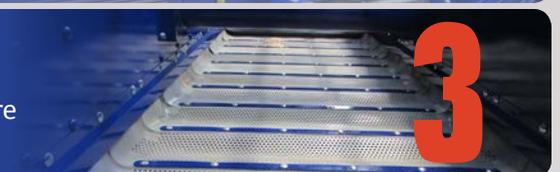
OVERSIZE

- Oversize screened material from the 18X6 Flip Flow screen is conveyed transversely across via the 800mm (32") wide, integral over-size conveyor to be returned to the waste stream for further picking.



MID-GRADE

- 12-50mm mid-grade screened material is transferred to the material classifier to be further separated to create high quality, clean hardcore and lights that meet RDF specifications.



FINES

- 12mm minus material screened by the bottom flip flow screen deck is further separated by an air knife in order to create inert fines suitable for the lower landfill tax rate brought into legislation in the UK from April 2015.



HEAVIES

- High quality, clean hardcore is discharged via a 800mm (32") wide heavies conveyor at a discharge height of 1.9m (6'2"). A magnetic head drum extracts ferrous metal that was previously missed.



LIGHTS

- Clean lights that meet stringent RDF specifications is discharged via a 1200mm (48") wide belt. A magnetic head drum for further extraction is fitted to capture ferrous metals that were previously missed.





EDGE FF16K5

EDGE FSM FINES

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PLANT CONTENTS



FS-SERIES

TRACK DRIVEN
MOBILE
STATIC

DIESEL/HYDRAULIC
DIRECT ELECTRIC
DIESEL GENSET



FF18X6

SEMI MOBILE
STATIC

DIRECT ELECTRIC



MC1200

TRACK DRIVEN
MOBILE
STATIC

DIRECT ELECTRIC
DIESEL GENSET

ADDITIONAL OPTIONS

3D Screen Media



3D scalping screen with various aperture and shape media available.

Punched Rubber Media



Provides additional throw & reduces the chance of plugging. Suitable for sticky and wet materials

Punch Plate Media



Recommended for heavier applications and for customers desiring longer wear

Polyurethane Bottom Deck



Various apertures available to suit customers desired piece size

Woven Mesh Media



Woven wire mesh to maximise screening area. Various apertures available.

Bofor Bar Media



Air knife consisting of a 17.5kw motor providing a fan speed of 2900m³/s.

Powersource



Option of Hydraulic or Electric drive available

Air Knife



Recommended for UK

Air knife consisting of a 17.5kw motor providing a fan speed of 2900m³/s.

Semi Mobile



Enables customers to easily reposition unit

Heavies Magnetic Head Drum



Magnetic Head Drum provides additional revenue by extracting ferrous metal from the waste stream

Lights Magnetic Head Drum



Magnetic Head Drum provides additional revenue by extracting ferrous metal from the lights material

Central Auto-Lube System



The auto-lube system provides reliable protection against friction and wear



TECHNICAL SPECIFICATIONS

FMS65	Conv. Length	Hopper Capacity	Main Conv. Belt Width	Discharge Height		
	20m (65')	4m ³ (5.2yds ³)	1000mm (40')	9.4m (30'9")		

FF18X6	No. Of Decks	Screening Area Top Deck	Screening Area Bottom Deck	Tensioning Top Deck	Tensioning Bottom Deck	Speed Adjustable
	2	9.34m ² (11.17yds ²)	8.74m ² (10.4yds ²)	Side Tension Clamped	Wedge Fastened	Yes (Top & Bottom)

