



# MOBILE DRUM SCREENS

JOKER PRIMUS MAXX MUSTANG MAGNUM  
WIDE RANGE OF APPLICATIONS  
ROBUST AND RELIABLE  
HYDRAULIC OR ELECTRIC DRIVE





## HIGHLIGHTS



- » Broad product range for any performance requirement
- » Robust, proven solutions based on extensive experience
- » Extensive options to meet individual needs
- » Power options for the Maxx and Mustang: diesel-hydraulic, diesel-electric or all-electric operation
- » Choice of standard screen drums with fixed hole size or flexible system with quick-change screen segments



# MACHINE

In modern material management, screening (separation by different sizes) continues to be a major process step. With many years of experience in the construction of screening machines, and continual development, Komptech supplies drum screens that perform this key process step highly effectively, reflecting our focus on innovative technology and maximum customer benefit. Our product portfolio includes five model ranges tailored to the requirements of the market.

The Joker is the ideal entry-level screening machine. The Primus is the right choice when performance needs increase. The performance levels of the Maxx and Mustang meet the demands of high throughput and continuous output. At the top end of the range is the Magnum, with a performance normally only found with stationary machines.



01

### Compost

Green compost, organic compost, sludge compost

Komptech drum screens demonstrate their talent for screening when used for composting. Adjustable hopper and drum rotation speeds allow for precise material feed. Overfilling of the drum is prevented by load-dependent hopper control. In the drum itself, a spiral auger ensures full utilisation of the screen area. A standard screen drum or a drum with exchangeable screen segments can be used for screening, depending on requirements.



02

### Mulch/biomass

Shredded waste wood, woody biomass, wood chips, mulch, bark

Komptech drum screens are also effective with high-bulk material. This is because the feed hopper is tailored to the drum size (plus a generous reserve). Steep hopper sides prevent bridging, and a conveyor with T-cleats feeds the material into the drum consistently. Extended discharge belts allow for high piles, and ancillary hydraulic or electric connections allow you to run large stacking conveyors from the machine.



03

### Soil/aggregate

Excavated material, sand, gravel, light-weight building rubble

Heavy materials do not present problems for Komptech drum screens. With a hydraulic pre screen over the hopper, large contaminants are kept out of the machine. The hopper belt is constantly self adjusted & drums up to 3/8" / 10 mm thick allow for a long service life.



04

### Waste

Shredded bulky, household and residual waste, re-fuse derived fuels

Ample space between screen drum and side walls also makes operation with large screen hole sizes smooth. For these hole sizes in particular, outside scrapers are more effective than circular brushes for drum cleaning. For residual waste screening, a special drum with anti-dirt strips is also available. Large side doors and flaps provide simple access for cleaning and servicing.



## HIGHLIGHTS



- » Sturdy frame, mounted on highly mobile single-axle trailer
- » Opposing discharge belts for fine and oversized particles save space
- » Screen drum with fixed hole size, or flexible system (core trommel with quick-change screen segments)



# JOKER

## SMALL IS BEAUTIFUL

The Joker is an entry-level mobile drum screen. The easy spelling of the single-axle trailer and its compact and sturdy design make the Joker an ideal solution for horticulture and landscaping, for smaller composting systems and wherever mobile screening is needed.

Simple operation and tried and tested technologies give it high operational reliability. The learning curve is short, and the Joker provides powerful screening despite its compact dimensions.



01

### Compact

The Joker is built on a 24' 7" / 7.5 m trailer with a single central axle that is easy to position even in tight spaces. The manually operated front support allows quick uncoupling, safe assembly and simple adjustment of the screen drum tilt.



02

### Discharge belts only

The well-conceived design of the Joker requires only two conveyor belts – the width of the fine particle belt is the same as the length of the screen area. It starts underneath the drum and handles both collection and discharge. The coarse particle belt hinges out at a right angle to the machine. This arrangement results in extremely compact dimensions, both in transportation and in working position.



