



MDS INTERNATIONAL
LEAVE NO STONE UNTURNED


Product BOOK

TROMMELS

APRON FEEDERS



ABOUT MDS INTERNATIONAL



MDS International is an Irish manufacturing company specialising in equipment for aggregate handling, quarry, mining, construction and recycling sectors. We have over 25 years of experience in producing our own brand of heavy duty and recycling Trommels and apron feeders. There is a wide range of models available in our product range to cater for the diverse customer needs. The designs are revolutionary and innovative with features added such as mobility, modular design and sensor systems to increase working life and productivity.

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MDS M412 MOBILE TROMMEL

1250mm / 4' 1" Drum



COMPACT AND POWERFUL



EASY & CHEAP TO TRANSPORT



FITS ON NORMAL TRUCKS

The M412 Track Trommel is ideal for screening from light material all the way upto recycling demolition waste. This machine can also operate in the quarry, cleaning dirty material upto 600mm (24") in size. it comes complete with fold out stockpiling conveyors and is ideal for moving around the quarry and from one site to the next.

TRANSPORT DIMENSIONS

Length : 12820mm (42 ft)
Width : 2500mm (8 ft 2")
Height : 3000mm (9 ft 8")
3423mm (11 ft 2") with Grid
Weight : 21.5 Tonnes (23.7 US Tons)

DISCHARGE HEIGHTS

Oversize : 2326mm (7 ft 6")
Fines : 2136mm (7 ft)

OUTPUT

Capacity : 300 Tonnes per hour
(330 US Tons per hour)



Oversize Conveyor

Rocks upto 600mm (24")
1000mm width (3ft3")
2.3m Output Height (7ft6")
Heavy Duty Belt
Single Hub Hydraulic Drive

Drum

Welded or Changeable screens
4m (13 ft 1") long
1250mm (4 ft 1") Internal Dia
Drum Cleaner (Optional)

Hopper

4 cubic metre capacity (5.23 yd³)
Hydraulic Variable Speed drive
Speed of 8 Strokes per minute
Wide mouth opening:
3508 x 2107 (11' 6" x 6' 11")
Heavy Duty Tipping Grid (Optional)

Push Feeder

Hydraulic Push feeder
1018x3150mm (3ft4"x10ft4")
Variable Speed drive

Tracks

All terrain Heavy Duty tracks

Engine

CAT 2.2 50kW (67HP) TIER 4 Engine
Diesel Engine
Hydraulic Power Unit
Electronic Control System
Sensors and Probes for monitoring

Fines Conveyor

Rocks output up 150mm (6")
1000mm width (3ft3")
2136mm output height (7ft)
Single Hub Hydraulic Drive
Heavy Duty Belt

M412 DRUMS AND SCREENS



ROBUST DRUM STRUCTURE

700 MPa TENSILE STRENGTH

VARIOUS SCREEN SIZES

The M412 drums can come in two configurations. Customers have the option of a drum frame with changeable screens or a fully welded drum. These configurations are shown in this document.

There are various screen sizes that can be chosen for the M412 Trommel which are shown below:



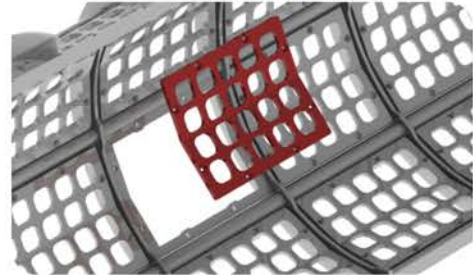
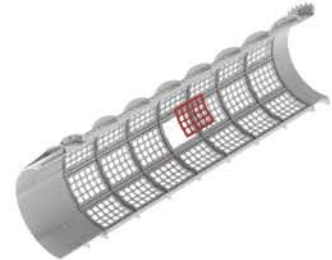
25mm (1")
38mm (1.5")
50mm (2")



75mm (3")
100mm (4")
125mm (5")



150mm (6")



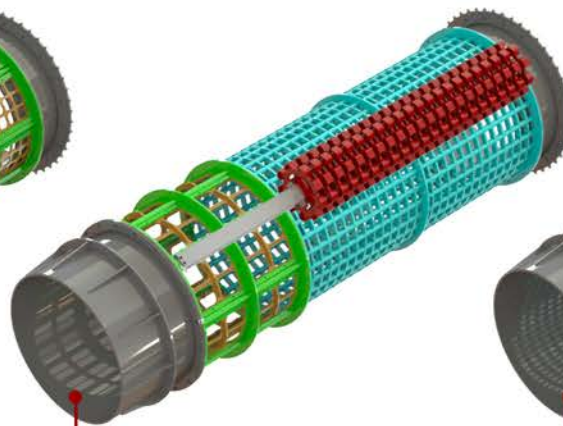
Drum Cleaners only work with fully welded drums. The configuration of this are shown below.

MDS Trommels can come with an option to get changeable Screens on its drums or fully welded drums.



1. Drum Frame with Screens

4m Drum Frame with screens
Various Screen sizes
Easily changeable screens



2. Welded + Screens

2.9m Welded Drum
75mm(3") to 150mm (6")
Used with Drum cleaner
1.1m Changeable screens up to 150mm (6")
Allows to clean and control size



3. Fully Welded

Full 4m Welded Drum
This is the setup for dirty material



MDS M413 3 Split MOBILE

1250mm / 4' 1" Drum



COMPACT AND POWERFUL

EASY & CHEAP TO TRANSPORT

FITS ON NORMAL TRUCKS

The M413 Track Trommel is ideal for screening from light material to recycling demolition waste. This machine can also operate in the quarry, cleaning dirty material upto 600mm (24") in size. It comes complete with three fold out stockpiling conveyors. It is compact in design and is easy to transport thus is ideal for moving around the quarry.

