



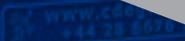
CDE



AGG  
MAX 800



# AggMax



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At CDE, we are proud of our environment. That's why we have chosen the dragonfly as our symbol of constant quality improvement. Usually only seen near exceptionally clean water, these fastidious insects hold the same standards that we continue to aspire to every day of every year. By promoting the reuse of waste materials and continually improving our water filtration technology, this symbol reminds us of our commitment to preserving the earth's natural resources as best we can.

Constantly evolving sector-defining equipment, a dynamic and innovative team, award winning business management and unrivalled dedication to giving each client a professional experience. These factors have made us the world's leading materials washing company.





# AggMax

Integrated  
Scrubbing  
System

# The CDE AggMax™ system allows for the primary screening and high attrition scrubbing of claybound material.

Through a combination of our RotoMax™ Logwasher and high frequency screening technology the AggMax™ offers maximum performance and minimum wear.

Key Benefits of the AggMax™ are:

- 1 Pre-screening of material allows for removal of the sand fraction prior to it entering the RotoMax™ maximising life of the wear parts.
- 2 Discharge of material to the integrated secondary rinsing and dewatering screen ensures a 'belt and braces' approach and captures the sand fraction liberated from the aggregate product during the attrition process within the RotoMax™.
- 3 Integration of optional trash screen at the rear of the RotoMax™ allows for the effective removal of lightweight contaminants from feed material, ensuring final sand and aggregate products of the highest quality and commercial value.
- 4 Integration of all elements of the AggMax™ on a single compact and portable chassis ensures minimum time required for installation and reduced plant footprint.
- 5 Integration of all the elements of the AggMax™ on a single chassis ensures the efficient movement of material from one stage of processing to another - CDE transfer point technology (TPT)

## AggMax™ Applications

The AggMax™ can be applied in the treatment of a variety of materials to ensure effective removal of contaminants. These include:

## Construction Applications

- Sand & Gravel
- Crushed Rock
- Construction & Demolition Waste

## Mining Applications

- Iron Ore
- Other Mineral Ores
- Chrome
- Bauxite
- Metals



# AggMax™

## Key Benefits

Optional Pre-Rinsing Screen to allow for the removal of the sand fraction prior to entering the RotoMax™, maximising wear parts.

Temperature Sensor fitted as standard to monitor the RotoMax™ back bearing temperature, ensuring maximum lifetime.

Optional Trash Screen for effective removal of lightweight contaminants from feed material

Unit pre-wired in CDE factory prior to despatch including all isolators / emergency stop units fitted and wired

All elements of AggMax™ integrated onto a single, easily transportable chassis; minimising installation time and reducing footprint

Control Panel mounted for complete control of AggMax™ System

Heavy duty large diameter shaft ensures minimal deflection thus reducing out of balance loads on the bearings

Unique Spiral Alignment of Paddles to reduce shock of intermitting loads on the gearbox and bearings

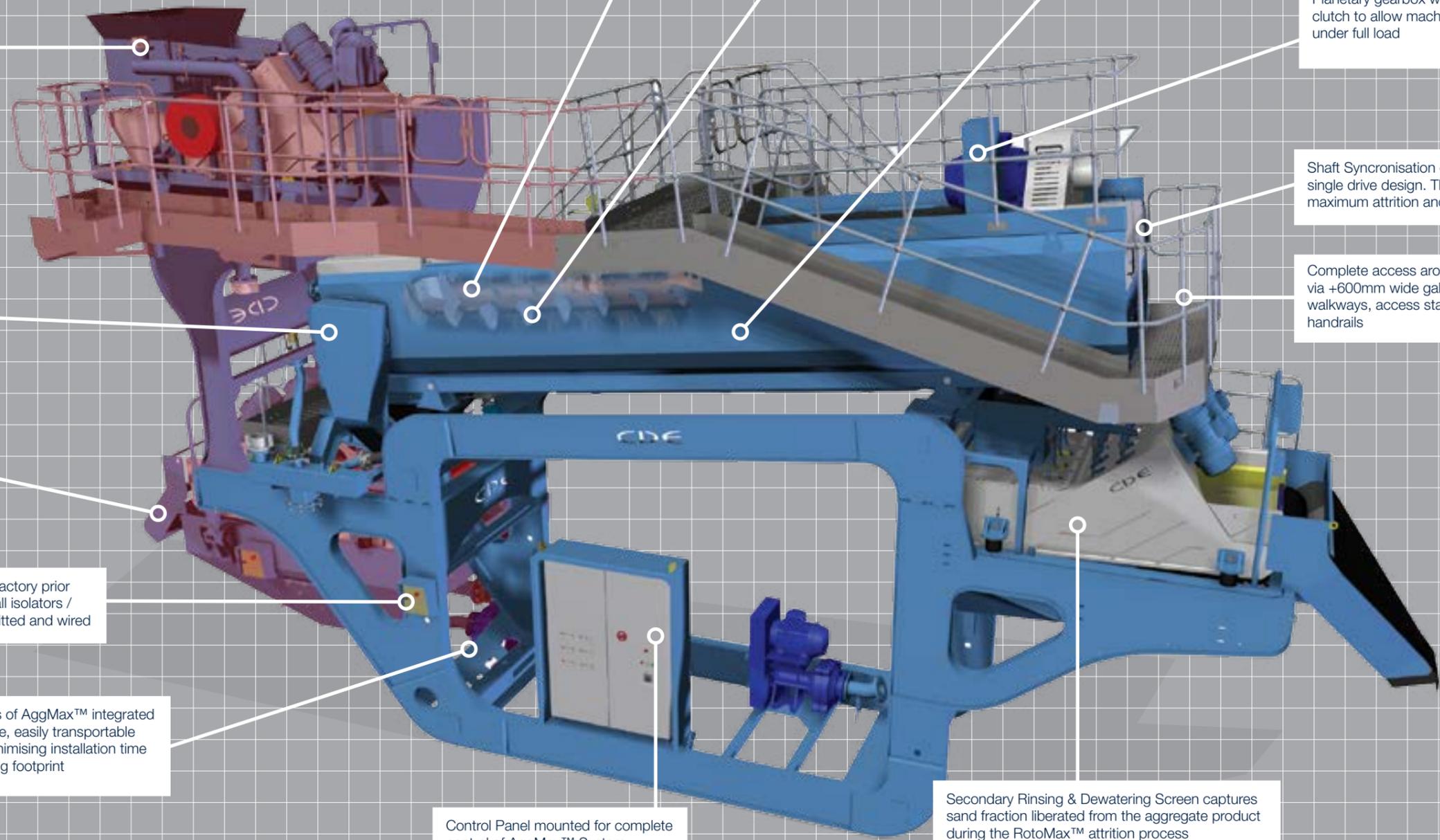
Side panels of RotoMax™ shell are constructed from full length pressed sheets