03

### Proven solutions

A fuel-efficient diesel power plant with engine monitoring delivers the power. The discharge belts can be raised and lowered simply and practically with a hand winch. The drum is moved by a hydraulic drive, and the sturdy roller chain with "drum grip" provides reliable power transfer.

### Details

<b>Drive</b>	
Diesel engine:	16.5 kW / 22 HP
<b>Material feeding</b>	
Hopper volume:	> 3 yd <sup>3</sup> / > 2.3 m <sup>3</sup>
<b>Screening drum</b>	
Length:	8' 0" / 2400 mm
Diameter:	5' 11" / 1800 mm
Effective screening area:	108 ft <sup>2</sup> / 10 m <sup>2</sup>
<b>Dimensions</b>	
Transport dimensions L x W x H:	25' 1" x 8' 4" x 12' 6" 7650 x 2550 x 3800 mm
<b>Throughput</b> (dependent on material)	
Throughput performance:	up to 45 yd <sup>3</sup> /h up to 35 m <sup>3</sup> /h



04

### Flexibility with screen segments

The use of interchangeable screening segments made of highly wear resistant spring steel is particularly beneficial for multi-site use, as different mesh sizes can be transported with the screening machine. The segments are mounted on a core drum with a quick fastener (available for all Komptech drum screens).



05

### Easy accessibility

The screen drum is freely accessible by opening the large side door. To change segments, the drive chain is loosened and the drum lifted out of the machine with suitable lifting gear. With the "Drum Grip" system, there are no teeth welded on the drum.



## HIGHLIGHTS



- » Large hopper for efficient working
- » Steep side walls prevent bridging
- » Problem-free servicing with easy accessibility to all power units and simple drum change system
- » Choice of screen drum with fixed hole size or flexible system with quick-change screen segments



# PRIMUS

## A PERFECT FIT

For higher throughput needs, the Primus is the next step up. Designed as a tandem central axle trailer, the Primus not only has 172 ft<sup>2</sup> / 16 m<sup>2</sup> of effective screening area, it also offers a screen length able to handle big jobs. Heavy-duty components, manually folding discharge belts, the hydraulic drum drive via roller chain

"drum grip" and a fuel-efficient diesel unit give this machine an excellent price/performance ratio. Options are available that allow users to configure the machine for their specific requirements. The Primus is the right solution for smaller and mid-sized composting plants, as well as for getting into contract screening.



01

### Hopper interface

Steep side walls in the hopper itself prevent material bridging. Material flow remains consistent even with wet material. The hopper conveyor belt drive roller has a special coating to prevent slippage with heavy material. Also, a mechanical straight running guide automatically keeps the hopper belt in the desired position at all times.



02

### Reliable drum cleaning

A freely revolving circular brush, adjustable from below, cleans the screen drum. Its position opposite the screen side presents no risk of contamination by the screen material. Optional spring steel scrapers keep the brushes clean.



03

### Well conveyed

The discharge belts can be folded out manually from the transport to the working position using a hand winch. In its base configuration, every screen (except the Joker) has a sturdy cleated V-belt for the fine fraction and a smooth belt for the oversize fraction with bolt-on, replaceable cleats that minimise roll-back of round pieces.

## Details

Drive	
Diesel engine:	38 kW / 51 HP
Material feeding	
Hopper volume:	> 4.0 yd <sup>3</sup> / 3 m <sup>3</sup>
Screening drum	
Length:	13' 1" / 4000 mm
Diameter:	4' 9" / 1450 mm
Effective screening area:	172 ft <sup>2</sup> / 16 m <sup>2</sup>
Dimensions	
Transport dimensions L x W x H:	32' 0" x 8' 4" x 13' 1" 9750 x 2550 x 4000
Throughput (dependent on material)	
Throughput performance:	up to 90 yd <sup>3</sup> /h up to 70 m <sup>3</sup> /h



04

### Piled high with belt extension

A conveyor extension increases the Primus discharge height to almost nine feet. This convenient working option is also available for all other Komptech drum screens (except the Joker).