TRANSPORT DIMENSIONS

Length : 13405mm (43 ft 11")
Width : 2500mm (8 ft 2")
Height : 3100mm (10 ft 2")
 3524mm (11 ft 6") with Grid
Weight : 29.5 Tons

DISCHARGE HEIGHTS

Oversize : 2039mm (6 ft 8")
Mid-Product : 1986mm (6ft 6")
Fines : 1993mm (6ft 6")

OUTPUT

Capacity : 300 Tonnes per hour
(330 US Tons per hour)



Oversize Conveyor

Rocks upto 600mm (24")
1000mm width (3ft3")
2039mm Output Height (6ft8")
Heavy Duty Belt
Single Hub Hydraulic Drive

Mid Product Conveyor

Rocks upto 300mm (12")
1350mm (4ft 5") width
1986mm (6ft 6") Output Height
Single Hub Drive
Heavy Duty Belt

Drum

Welded or Changeable screens
4.6m (15 ft 1") long
1250mm (4 ft 1") diameter
Drum Cleaner Option Available

Hopper

4 cubic metre capacity (5.23 yd³)
Hydraulic Variable Speed drive
Speed of 8 Strokes per minute
Wide mouth opening:
3508 x 2107 (11' 6" x 6' 11")
Heavy Duty Tipping Grid (Optional)

Push Feeder

Hydraulic Push feeder
1018x3150mm (3ft4"x10ft4")
Variable Speed drive

Tracks

All terrain Heavy Duty tracks

Engine

CAT 2.2 50kW (67HP) TIER 4 Engine
Diesel Engine
Hydraulic Power Unit
Electronic Control System
Sensors and Probes for monitoring

Fines Conveyor

Rocks output upto 150mm (6")
1000mm width (3ft3")
1993mm output height (6ft 6")
Single Hub Hydraulic Drive
Heavy Duty Belt

M413 DRUMS AND SCREENS



ROBUST DRUM STRUCTURE

700 MPa TENSILE STRENGTH

VARIOUS SCREEN SIZES

The M413 uses same screens as M412 in its fines section. Mid-Product section uses a different style of screens. There are various screen sizes that can be chosen for the M413 Trommel which are shown below:

FINES SECTION (40 NEEDED)



25mm (1")
38mm (1.5")
50mm (2")

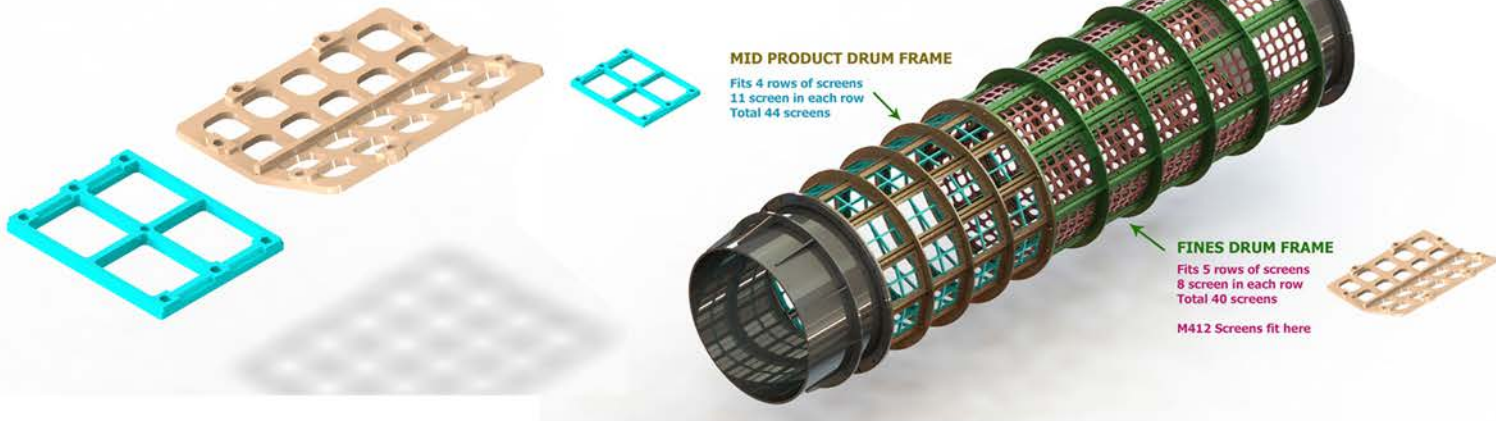


75mm (3")
100mm (4")
125mm (5")
150mm (6")

MID-PRODUCT SECTION (44 NEEDED)



75mm (3")
100mm (4")
125mm (5")
150mm (6")
200mm (8")
250mm (10")
300mm (12")

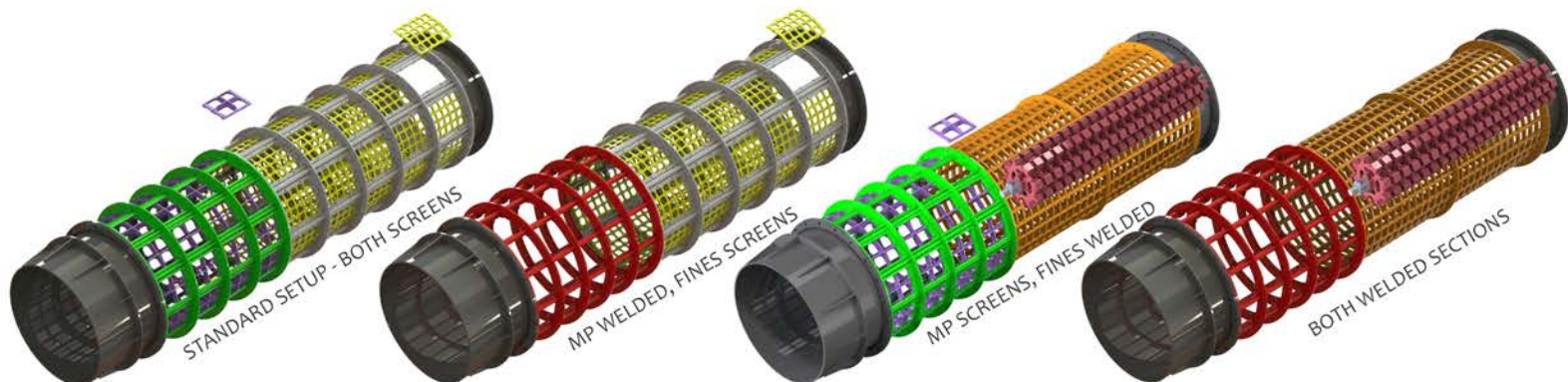


MDS M413 Trommels are made up of a drum with a 2.9m Fines section and 1.7m Mid Product Section. There are various combinations of Drums that can be setup on the machine. These are either frames with changeable screens or fully welded drums. The exact configuration depends on the application and requirements of the customer.

M412 screens fit in the fines section of M413. However the Mid Product Screens have a different design.