Planetary gearbox with hydraulic clutch to allow machine start-up under full load

Shaft Synchronisation ensured through single drive design. This ensures maximum attrition and efficiency

Complete access around plant via +600mm wide galvanised walkways, access stairs and handrails

Secondary Rinsing & Dewatering Screen captures sand fraction liberated from the aggregate product during the RotoMax™ attrition process



**The AggMax™ comes in a variety of configurations. Our ‘fully loaded’ SR model includes the following elements:**

**1**

**Pre-Rinsing  
Screen**  
Pg.13



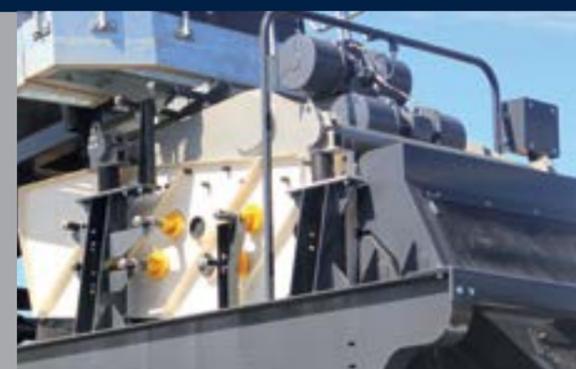
**2**

**RotoMax™  
Logwasher**  
Pg.13



**3**

**Oversize  
Screen**  
Pg.19



**4**

**Trash Screen**  
Pg.19





AggMax™  
AggMax™ 81SR Pre Rinsing Screen



AggMax™  
AggMax™ 80R

# 1

## Pre-Rinsing Screen

Several options are available ensuring a **variety of capacities and final product specifications** can be accommodated.

### Options include:

1. EvoScreen™ DW-C Dewatering Screen
2. EvoScreen™ DW-B Dewatering Screen
3. ProGrade™ P2-75 Rinsing Screen (double deck)
4. ProGrade™ P3-75 Rinsing Screen (triple deck)

- Rubber lined feedbox eliminates material impact on steel, maximising plant life and minimising wear.
- Rubber lined sump ensures maximum wear resistance from sand material recovered from feed material during pre-screening.
- Discharge pipework from sump included as standard and can be fitted to either side of the sump to ensure compatibility with individual site requirements.
- Rubber lined rolling chute from pre-screen to integrated RotoMax™ ensures the efficient transfer of material to the attrition phase.
- Transfer Point Technology (TPT) on pre-screen to allow for the efficient transfer of material from the feed conveyor to the first stage of processing.

# 2

## RotoMax™ Logwasher

The RotoMax™ represents the most efficient logwasher technology available on the global market and has extensive advantages over other systems. These can be categorised in 4 main areas:

- 2.1: Design & Construction of RotoMax™ Shell
- 2.2: Design & Construction of RotoMax™ Shafts and Paddles
- 2.3: Design & Construction of Drive Assembly
- 2.4: Design & Construction of Bearings

### 2.1 The Rotomax Shell

- The RotoMax™ shell is a welded construction with a bolted option available for galvanising.
- Side panels of the RotoMax™ shell are constructed from full length pressed sheets – no welded joints, increasing stability and maximising plant life.
- The shell design minimises the impact of material on steel and allows material to form its own bed. Maximising material on material impact ensures the highest possible levels of attrition and minimises wear.
- The location of the rubber lined feed chute ensures material enters the centre of the RotoMax™ without impacting on the shafts.
- Lightweight GRP top guards.
- Integrated water connection and valve to regulate water supply.

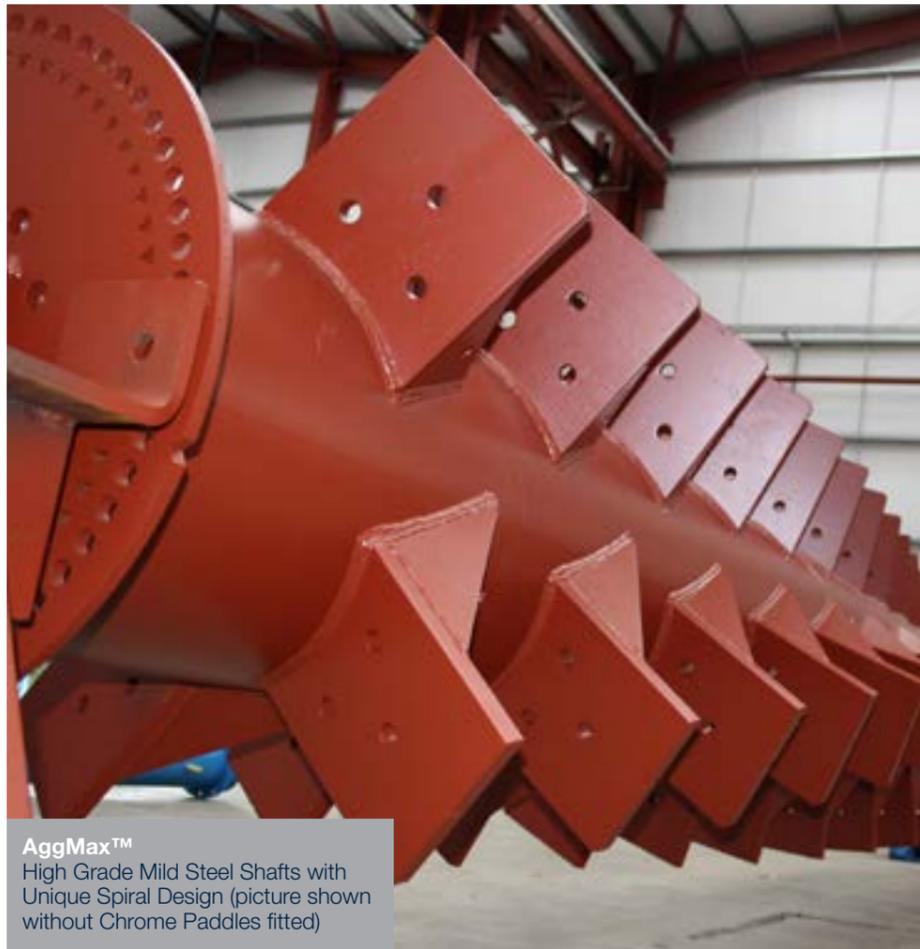
- Adjustable weir at the rear of the RotoMax™ to allow for easy control of the water level within the RotoMax™.
- Outlet weir allows for highly efficient lightweight removal. Large, steep chutes facilitate free flow of material.
- Upward flow design option to float out lightweights such as grass and roots from feed material. Successfully proven in field applications to remove these contaminants.
- A single valve on the water manifold minimises potential for problems from leaks and corrosion.