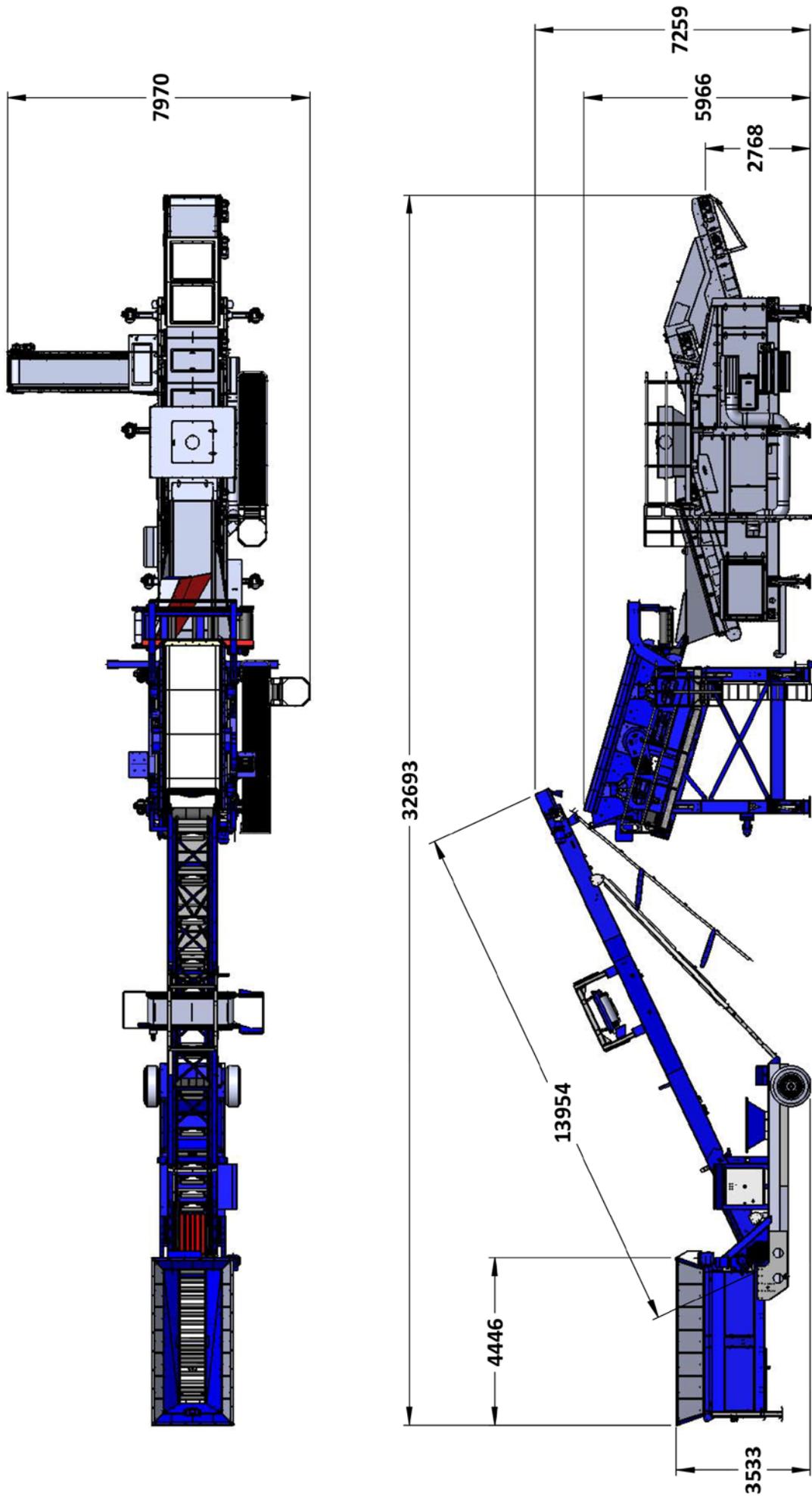
MC1200	Feed In Height	Feed Conv. Belt Width	Primary Fan	Paddle Fan	Lights Discharge Conv. Height	Heavies Discharge Height
	3m (9'10")	1200mm (48")	18.5KW	7.5KW	2.75m ³ (9')	1.9m (6'2")

OPERATING DIMENSIONS

Machine	*Weight	Height	Length	Width
FMS65	5.23 Tonnes (16.7UST)	9.4m (30'9")	21.95m (72')	2.55m (8'6")
FF18X6	5.2 Tonnes (5.7UST)	1.32m (4'3")	6.2m (20'4")	2.5m (8'7")
MC1200	20 Tonnes (22.4UST)	4.15m (13'8")	13m (42'8")	5.7m (18'8")

Optional conveyors with variable transfer lengths available

FSM FINES RECOVERY PLANT OPERATIONAL DIMENSIONS



WE ARE HERE WHEN IT MATTERS MOST



PRODUCT AND TECHNICAL SUPPORT

With our ethos of "Innovation at Work", EDGE not only persist in pushing the boundaries of design and manufacturing to produce hard working, quality machinery, we also bring that same ethos to our aftersales service in order to bring real benefits to customers right across the world. At EDGE we like to see the sales transaction as the start of a long-term partnership. Our goal is to offer the best customer support in the market for the lifetime of the unit. Edge has reinvested and expanded our aftersales department in order to streamline and provide the customer support we believe our customers deserve.