Drum Cleaners are only used with Fully Welded Drums in the fines section of the drum. These can be used with drums with openings of 75mm (3") to 150mm (6")

Drum Sections Available for M413:



MDS M515 MOBILE TROMMEL

1500mm / 4' 11" Drum



DIVERSE APPLICATIONS



QUICK AND EASY SETUP



VARIETY OF SCREEN SIZES

The M515 Track Trommel is perfect for cleaning dirty material and can handle rocks up to 800 mm (32") in size. It comes complete with fold out stockpiling conveyors and is ideal for moving around the quarry and from one site to the next.

TRANSPORT DIMENSIONS

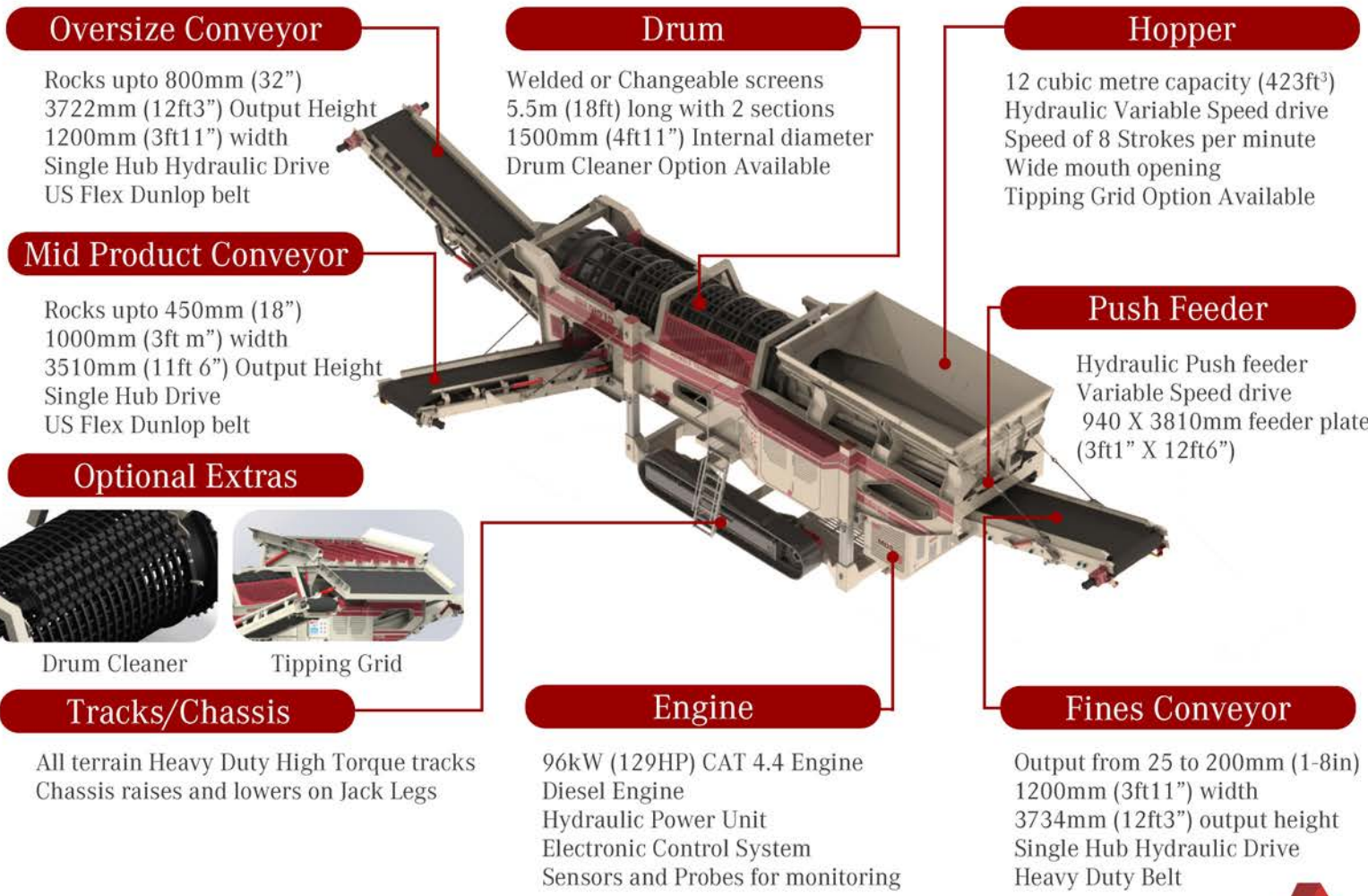
Length : 17047mm (55 ft 11")
 Width : 2980mm (9 ft 9")
 3179mm (10 ft 5") with Grid
 Height : 3500mm (11 ft 6")
 3735mm (12 ft 3") with Grid
 Weight : 48 Tonnes (52.9 US Tons)

DISCHARGE HEIGHTS

Oversize : 3722mm (12 ft 3")
 Mid Product : 3510mm (11 ft 6")
 Fines : 3734mm (12 ft 3")

OUTPUT

Capacity : 350-500 Tonnes per hour
 (385-550 US Tons per hour)



M515 DRUMS & SCREEN OPTIONS



ROBUST DRUM STRUCTURE

700 MPa TENSILE STRENGTH

VARIOUS SCREEN SIZES

MDS M515 trommel is a versatile unit and can be used in different applications. MDS offers different drum options to cater for the needs of the customers. Drum frame with changeable screens and fully welded drums are available as options. The following screen options are available in the M515 Trommel:



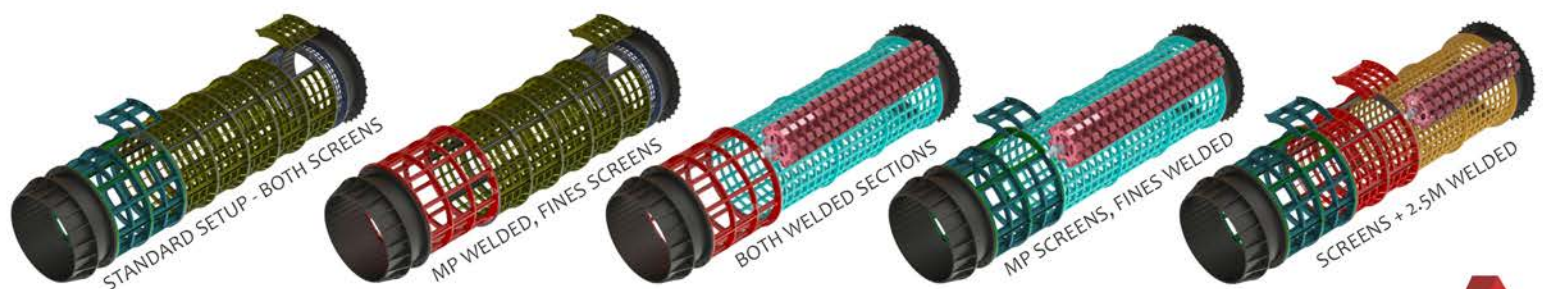
MDS M515 Trommels are made up of a drum with a 4m Fines section and 1.5m Mid Product Section. There are various combinations of Drums that can be setup on the machine. These are either frames with changeable screens or fully welded drums. The exact configuration depends on the application and requirements of the customer.