AggMax™  
High Chrome Cast Iron Paddles



AggMax  
High Chrome Wear Shoe



AggMax™  
High Grade Mild Steel Shafts with  
Unique Spiral Design (picture shown  
without Chrome Paddles fitted)



AggMax  
High Chrome Cast Iron Paddles



### 2.2 Rotomax Shafts & Paddles

- Shafts constructed from High Grade Mild Steel providing superior durability.
- Heavy duty shaft design ensures minimal deflection and smooth operation.
- Large distance between shafts ensures the feed material will flow easily on the shafts maximising lifetime.
- Spiral design of paddles evenly distributes the working load on both the shafts and the shell.
- Spiral design of paddles ensures efficient transfer of power which results in highly efficient scrubbing of material.
- Spiral design allows paddles to intermesh and is designed to ensure maximum attrition of material.
- Paddle brackets are constructed from high grade plate with a high weld specification and are FEA tested offering superior protection.
- Paddles are connected to the brackets by means of a maximum strength countersunk 3 bolt connection.
- Paddles have a corrugated face which increases the level of attrition applied to material.

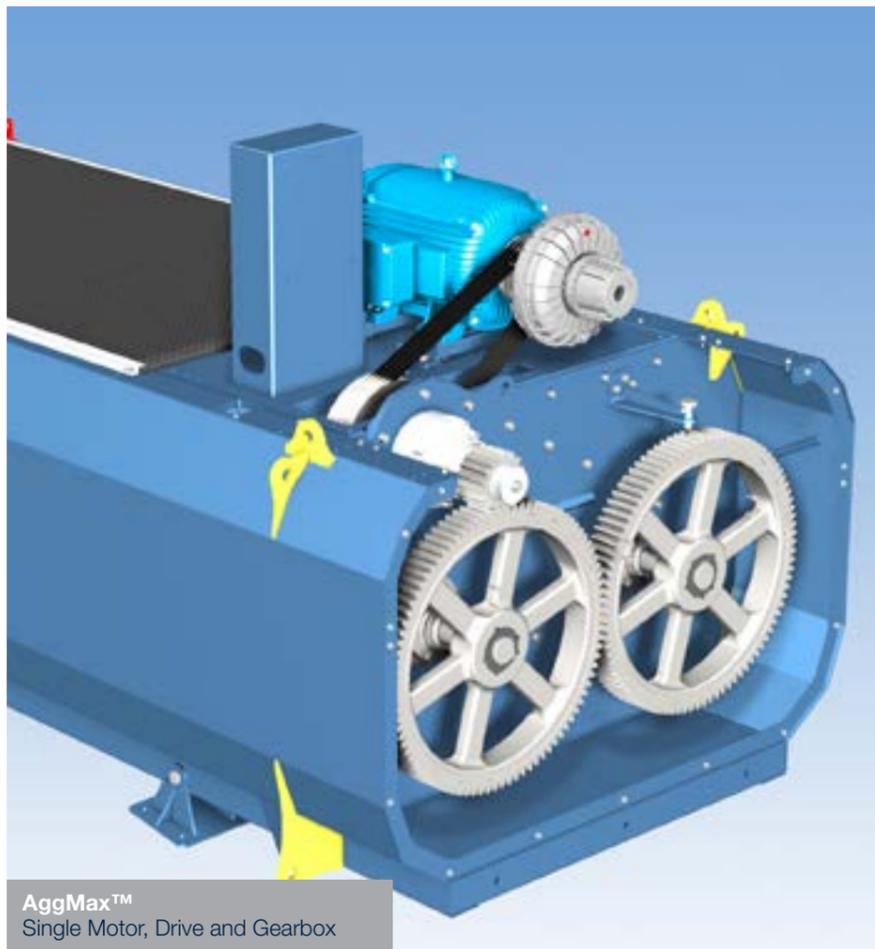
- Spiral design of the paddles eliminates intermittent shock load on the shafts, bearings and gearbox while also minimising impact of the material on the shafts.
- A high chrome wear shoe on each bracket protects gussets and bolts from wear.
- Integrated Paddle Wear line indicates service life
- Paddles are thicker on the leading edge (75mm on RX150) minimising wear on the paddles.
- Paddles are the largest available in the industry ensuring the maximum transfer of energy to the material within the RotoMax™ resulting in the highest possible levels of attrition.