05

### Separating off the coarse fraction

When working with excavated material, gravel or lightweight building rubble, a hopper pre-screen prevents damage from large overs. The sturdy coarse material grid folds hydraulically by radio remote control and has a chute to eject overs beside the machine (also available for Maxx, Mustang, Magnum).

# MAXX MUSTANG

Professional technology for the highest expectations

The Maxx and Mustang drum screens fully meet tough requirements. Rugged, reliable and featuring modern power plants with high ease of operation, they satisfy even the most demanding customers. Their ample power reserves ensure top performance in all applications. Both machines have a tandem central axle trailer design and a generously-sized feed area which can accommodate large front end loaders. The patented DRUMGRIP drive system provides smooth, low-noise and low-wear power transmission to the drum. With a 7 7/8" / 200 mm wider and 39" / 1000 mm longer screen drum, the Mustang has 1/3 more effective screening area. The powerful engine converts this additional screening area into higher throughput. A comprehensive range of useful options meets virtually any customer requirements.



Lots of room in the hopper

- » >13' 1" / 4 m fill length, >6.5 yd<sup>3</sup> / 5 m<sup>3</sup> volume
- » Automatic hopper belt controller for precise straight line travel

01  
Easily adjustable  
round brush

02  
Steep hopper  
side walls

03  
Ideally positioned  
operator console

04  
Fuel-efficient  
diesel engine

05  
Discharge belts  
hydraulically adjustable







**Maintenance-friendly**

- » Engine compartment accessible from all sides, engine unit also extendable
- » Hopper belt change possible on-site



**Low-wear drum drive**

- » Patented, self-tensioning and load-dependent DRUMGRIP drum drive
- » Smooth friction power transmission



**Simple drum change**

- » Side wall folds out hydraulically 90° (with or without drum)
- » Easy access for cleaning



**Clean drum**

- » Segment outer scraper for cleaning large hole sizes
- » Adjustable circular brush along the entire screen length



**Discharge as desired**

- » Wider and longer belts with controllable belt speed
- » Magnet rollers for metal separation



**Nice to have**

- » Integral wind sifter (Maxx)
- » Hopper sensor controller
- » Track drive (Maxx, Mustang)
- » Cleanfix fan, etc.

## Details

	Maxx	Mustang
<b>Drive</b>		
Diesel engine:	62.5 kW / 84 HP	70 kW / 94 HP
<b>Material feeding</b>		
Hopper volume:	> 6.5 yd <sup>3</sup> / > 5 m <sup>3</sup>	> 6.5 yd <sup>3</sup> / > 5 m <sup>3</sup>
<b>Screening drum</b>		
Length:	14' 9" / 4500 mm	18' 1" / 5500 mm
Diameter:	5' 11" / 1800 mm	6' 7" / 2000 mm
Effective screening area:	242 ft <sup>2</sup> / 22.5 m <sup>2</sup>	323 ft <sup>2</sup> / 30 m <sup>2</sup>
<b>Dimensions</b>		
Transport dimensions L x W x H:	36' 11" x 8' 4" x 13' 1" 11250 x 2550 x 4000 mm	39' 2" x 8' 4" x 13' 1" 11950 x 2550 x 4000 mm
<b>Throughput</b> (dependent on material)		
Throughput performance:	up to 160 yd <sup>3</sup> /h up to 120 m <sup>3</sup> /h	up to 210 yd <sup>3</sup> /h up to 160 m <sup>3</sup> /h



## HIGHLIGHTS



- » Up to 75% lower energy costs through high efficiency electric drive
- » Lower wear and maintenance costs
- » Simple, convenient operation through console with schematic
- » Expanded range of applications through optional ground power operation
- » DRUMGRIP drive with the reliability of a chain and the quietness of a friction drive



# THE ELECTRICAL ADVANTAGE

Electrical drive is available as an option for the Maxx and Mustang drum screens. On these E versions, electric motors are used in place of hydraulic drives. This saves energy, because electric motors have markedly higher efficiency than hydraulic systems. Power comes directly from ground power, is produced by the on-board diesel generator if necessary. The

auxiliary hydraulic system is used only for machine set-up. The E versions of the Maxx and Mustang are available with and without generator; the generator version also has an optional ground power connection. For operators concerned with upfront and operating costs, the Maxx E and Mustang E are investments which pay back within a short period of time.