Drum Sections Available for M515:



Fully welded drum on the Fines Section is needed if installing a Drum Cleaner
For Sizes bigger than 300mm (12"), Fully welded drum is needed in MidProduct (Max drum size 425mm/16.5")

Possible Drum Configurations for M515:



MDS M615 MODULAR TROMMEL

1500mm / 4' 11" Drum



QUICK SETUP

EASY TO MOVE

4 PRODUCTS OUTPUT

The M615 Modular Trommel is capable of screening material at the rate of approximately 500 tons per hour with a max rock size of 800 mm (32"). It is ideal for use in cleaning dirty rock or screening blasted material. With 3 possible configurations, our modular trommel covers many applications. The M615 comes with 4 splits as standard.

TRANSPORT DIMENSIONS

Length : 12188mm (40 ft 0")
Width : 2556mm (8 ft 5")
Height : 3036mm (9 ft 12")

Weight : 35 Tonnes (38.6 US Tons)

WORKING DIMENSIONS

Length : 12478mm (40 ft 11")
Width : 5726mm (18 ft 9")
Height : 6458mm (21 ft 2")

The height is both Trommel and Base

OUTPUT : 500 Tonnes per hour
(550 US Tons per hour)



Drum

Max rock size 800mm (32")
1.5m (4 ft 11") Drum Diameter
6m (19ft 8") Drum Length
Drum Cleaner Option Available
4 Outputs (5 with Grid)

Hopper

Hydraulic Push Feeder
Capacity of 15 cubic metres (530ft³)
970mm (3ft2") plate width
2580 X 4665mm feed opening
(8ft6" - 15ft4")
Tipping Grid Available

Engine

75 kW (100HP) CAT4.4 Diesel Engine
Hydraulic Power Unit
Electronic Control System
Sensors and Probes for monitoring

Bases



Concrete Walls
Ideal for larger stockpiles and feeding dump trucks



Standard Base
Portable and allow quick setup on different sites



Washing Chutes
Includes spray bar system and collection tray for washed materials

MDS M820 MODULAR TROMMEL

2000mm / 6' 7" Drum



LARGEST TRACK TROMMEL



UPTO FOUR OUTPUT PRODUCTS



STRONGEST TROMMEL

The M820 is the largest track trommel in the world. It is a heavy duty rock trommel, capable of screening rocks up to 1m (40") in size at approximately 750 tons per hour. It is ideal for use in cleaning dirty rock or screening blasted material. With three possible configurations, our modular trommel covers many applications. The M820 comes with 3 or 4 splits.

TRANSPORT DIMENSIONS (STATIC)

Length : 14923mm (49 ft 0")
Width : 3647mm (12 ft 0")
Height : 3826mm (12 ft 5")

Static Weight : 80 Tonnes (88 US Tons)
With Tracks : 200 Tonnes (220 US Tons)

WORKING DIMENSIONS STATIC

Length : 22598mm (74 ft 2")
Width : 25248mm (82 ft 10")
Height : 7720mm (25 ft 4")

Capacity : 750 Tonnes per hour
826 US Tons per hour



Drum

Max rock size 1m (40")
Perfect for cleaning dirty material
2m (6ft 7") Diameter
8m (26 ft 3") length
3 or 4 outputs (50 to 600mm / 2-24in)
5 with Tipping Grid

Hopper

Hydraulic push feeder
Variable Speed Drive
Capacity of 70 m³ (2472ft³)
1200mm (3ft11") plate width
4100 X 4875 mm feed opening
(13ft5" X 16ft0")
Extension Wings for 40Ton Dump

Power Unit

2 x 90kW (120HP) Electric Motors
Or CAT 7.1 Engine
Electronic Control System
Speed Control on Drum & Feeder
Auto Drum & Feeder Reverse
Remote Controlled Start/Stop

Bases



Concrete Walls
Ideal for larger stockpiles and feeding dump trucks



Standard Base
Portable and allow quick setup on different sites



Tracks
Track option with conveyors and oversize apron feeders

MDS M825 STATIC TROMMEL

8" x 26" DRUM



HIGH OUTPUT CAPACITY



HEAVY DUTY SCREENING



UPTO 4 OUTPUTS

The M825 trommel is a mega heavy duty machine which can handle rocks upto 1.5 m (5 ft) in size. This static trommel is perfect as a primary screener for material direct from the blast. The hopper can be loaded by dump trucks and the output is upto 1000 tons per hour. Also available with this trommel as an option, is a hydraulic rock breaker.

TRANSPORT DIMENSIONS

Length : 16420mm (53 ft 10")
Width : 4542mm (14 ft 11")
Height : 4440mm (14 ft 7")

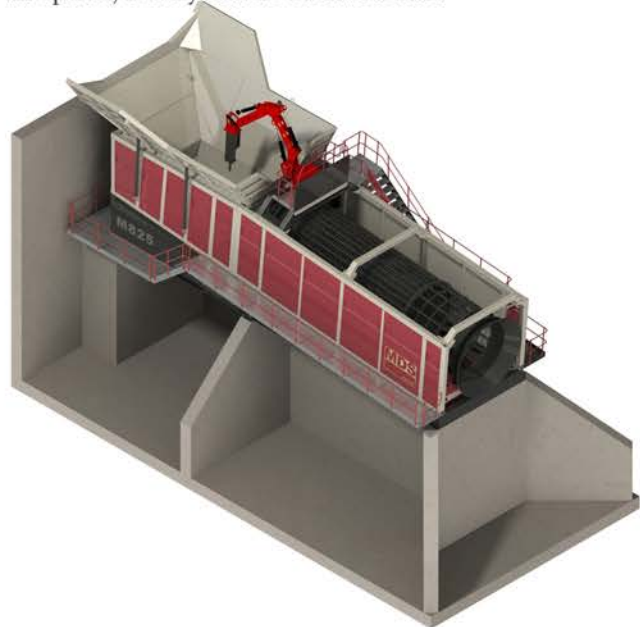
Weight : 125 Tonnes (137.8 US Tons)