RotoMax™ Paddles are constructed from High Chrome Cast Iron 600 Brinell offering excellent abrasion properties. This is the same specification as used in impact crushers and far exceeds the specification of paddles within any other Logwasher available on the global market.

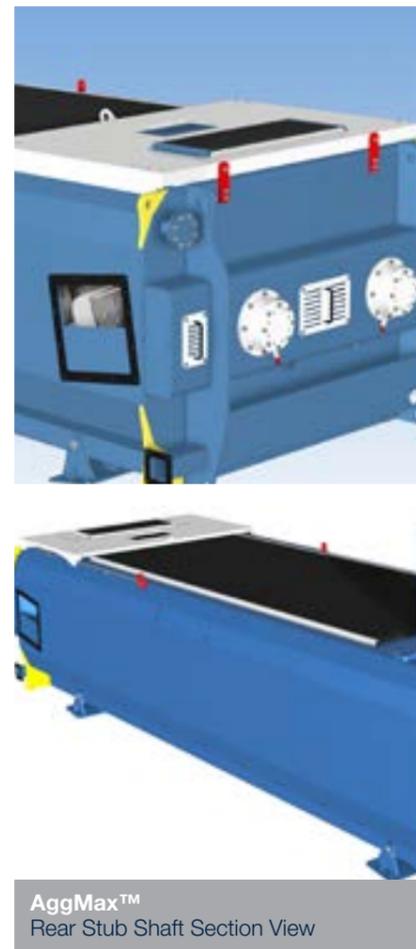
**When compared to paddles constructed from Hardox, CDE RotoMax paddles will outlast Hardox paddles by 8-10 times on a like for like application, representing a significantly lower cost of ownership.**



AggMax™  
Dual Sealed Bearings with  
Temperature Sensor Fitted



AggMax™  
Single Motor, Drive and Gearbox



AggMax™  
Rear Stub Shaft Section View

### 2.3 Drive Assembly

- Single motor and gearbox - fewer wearing parts and less maintenance required than alternative systems.
- Planetary gearbox with hydraulic clutch to allow machine start-up under full load
- Gears used to both transmit power to the shafts and ensure shaft synchronisation. This results in maximum attrition of material within the RotoMax™.
- Belt drive allows simple adjustment to the shaft RPM if required to increase or decrease cycle time. This allows the RotoMax™ to easily accommodate variations in contaminant levels within the feed material.
- Hydraulic Clutch as standard allows for start up under full load by providing gradual acceleration. This ensures that the drive is protected against overloads and rotational vibrations are dampened.
- Guards easily removed for access to gears and transmission, minimising time spent on maintenance.

### 2.4 Bearings

- SKF Spherical Roller Bearings as standard with proven lifecycle time in excess of 1,000,000 hours and global distribution network ensuring easy access to replacement parts.
- Bearing housing is removed from the rear of the main shell (6") and located high above the water level to ensure no contamination from sand and waste water.
- High degree of protection for the bearings with:
  - a) Flinger discs
  - b) Hardox protection plates
  - c) 80 shore rubber seal
- Dual sealed bearings with both Radial Seal (Nitrile Rubber Lip) and Labyrinth Seal.
- In-built bearing float with allowance for thermal expansion during plant operation.
- Temperature sensor fitted as standard to monitor the back bearing temperature. This ensures that bearings are kept at the optimum temperature allowing the plant to continue working.
- Unique design of bearing housing for ease of access and maintenance including bearing inspection cap.



AggMax™  
Triple Deck Sizing Screen



AggMax™  
Trash Screen showing removal  
of lightweight contaminants

# 3

## Oversize Screen

- Modular non-bolted Isemmann Polyurethane screen media for the highest efficiency dewatering of material and maximum wear resistance.
- Rubber lined feedbox with material impact shelf delivers material to the very back of the screen maximising the screen area.
- Discharge height from screen optimised to allow efficient feeding of aggregate sizing screen.
- Integrated screen cover minimises splashing leading to a cleaner, safer site and ensuring the most efficient use of water.
- Independently controlled spray bars allow for easy adjustments to be made depending on the nature of material to be processed.
- Two high frequency vibrating motors contribute to maximum dewatering of material on the screen.

- Marshmallow screen mounts ensure vibration is harnessed on the screen and is not transferred to the supporting chassis. This not only increases dewatering of the material but reduces oscillating variable stress.
- Safe and efficient cable management via cable 'goal posts' over screen.

# 4

## Trash Screen

19

- Supported screen mounted to the rear of the AggMax™ to allow for easy access for cleaning and maintenance.
- Modifications to discharge chutes as standard when required during processing of construction, demolition and excavation waste material or other materials containing high levels of lightweight contamination.
- Rubber lined pump inlet and discharge pipework to minimise wear and maximise plant life.
- Modular non-bolted Isemmann Polyurethane screen media for the highest efficiency dewatering of material and maximum wear resistance.
- Two high frequency vibrating motors contribute to maximum dewatering of material on the screen.
- Marshmallow screen mounts ensure vibration is harnessed on the screen and is not transferred to the supporting chassis. This not only increases dewatering of the material but reduces oscillating variable stress.



AggMax™  
AggMax™ 83 during on-site Installation



AggMax™  
Washed Aggregate

## Other Benefits

- Integrated return pipework between the oversize sump and trash sump minimises installation time and ensures the most efficient transfer of material.
- Safe access to the top of the AggMax™ provided via a lockable gate.
- Complete access to plant via galvanised +600mm wide walkways allowing access to all 3 screens and the RotoMax™.
- 800mm access stairs to comply with Health & Safety Specifications
- Electrically operated maintenance hatch on recycling applications.
- Single water inlet point to feed complete plant minimises additional pipework required and ensures minimal installation time.
- Integration of all AggMax™ elements on a single compact, transportable chassis allows for the unit to be moved to alternative sites much more quickly and efficiently than other systems.
- Skid frame design reduces complexity of civils work required on site prior to introduction of the AggMax™, significantly reducing the cost of introducing the AggMax™ in relation to alternative systems.
- Building block structure allows for easy modification on the system to meet your individual project requirements.