01

### Reduced operating costs

Compared to diesel-hydraulic operation, electric uses less energy and saves on replacement/ consumable parts and servicing costs.

#### Savings potential of electric drive (ground power):

- » up to 75% lower energy consumption
- » up to 30% lower consumable parts costs
- » up to 25% lower operating costs
- » no servicing of the diesel unit or hydraulics unit

#### Savings potential of the diesel-electric drive (generator mode):

- » up to 25% lower energy consumption
- » up to 15% lower consumable parts costs
- » up to 5% lower operating costs
- » no servicing of the hydraulic system



02

### Alternative to stationary machines

If the power comes from the power socket, no exhaust gases are produced and work can be performed in enclosed buildings. This is a cost-effective alternative for stationary jobs in which a feed hopper is required. For this operating mode, higher dust incidence poses no problem either (no diesel unit, no radiator).



03

### Flexible generator solution

The removable generator version provides a high degree of flexibility. With it, it is possible to run the machine inside where no electrical connection is available. The generator pack is taken out of the machine, moved with a forklift and placed outside in a rack frame, together with its housing.



04

### Simpler operation

Thanks to its fully electronic controller, this drive concept features the highest ease of use. The display mode shows the operating status, and all functions are clearly visible and easily configurable. An automatic start-up and idling feature simplifies ease of operation.



05

### More torque

All components that have proven so successful on the Maxx and Mustang, such as the DRUMGRIP drum drive, were kept for the E version. But the power on the E version comes from an electric motor which can be precisely controlled with frequency converters, and also delivers higher torque to the drum.

### Details

<b>Maxx E</b>	
Electrical power input :	26 kW / 35 HP
Diesel generator:	48 kVA
<b>Mustang E</b>	
Electrical power input:	30 kW / 40 HP
Diesel generator:	48 kVA
See Maxx and Mustang for other specifications	



## HIGHLIGHTS

- » Fully mobile, two-axle semi-trailer design
- » Stiff frame with four supports provides excellent stability even on adverse terrain
- » Options:
  - Screen drum with fixed hole size
  - Flexible system with interchangeable screen segments
  - Special drum with anti-dirt strips for screening residual waste
  - Separated screen drum for three-fraction screening



# MAGNUM DO MORE

The Magnum is the largest hydraulically driven drum screen in the Komptech product range. After a technical upgrade, the machine now boasts even more functional design and impressive technical features. Whether the Magnum is used for waste screening, composting

or biomass treatment, it always delivers performance in the stationary drum screen category, but with the benefits of a mobile machine. Here today, there tomorrow, but always ready for use immediately and extremely cost-effective.



01

### Fully mobile with semi-trailer

Despite its impressive dimensions, transportation and set-up of the Magnum present no problems. The two-axle semi-trailer has a solid frame with hydraulic front and rear supports for a solid footing.



02

### A lot goes in

The hopper is sized to match the high screen performance. Its  $> 9.1 \text{ yd}^3 / 7 \text{ m}^3$  volume makes for efficient working. The free fill length of  $> 14' 5" / 4.4 \text{ m}$  allows large wheel loader's to be used without problem. When used for soil and rubble, a hydraulically folding hopper pre-screen can be mounted as an option.



03

### A lot comes out

506 ft<sup>2</sup> effective screen area demands a powerful discharge system, and the Magnum has it, with a wide collection belt and 3' 3" / 1000 mm wide discharge belts. High piles are possible with standard or long discharge belts, up to a height of 11' 6" / 3.5 m with a belt extension.