WORKING DIMENSIONS

Length : 17075mm (56 ft 0")
Width : 6385mm (20 ft 11")
Height : 11855mm (38 ft 11")

The height is both Trommel and Base

Capacity : 900 Tonnes per hour
(1000 US Tons per hour)



Drum

2.5m (8 ft 2") internal diameter
2.8m (9 ft 2") external diameter
8m (26 ft 3") length
5 degrees incline
3 or 4 outputs (70-500mm/3-20in)
1.5m (60in) Max Rock size
1000 Tonnes per hour output

Hopper

145 cubic metre capacity (5120ft³)
Hydraulic Push feeder
Variable Speed Drive
Optional Hydraulic Rock Breaker
900mm (2ft11") feeder stroke
4700 X 5500mm feed opening
(15ft5" X 18ft0")

Power Unit

180kW (240HP) CAT Engine
Diesel Engine
Or Electric Motors
Hydraulic Power Unit
900L Hydraulic Reservoir

Chassis

I-Beam Base
Box Section Uprights & Top Frame
Mild Steel (S275) Construction
Safety Guards to ISO Standards

Base

Concrete Base
Catwalks for easy access



COMPACT AND POWERFUL



EASY & CHEAP TO TRANSPORT



QUICK SETUP

M518R is a compact recycling trommel that is designed to be used in various applications. It is packed with many features and has several options that are quickly interchangeable. It can be fitted with 4 different styles of drums (5m long, 1.8m diameter). The main unit is designed on tracks for easy mobility and a transport height just under 3170mm (10' 5").

TRANSPORT DIMENSIONS

- Length : 10374mm (34 ft)
- Width : 2500mm (8 ft 2")
- Height : 3180mm (10 ft 4")
- Weight : 19.783 Tonnes (21.807 US Tons)
- OUTPUT**
- Capacity : Dependent on Application



Drum

- 1.8m (5 ft 11") Diameter
- 5m (16 ft 5") Length
- Drum Cleaners Available
- Drum Roll out for easy change

Feeder

- 5.0m³ (6.54yd³) Capacity Hopper
- Heavy Duty US Flex Belt Conveyor
- Feed Opening: 3740 x 1954mm
(12 ft 3in x 6ft 5in)
- 920mm (3ft) Belt Width
- Tipping Grid Option Available



Drum Types

- Frame with Changeable Screens**
50mm to 150mm (2" - 6") Openings
- Square Punch Plate**
5mm to 100mm (13/64" - 4") Openings
- Wired Mesh**
1mm to 20mm (3/64" - 3/4") Openings
- Fully Welded**
50mm to 150mm (2" - 6") Openings

Track Base

- Standard Track Base
- Lower transport height
- Easy to move around site

Engine

- CAT 2.2 50kW (67HP) TIER 4 Diesel
- Hydraulic Power Unit
- Electronic Control System
- Sensors and Probes for monitoring



RECYCLING TROMMEL



PROCESS UPTO 800MM



OVERBURDEN, SCALPING

The M720 Recycling Trommel is ideal for screening heavy materials from Steel to Demolition waste and recycling in general. It can be used in a quarry, recycling or construction setting. It can handle material upto 750mm and is great for scalping, cleaning overburden and screening materials into different size streams. It is equipped with a 2m(6ft 6") diameter & 7m (22ft 11") long drum.

TRANSPORT DIMENSIONS (STATIC)

Length : 11922mm (39ft 1")
 Width : 3500mm (11 ft 6")
 Height : 3222mm (10ft 7")

Weight : 34 Tonnes (37 US Tons)

WORKING DIMENSIONS STATIC

Length : 11871mm (38ft 11")
 Width : 3500mm (11ft 6")
 Height : 6512mm (21ft 4")

Capacity : 800 Tonnes per hour
 882 US Tons per hour



Drum

Max rock size 800mm (32")
 2m (6 ft 6") Drum Diameter
 7m (22ft 11") Drum Length
 Changeable Screens or Welded Drum
 Heavy Duty or 3D Screens available

Hopper

20T Capacity
 Wide Mouth Opening

Motor

22kW Single Drive
 Planetary Moter Gearbox
 Chain Drive Mechanism

Feeder

Apron Feeder
 Driven by 15kW Motor
 Auto Reverse Function
 Variable Speed

Trommel Base

Hydraulic Jack legs
 2.4m (7ft 10") Working Height
 Easy Self Loading - Driver Trailer