# CDE ProMan

## World Class Project Management



The CDE ProMan system is proven to deliver highly efficient and productive plants through a process which ensures that lines of communication are clear and everyone involved from both your side and ours knows exactly where the project sits at any given time.

This system has been implemented effectively on numerous worldwide projects from the UK and Ireland to India, Middle East, Africa, North America and South America.

A dedicated project team is appointed as soon as the project goes live which contains all the major disciplines required to deliver you a truly world class project.

Through this process you are allocated a dedicated Single Point Of Contact (SPOC) who is ultimately responsible for the delivery of your project in its entirety.

Our wish and yours is for a project that is delivered on time, on budget and performs to the highest possible standards. ProMan is the methodology that has been proven to consistently deliver this outcome.

The key to success here is the same as with our design philosophy – each project must be constructed individually to take into account the individual characteristics of the site, the material, the deadline, the requirements of the process.

Your project team will contain a team of individuals with a wealth of experience in the delivery of numerous processing systems in wide range of industries covering the full range of materials.

### Easy, Safe Access for Operation & Maintenance

The inclusion of galvanised walkways and access stairs as standard on the AggMax™ sets it apart from other attrition systems.

Safe and easy access for operators and maintenance personnel.

Minimises time required for maintenance

All walkways are compliant with European Health and Safety Specifications.

### Ensure Optimum Efficiency with CustomCare

Following installation of your AggMax™ system the focus switches to ensuring optimum efficiency is maintained.

CDE CustomCare service offers a variety of Preventative Maintenance packages including the following services:

- Your own individual CDE Account Manager
- Comprehensive Operator Training to ensure the highest levels of health & safety and plant efficiency are maintained.
- Regular plant audits to highlight improvements in plant operation & maintenance that will lead to a safer, cleaner, more productive site.
- Recommended Spares Lists detailing plant wear parts that should be held in stock to minimise plant downtime when maintenance work is required.
- Access to your own tailored 'MyCDE' area of the CDE web site where all documentation relating to your plant is stored for quick and easy access. This also includes a facility where you can arrange a service visit from one of our team of qualified AggMax™ Service Engineers.



# AggMax™ Product Information

## Standard Features

### RotoMax™

- CDE Blue Paint Finish
- Heavy duty High Cast Chrome paddles with corrugated face
- Thick walled seamless shaft constructed from special alloy steel
- Centralised greasing point
- Hydraulic Clutch
- Single motor and drive arrangement
- Lightweight GRP top cover guards
- Rubber lined feed chute
- Planetary gearbox with Hydraulic Clutch
- SKF Spherical Roller Bearings
- Temperature sensor on rear bearings

### Oversize Screen

- EvoScreen™ DW-C Dewatering screen
- Warman Slurry Pump

## Optional Extras

### Pre-Rinsing Screen

- EvoScreen™ DW-C Dewatering Screen
- EvoScreen™ DW-B Dewatering Screen
- ProGrade™ P2-75 Rinsing Screen
- ProGrade™ P3-75 Rinsing Screen

### RotoMax™

- Non-standard paint finish
- Upward flow design for additional lightweights removal
- Recycling modifications