## Details

Drive	
Diesel engine (kW):	96.5 / 129 HP
Material feeding	
Hopper volume:	$> 9.1 \text{ yd}^3 / 7 \text{ m}^3$
Screening drum	
Length:	24' 6" / 7465 mm
Diameter:	7' 3" / 2000 mm
Effective screening area:	506 ft <sup>2</sup> / 47 m <sup>2</sup>
Dimensions	
Transport dimensions L x W x H:	46' 1" x 8' 4" x 13' 1" 14040 x 2550 x 4000 mm
Throughput (dependent on material)	
Throughput performance:	up to 330 yd <sup>3</sup> /h up to 250 m <sup>3</sup> /h



04

### Drum drive: 2 x "DRUMGRIP"

The smooth, low-wear DRUMGRIP drive system is used on both inlet and outlet sides. In conjunction with tandem supporting wheels, this drive concept stands up to the toughest use on a continual basis.



05

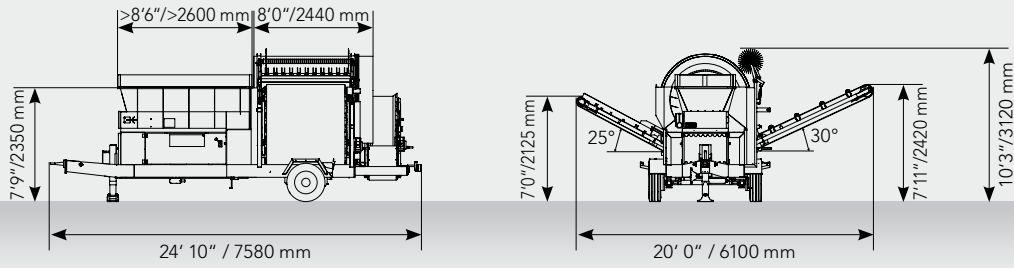
### 3 fractions on request

The Magnum is also available as a 3-fraction screen machine. The fine particle and medium particle belts can be mounted on the right or left. The discharge and fill sides can be switched on site.