Control Panel

Control Panel included
 Variable Speed for Drum/Feeder

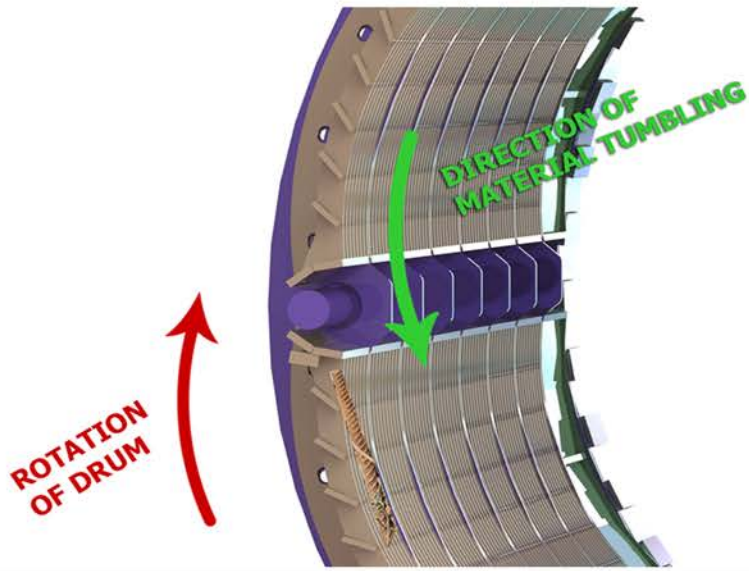


MDS Drums with 3D Screens

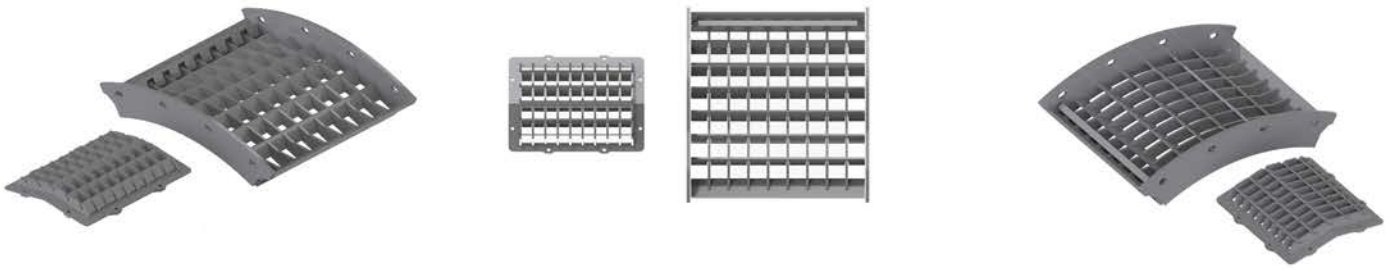


MDS has developed special 3D Screens that provide revolutionary performance for various recycling solutions. These screens have proven to be extremely successful in processing of Metal Waste and Incinerated Bottom Ash.

The 3D Screens have plates at an angle, this stops the longer pieces of metal getting stuck in the screens. This is because there isn't sufficient "opening areas" for the material to catch onto. The finer materials are easily removed through the openings.



Rotational force of the drum & material pushes the long metal back into the drum and is carried through to the oversize.



We have 3D Screens for M412, M413, M515 & Bespoke Machinery.



MDS RECYCLING SOLUTIONS



LARGE RECYCLING PLANTS



VARIOUS RECYCLING APPLICATIONS



HIGH PRODUCTIVITY

MDS offers various recycling trommels such as the M518R, M720R and M625R which are available as light, medium or heavy duty recycling trommels. These are ideal for woodchip, compost, soil, rubber and plastic and general waste. Drums are available in different styles to suit the applications. Full solutions are provided that include feeding systems, conveyors, structures and walkways. We also make recycling trommels as per customer specifications.

TROMMEL AVAILABLE IN VARIOUS SIZES

Lengths : 4 - 9m (13 ft 1" - 29 ft 6")

Diameters : 1m - 2.5m (3 ft 3" - 8ft 2")

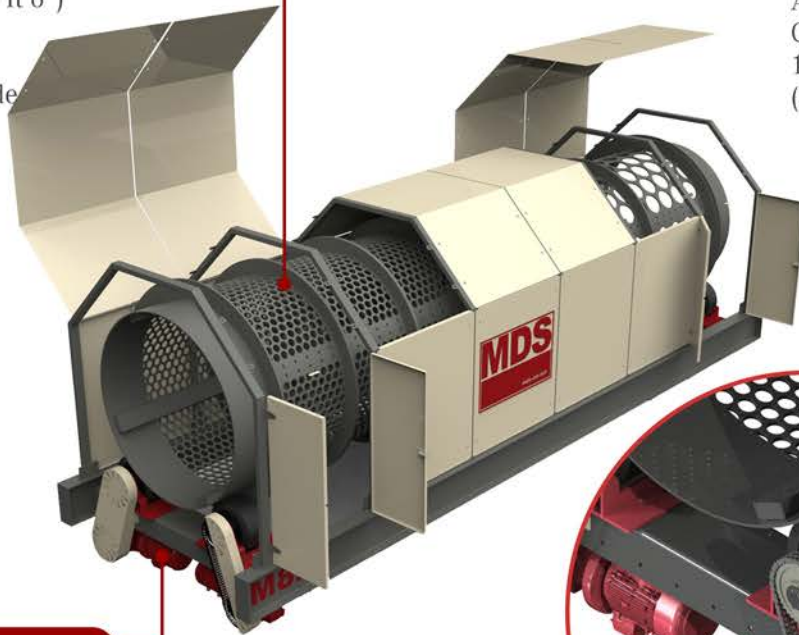
SOLUTIONS PROVIDED INCLUDE:

- Recycling Trommels
- Conveyor Systems
- Complete Support Structures
- Stairs & Walkways
- Picking Lines
- Design Consultation
- Washing Systems within Trommels
- Mobile or Static Units
- Feed Systems with Hoppers
- Brush Cleaners
- Overband Magnets
- Metal Detectors



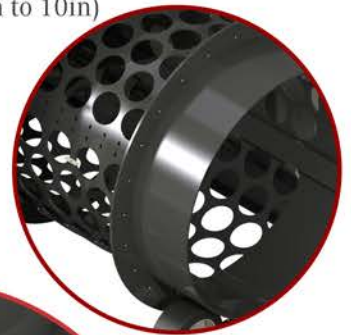
Drum

Diameters of up to 2.5m (8 ft 2")
 Length of up to 9m (29 ft 6")
 2 or 3 off outputs
 Made from steel
 Other sizes can be made



Screens

Various screen openings
 Available as Mesh, Punch Plate
 Changeable Screens or Fully Welded
 1 to 250 mm Screen openings
 (3/64 in to 10in)



Motor

2 off 15 kW (20HP) Motors
 Solid Rubber Wheels

Twin Drive motors
 with solid rubber
 wheels



STANDARD APRON FEEDERS



QUARRY FEEDERS

VARIOUS SIZES AVAILABLE

CAN START UNDER LOADING

Used for feeding crushers and screeners. Our robust and versatile apron feeders have many applications. The length and Width of the feeder can be adjusted as per customer spec. Hoppers are also provided for these feeders

COMMON APRON SIZES

	AF 10-4	AF 10-6	AF 12-4	AF 12-6
Length	: 4000mm (157")	6000mm (236")	4000mm (157")	6000mm (236")
Width	: 1000mm (39")	1000mm (39")	1200mm (47")	1200mm (47")

CAPACITY

Output : 225-450 Tonnes per hour
(250-500 US Tons per hour)