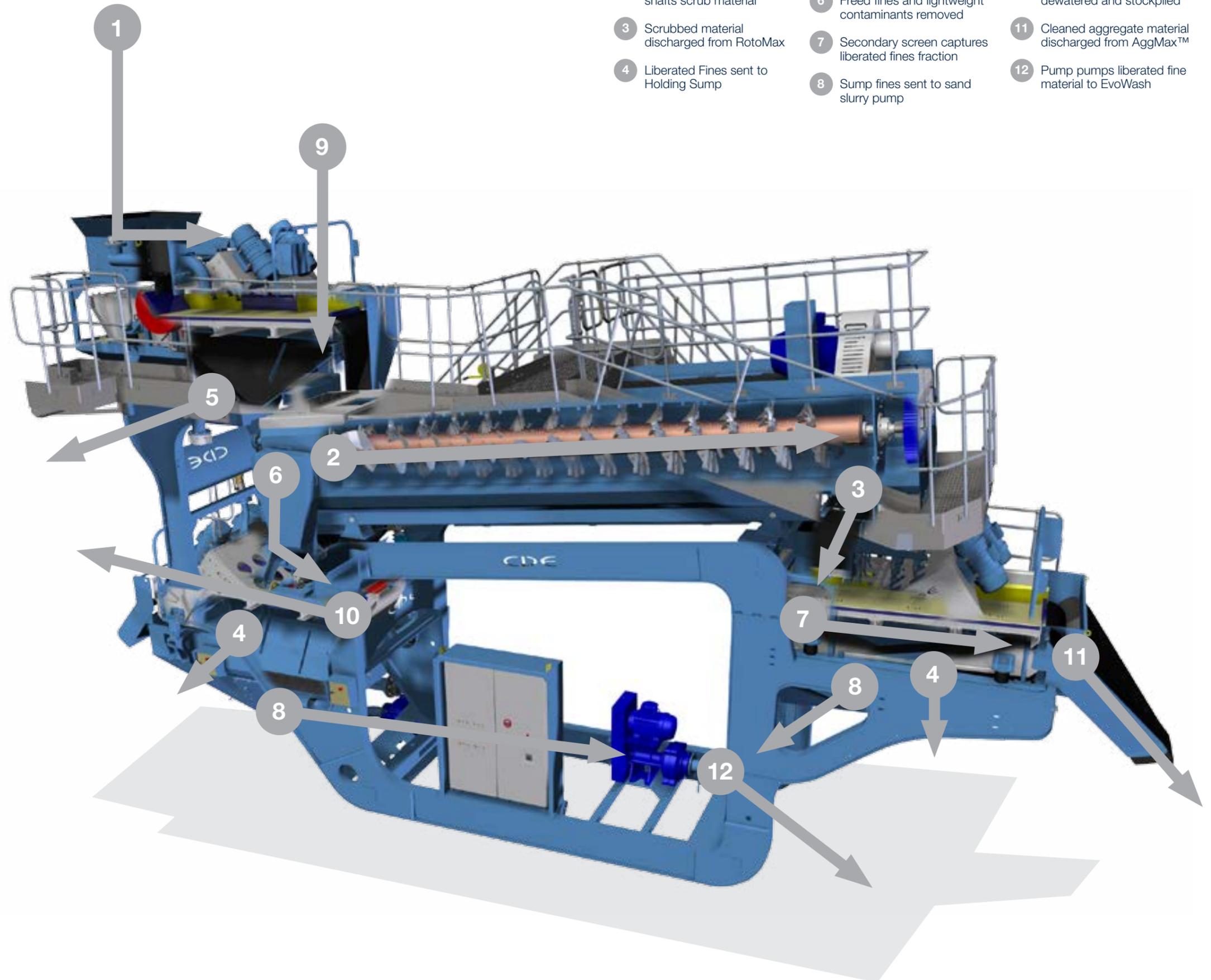
### Oversize Screen™

- EvoScreen DW-B Dewatering Screen
- Double Deck Horizontal EvoScreen
- Triple Deck Horizontal EvoScreen

### Trash Screen

- EvoScreen™ DW-C Dewatering Screen
- EvoScreen™ DW-B Dewatering Screen

- 1 Feed material enters the Pre-Rinsing Screen
- 2 Counter rotating twin spiral shafts scrub material
- 3 Scrubbed material discharged from RotoMax
- 4 Liberated Fines sent to Holding Sump
- 5 Liberated sand removed to Evowash sand washing phase
- 6 Freed fines and lightweight contaminants removed
- 7 Secondary screen captures liberated fines fraction
- 8 Sump fines sent to sand slurry pump
- 9 Washed & Screened Aggregate enters RotoMax
- 10 Lightweight contaminants dewatered and stockpiled
- 11 Cleaned aggregate material discharged from AggMax™
- 12 Pump pumps liberated fine material to EvoWash



# AggMax™ 81



## RotoMax™ Logwasher

Model	RX80
Maximum Capacity	50-80tph
Maximum Feed Size	100mm
RPM	18-24
Tip to Tip Diameter	800mm
Number of Paddles	118
Power Requirement	45kW

## Dewatering Screen

EvoScreen™ Model	DW-C
Maximum Capacity	80tph
Power Requirement	7.2kW
Number of Products Sized	1no.

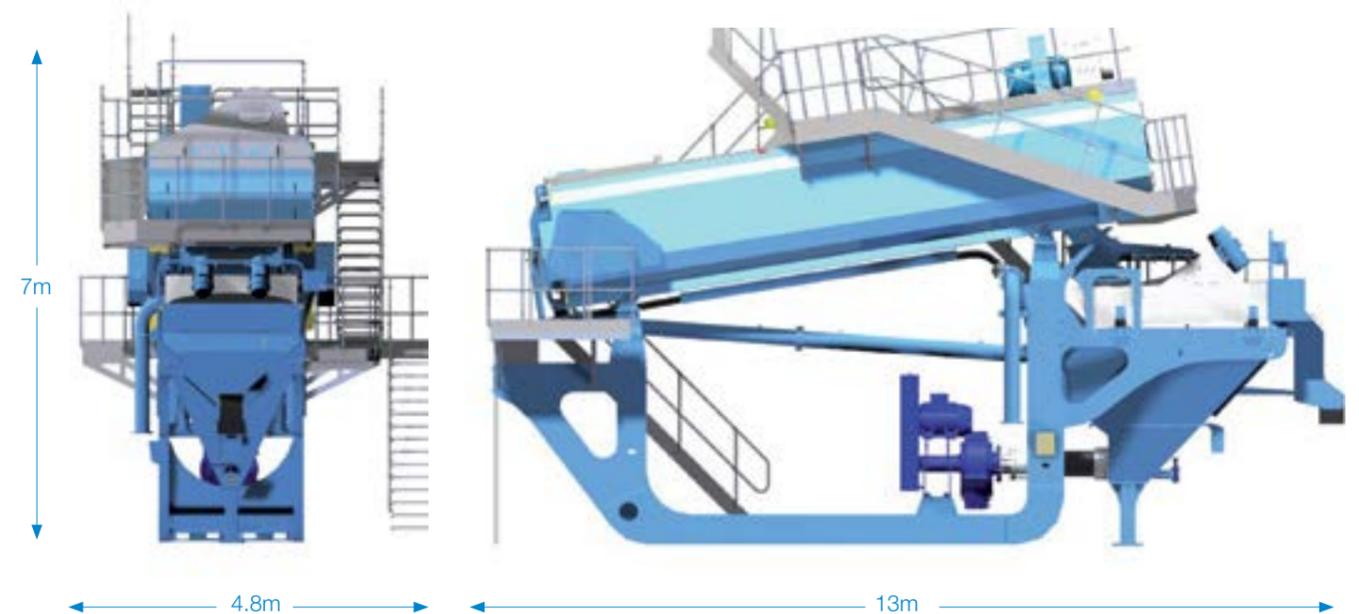
## Pre-Rinsing Screen

EvoScreen™ Model	DW-C	DW-B	P2-75	P3-75
Maximum Capacity	100tph	150tph	200tph	200tph
Power Requirement	7.2kW	7.2kW	11kW	11kW
Screen Size	1.2m x 2.4m	1.8m x 2.4	1.5m x 5m	1.5m x 5m

## Trash Screen

EvoScreen™ Model	DW-C
Maximum Capacity	20tph
Power Requirement	7.2kW

# AggMax™ 151



## RotoMax™ Logwasher

Model	RX150
Maximum Capacity	80-150tph
Maximum Feed Size	100mm
RPM	18-24
Tip to Tip Diameter	1300mm
Number of Paddles	136
Power Requirement	90kW

## Dewatering Screen

EvoScreen™ Model	DW-C	DW-B
Maximum Capacity	100tph	150tph
Power Requirement	7.2kW	7.2kW
Number of Products Sized	1no.	1no.