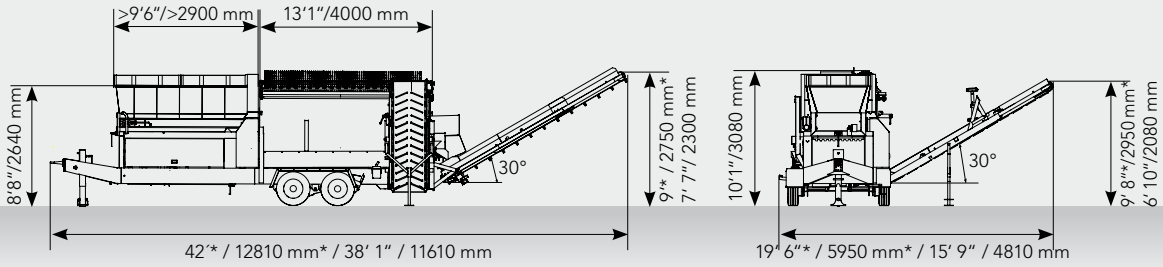


	JOKER	PRIMUS	MAXX MAXX E	MUSTANG MUSTANG E	MAGNUM
<b>Drive</b>					
Diesel engine (kW):	16.5 / 22 HP	38 / 51 HP	62.5 / 84 HP	70 / 94 HP	96.5 / 129 HP
Electrical power input (kW):			Maxx E: 26 / 35 HP	Mustang E: 30 / 40 HP	
Diesel generator (kVA):			Maxx E: 48	Mustang E: 48	
<b>Material feeding - feed hopper</b>					
Hopper volume:	> 3.0 yd <sup>3</sup> / > 2.3 m <sup>3</sup>	> 4.0 yd <sup>3</sup> / > 3.0 m <sup>3</sup>	> 6.5 yd <sup>3</sup> / > 5.0 m <sup>3</sup>	> 6.5 yd <sup>3</sup> / > 5.0 m <sup>3</sup>	> 9.1 yd <sup>3</sup> / > 7.0 m <sup>3</sup>
Filling length:	> 8' 6" / > 2600 mm	> 9' 6" / 2900 mm	> 13' 1" / 4000 mm	> 13' 1" / 4000 mm	> 14' 5" / 4400 mm
Filling width:	45" / 1135 mm	5' 6" / 1340 mm	5' 6" / 1675 mm	5' 6" / 1675 mm	5' 6" / 1675 mm
Filling height:	7' 9" / 2350 mm	8' 8" / 2640 mm	9' 2" / 2800 mm	9' 2" / 2800 mm	10' 2" / 3100 mm
<b>Screening drum</b>					
Diameter:	5' 11" / 1800 mm	4' 9" / 1450 mm	5' 11" / 1800 mm	6' 7" / 2000 mm	7' 3" / 2200 mm
Length:	8' 0" / 2440 mm	13' 1" / 4000 mm	14' 9" / 4500 mm	18' 1" / 5500 mm	24' 6" / 7465 mm
Effective screening area:	108 ft <sup>2</sup> / 10 m <sup>2</sup>	172 ft <sup>2</sup> / 16 m <sup>2</sup>	242 ft <sup>2</sup> / 22.5 m <sup>2</sup>	323 ft <sup>2</sup> / 30 m <sup>2</sup>	506 ft <sup>2</sup> / 47 m <sup>2</sup>
Drum rpm:	14	max. 21	max. 23	max. 23	max. 19
<b>Material discharge (standard)</b>					
Max. discharge height coarse fraction:	7' 0" 2125 mm	7' 7" 2300 mm	8' 4" 2550 mm	8' 4" 2550 mm	10' 0" 3050 mm
Max. discharge height fine fraction:	7' 11" 2420 mm	6' 10" 2080 mm	7' 1" 2150 mm	7' 1" 2150 mm	8' 10" 2700 mm
<b>Dimensions</b>					
Transport dimensions L x W x H:	25' 1" x 8' 4" x 12' 6" 7650 x 2550 x 3800 mm	32' 0" x 8' 4" x 13' 1" 9750 x 2550 x 4000 mm	36' 11" x 8' 4" x 13' 1" 11250 x 2550 x 4000 mm	39' 2" x 8' 4" x 13' 1" 11950 x 2550 x 4000 mm	46' 1" x 8' 4" x 13' 1" 14040 x 2550 x 4000 mm
Working dimensions L x W x H:	24' 10" x 20' 0" x 10' 3" 7580 x 6100 x 3120 mm	38' 1" x 15' 9" x 10' 1" 11610 x 4810 x 3080 mm	43' 4" x 16' 5" x 12' 4" 13200 x 5000 x 3750 mm	46' 0" x 16' 5" x 12' 10" 14020 x 5000 x 3900 mm	57' 5" x 20' 0" x 12' 10" 17500 x 6100 x 3920 mm
Weight:	~ 5.5 t.sh / ~ 5.0 t	~ 10.0 t.sh / ~ 9.0 t	~ 17.5 t.sh / ~ 16.0 t	~ 17.5 t.sh / ~ 16.0 t	~ 29.0 t.sh / ~ 26.0 t
<b>Throughput (dependent on material)</b>					
Throughput performance:	up to 45 yd <sup>3</sup> /h up to 35 m <sup>3</sup> /h	up to 90 yd <sup>3</sup> /h up to 70 m <sup>3</sup> /h	up to 160 yd <sup>3</sup> /h up to 120 m <sup>3</sup> /h	up to 210 yd <sup>3</sup> /h up to 160 m <sup>3</sup> /h	up to 330 yd <sup>3</sup> /h up to 250 m <sup>3</sup> /h
<b>Options</b>					
Conveyor extension, magnet drum, scraper for round brush, central lubrication, hopper pre-screening, hopper sensor controller, remote control, air suspension, feed device, attachment shoe, adjustable belt speed, noise insulation package, wind sifter (Maxx Integral) and more					