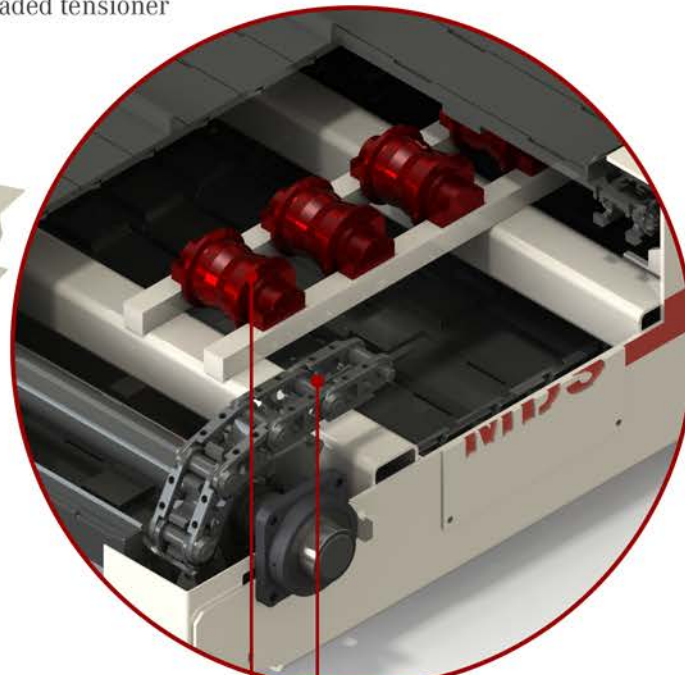
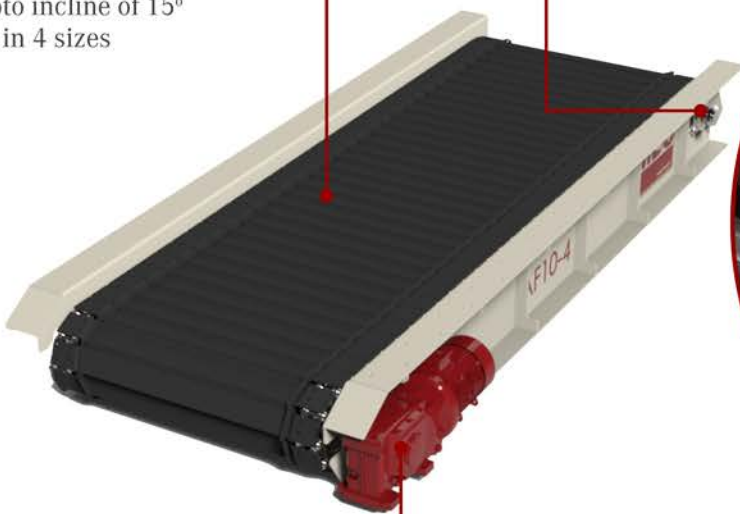


Pans

- Double row of impact rollers
- Excavator chain drive
- Hardened sprockets
- Hardox Pans
- Usable upto incline of 15°
- Available in 4 sizes

Tensioner

Spring loaded tensioner



Motor

- Differet Motor options available
- Size dependent on application & desired output
- Electric or Hydraulic Drive
- Bevel Planetary Helical Gearboxes
- 120% Loading During Startup

Track Rollers
Track Chain

Odd number of teeth to allow alternative meshing of chain to give double life

STANDARD APRON FEEDER

HEAVY DUTY APRON FEEDERS



MINING FEEDER

VERY STRONG AND ROBUST

RAIL TRACK SUPPORT

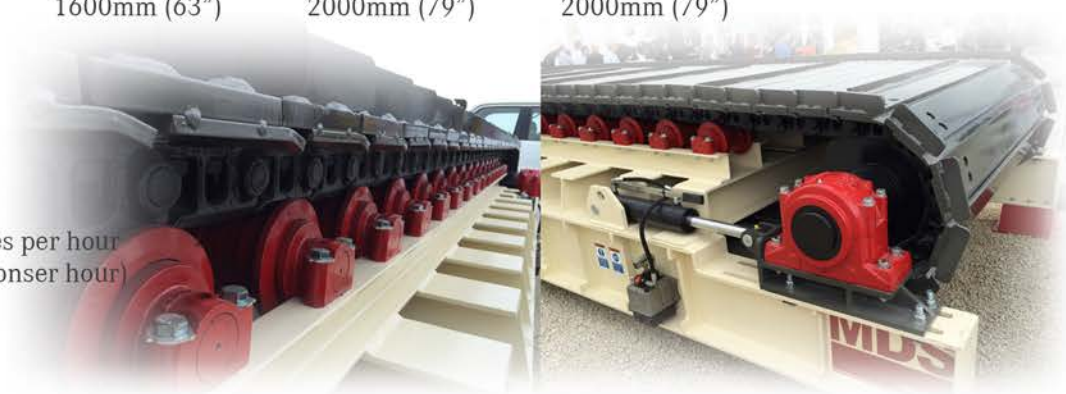
Used in the mining industry, this mega machine can withstand the toughest tasks. It can start up under full load and can be loaded by large dump trucks. Lengths and widths can be as per customer specifications.

MDS also provides hoppers for these large units.

	HD AF 16-6	HD AF 16-8	HD AF 20-6	HD AF 20-8
Length	: 6000mm (236")	8000mm (315")	6000mm (236")	8000mm (315")
Width	: 1600mm (63")	1600mm (63")	2000mm (79")	2000mm (79")

CAPACITY

Tonnes/hr : 1350-1800 Tonnes per hour
(1500-2000 US Tons per hour)