Top Availability

Our Aftersales Support Team are readily available for all our customer needs. We are just a call away, all day, every day.



Top Speed

Express service parts available. No customer expects a long wait for replacement parts.



Top Priority

The market rightly demands quick up-time. To make sure of this, we work tirelessly with our international couriers.



Top Satisfaction

We track every despatch, keeping you informed all the way to ensure you are totally satisfied.

Welcome to our Comfort Zone...



Innovation at Work



**SPARE
AND WEAR
PARTS**

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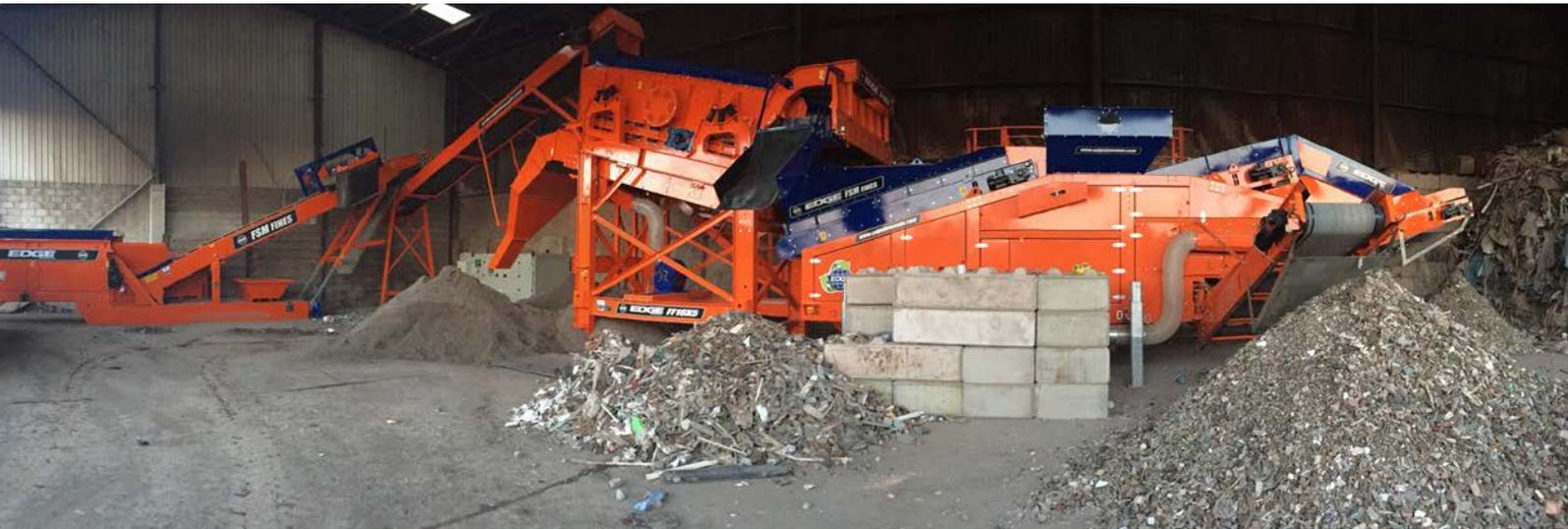
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Edge Innovate's dedicated Aftersales, Spare Parts & Technical Support team, focus entirely on helping you the customer keep your machines running. We have a stock of £10m of spares in Ireland alone, along with other spare parts hubs in strategically positioned depots. Give us a call or email us today and use our stock and experience for your advantage!



Innovation at Work



FERROUS METAL



INERT FINES



HARDCORE



RDF



Innovative Separation Technology

FINES RECOVERY

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