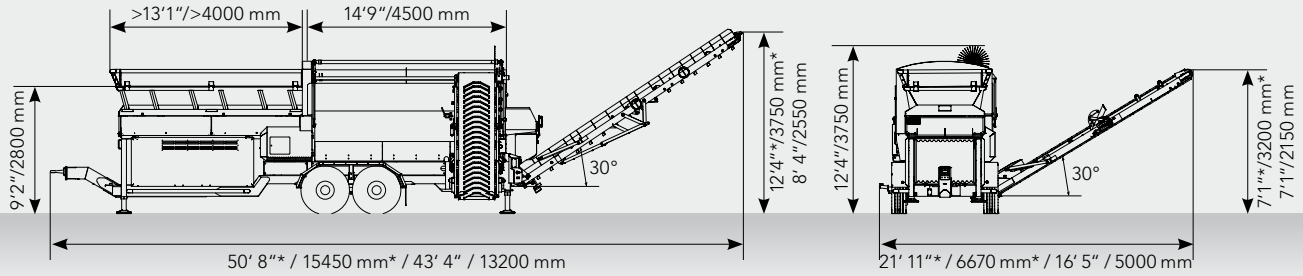
## JOKER



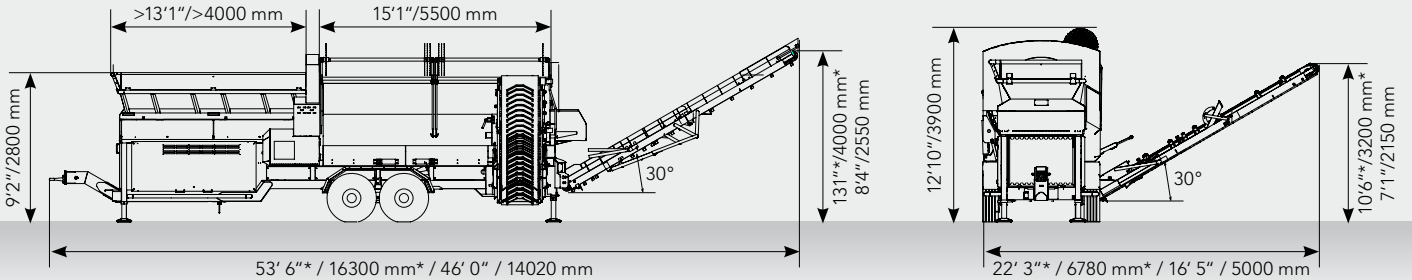
## PRIMUS



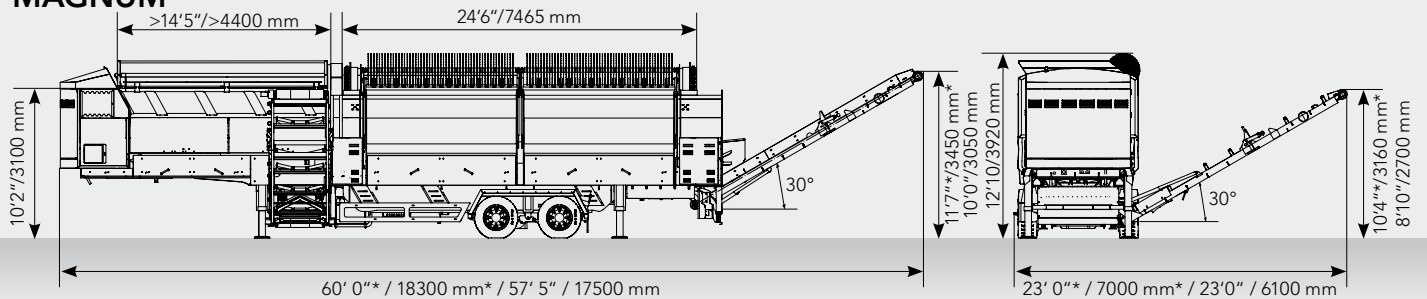
## MAXX



## MUSTANG



## MAGNUM



\*Option conveyor extension

# TECHNOLOGY FOR A BETTER **ENVIRONMENT**



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