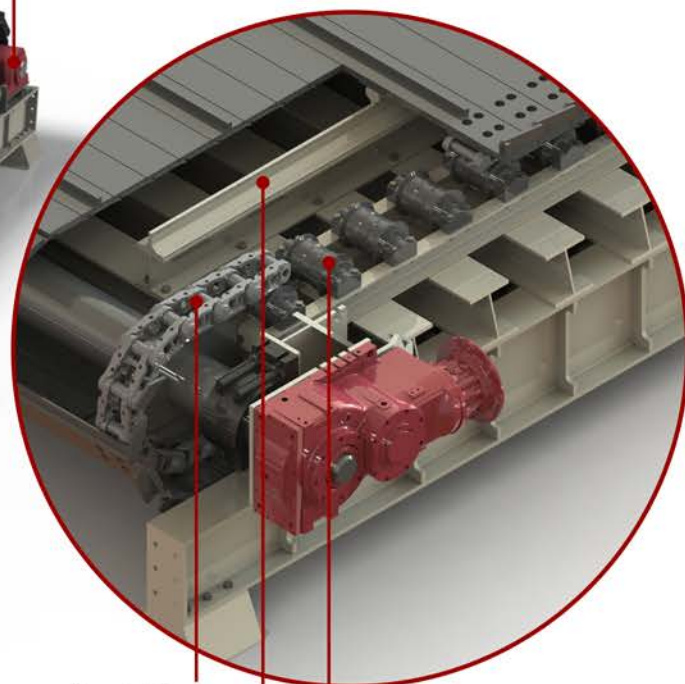
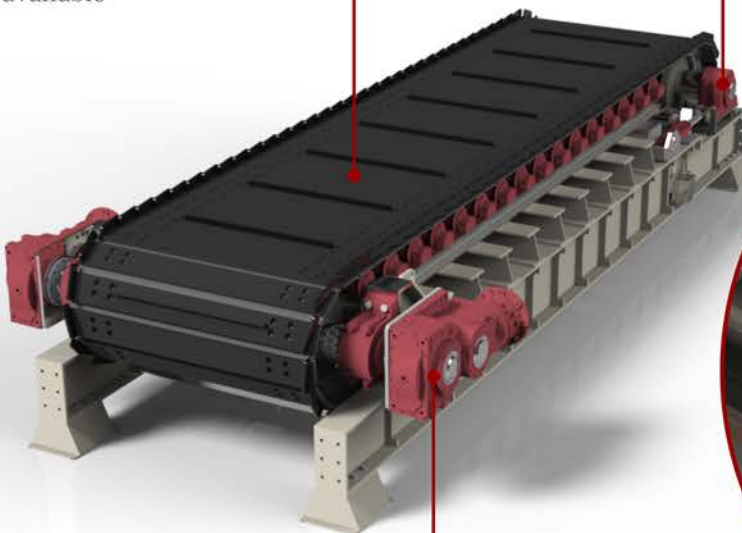


Pans

Hardox or Manganese Pans
Rail Track Impact beams
4 sizes available

Tensioner

Hydraulic Tensioner



Motor

Twin Drive
Electric or Hydraulic Drive
Able to start under heavy load
Different Motor options available
Size dependent on application & desired output

Track Chain
Support Rails
Track Rollers

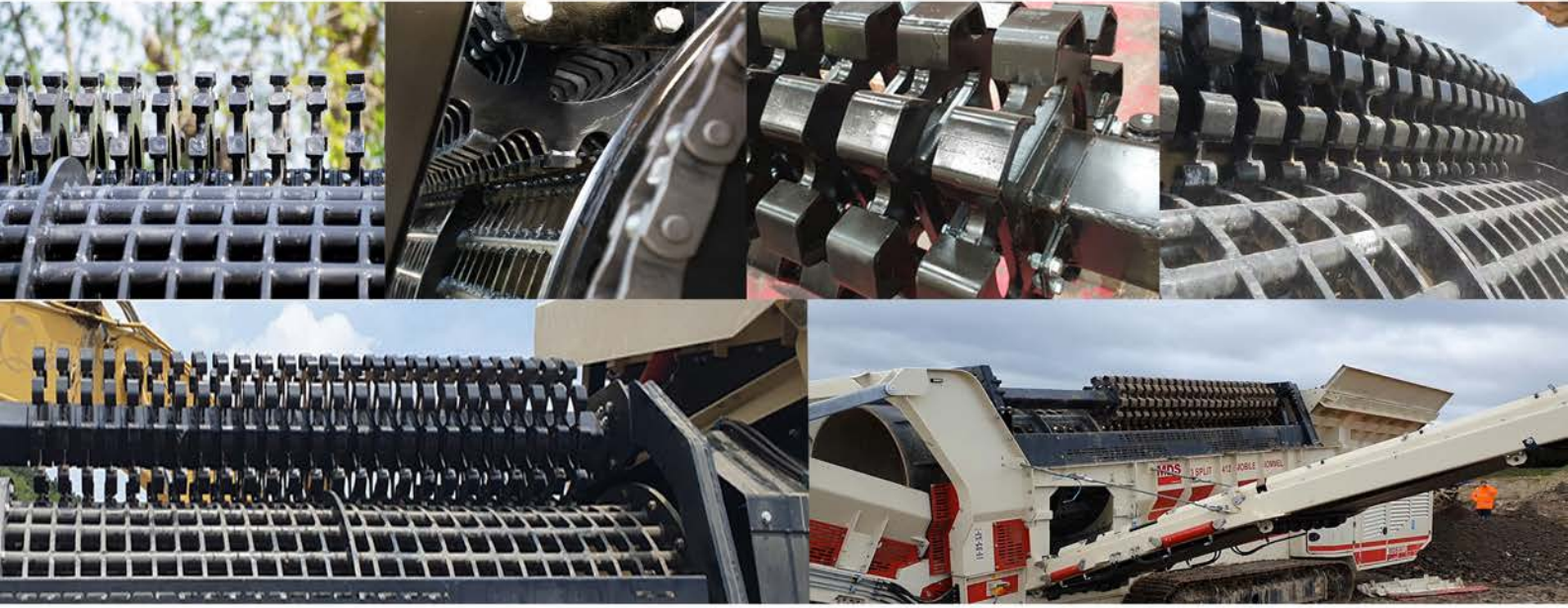
MDS DRUM CLEANER SOLUTION

MDS looked at this problem in a different way and took inspiration from the cog wheel concept. Loosely based on a Cog wheel style that meshes with the drum openings it punches out the holes to keep them clean even in the worst conditions.

The drum cleaner was developed to be at its happiest when punching out the soils and clays that traditionally blind over scalpers in both recycling yards but also quarries. It is driven by the motion of the drum and therefore doesn't require an independent drive. By meshing with the drum, the faster the drum rotates the faster the cleaner rotates as its meshed together.

All the range can have a drum cleaner fitted and those that have seen it in action have all commented on the simplicity of the solution. "It's a fool proof solution to processing all our nasty overburden which would have normally been sent to landfill".

MDS offers drum cleaner attachment on all of our units. These cleaners systems require a fully welded drum and cannot be used with a changeable screens setup.



MDS Tipping Grid

Our units have the option to have a Tipping Grid installed. The tipping grid serves two purposes, one is to act as a protection barrier and the second is to give an additional product. Customers can choose the bar spacing to meet their needs. The grid is designed in a way that the spacings can easily be adjusted to whatever opening the customer wishes. With the grid installed, customers now have a controlled product coming out of the oversize conveyor as well.

The grid is hydraulic and can be used as static or on a tipping cycle. The tipping allows for stuck rocks to fall out to the side. The M412, M413 and M518R can be transported with the grid installed. On the larger M515, M615 and M820 the grid ships separately.



TIPPING GRID

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