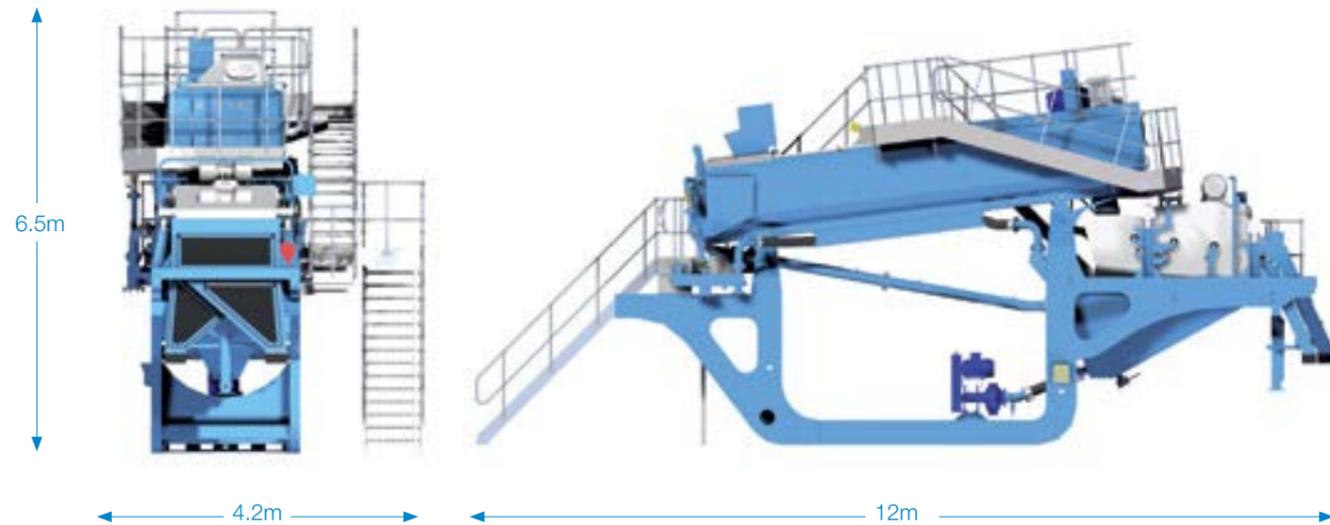
## Pre-Rinsing Screen

EvoScreen™ Model	DW-C	DW-B	P2-75	P3-75
Maximum Capacity	100tph	150tph	200tph	200tph
Power Requirement	7.2kW	7.2kW	11kW	11kW
Screen Size	1.2m x 2.4m	1.8m x 2.4	1.5m x 5m	1.5m x 5m

## Trash Screen

EvoScreen™ Model	DW-C
Maximum Capacity	20tph
Power Requirement	7.2kW

# AggMax™ 82



## RotoMax™ Logwasher

Model	RX80
Maximum Capacity	50-80tph
Maximum Feed Size	100mm
RPM	18-24
Tip to Tip Diameter	800mm
Number of Paddles	118
Power Requirement	45kW

## ProGrade Screen

EvoScreen™ Model	P2-42
Maximum Capacity	80tph
Power Requirement	7.6kW
Number of Products Sized	2no.

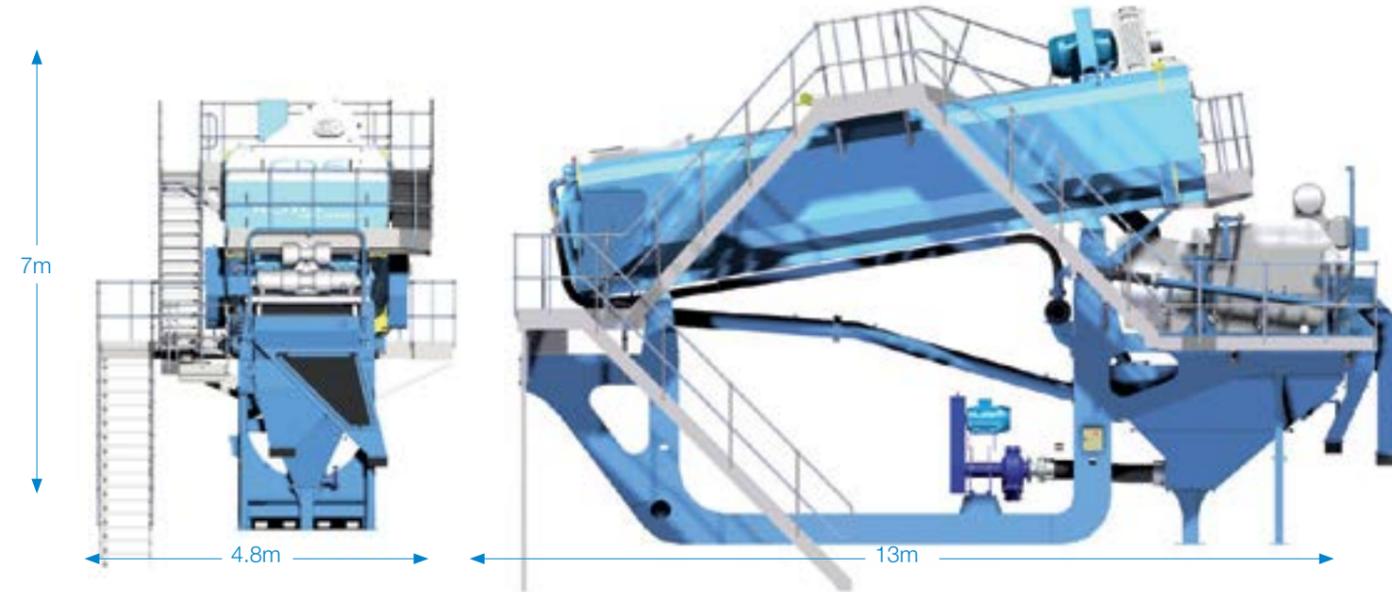
## Pre-Rinsing Screen

EvoScreen™ Model	DW-C	DW-B	P2-75	P3-75
Maximum Capacity	100tph	150tph	200tph	200tph
Power Requirement	7.2kW	7.2kW	11kW	11kW
Screen Size	1.2m x 2.4m	1.8m x 2.4	1.5m x 5m	1.5m x 5m

## Trash Screen

EvoScreen™ Model	DW-C
Maximum Capacity	20tph
Power Requirement	7.2kW

# AggMax™ 152



## RotoMax™ Logwasher

Model	RX150
Maximum Capacity	80-150tph
Maximum Feed Size	100mm
RPM	18-24
Tip to Tip Diameter	1300mm
Number of Paddles	136
Power Requirement	90kW

## ProGrade Screen

EvoScreen™ Model	P2-42
Maximum Capacity	150tph
Power Requirement	7.6kW
Number of Products Sized	2no.

## Pre-Rinsing Screen

EvoScreen™ Model	DW-C	DW-B	P2-75	P3-75
Maximum Capacity	100tph	150tph	200tph	200tph
Power Requirement	7.2kW	7.2kW	11kW	11kW
Screen Size	1.2m x 2.4m	1.8m x 2.4	1.5m x 5m	1.5m x 5m

## Trash Screen

EvoScreen™ Model	DW-C
Maximum Capacity	20tph
Power Requirement	7.2kW

# AggMax™ 83



## RotoMax™ Logwasher

Model	RX80
Maximum Capacity	50-80tph
Maximum Feed Size	100mm
RPM	18-24
Tip to Tip Diameter	800mm
Number of Paddles	118
Power Requirement	45kW

## ProGrade Screen

EvoScreen™ Model	P3-42
Maximum Capacity	80tph
Power Requirement	14kW
Number of Products Sized	3no.

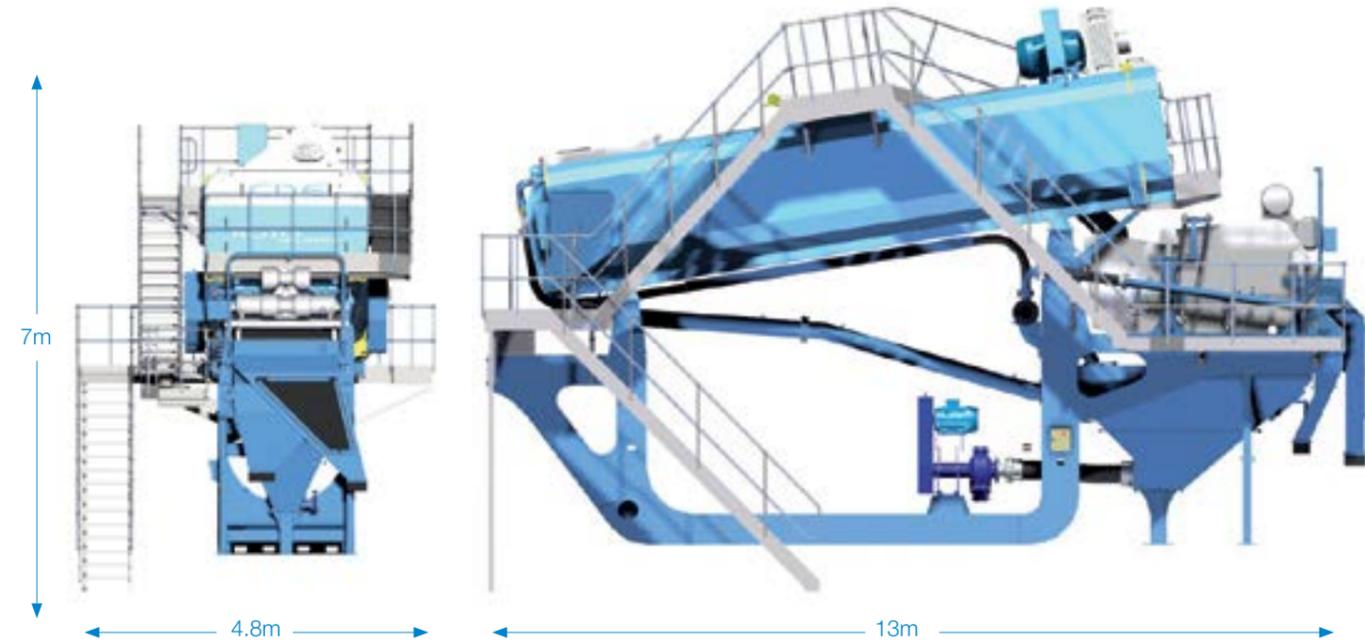
## Pre-Rinsing Screen

EvoScreen™ Model	DW-C	DW-B	P2-75	P3-75
Maximum Capacity	100tph	150tph	200tph	200tph
Power Requirement	7.2kW	7.2kW	11kW	11kW
Screen Size	1.2m x 2.4m	1.8m x 2.4	1.5m x 5m	1.5m x 5m

## Trash Screen

EvoScreen™ Model	DW-C
Maximum Capacity	20tph
Power Requirement	7.2kW

# AggMax™ 153



## RotoMax™ Logwasher

Model	RX150
Maximum Capacity	80-150tph
Maximum Feed Size	100mm
RPM	18-24
Tip to Tip Diameter	1300mm
Number of Paddles	136
Power Requirement	90kW

## ProGrade Screen

EvoScreen™ Model	P3-42
Maximum Capacity	150tph
Power Requirement	14kW
Number of Products Sized	3no.

## Pre-Rinsing Screen

EvoScreen™ Model	DW-C	DW-B	P2-75	P3-75
Maximum Capacity	100tph	150tph	200tph	200tph
Power Requirement	7.2kW	7.2kW	11kW	11kW
Screen Size	1.2m x 2.4m	1.8m x 2.4	1.5m x 5m	1.5m x 5m

## Trash Screen

EvoScreen™ Model	DW-C
Maximum Capacity	20tph
Power Requirement	7.2kW



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