DRUM SCREENS

NEMUS MAXX PRIMUS
WIDE RANGE OF APPLICATION
ROBUST AND RELIABLE
MACHINE FOR WISH
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 through continual development, Komptech supplies drum screens that perform this key process step highly effectively, reflecting our focus on innovative technology and maximum customer benefit.

The product range covers three size ranges that are an exact fit with market needs. The medium capacity Primus and Maxx series have been in use for years, and are tough, proven machines. A step up in capacity is the Nemus, combining proven solutions and innovative details with maximum operator convenience and performance.
Komptech drum screens demonstrate their talent for screening when used for composting. Controllable hopper and drum rotation speeds allow precise material alignment. Overfilling of the drum is prevented by load-dependent hopper control. In the drum itself, a screw conveyor 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.

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 reliably. Extended discharge belts allow for high piles, and with a width of up to 1000 mm there are no blockages on the conveyor belt.

Heavy materials do not present problems for Komptech drum screens. Solid contraries are kept back by a hinged hopper pre-screen. A hopper belt controller prevents skewing of the belt, while drums with up to 10 mm wall thickness allow for long service life. Controllable belt speed and bolt-on cleats on the oversize fraction belt keep stones from rolling back.

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.
» 5 m³ hopper volume for constant operation
» Efficient, low-wear hopper belt drive on the drum intake side
» 30 m² screening area for higher throughput and more efficiency per m² screening area
» Quiet-running, low-wear DRUMGRIP drive
» Takes Mustang and Doppstadt drums
» One-piece corrugated edge fines discharge belt eliminates transfer loss
» Control with simple visualization for easier operation

NEMUS FOR NEW STANDARDS

The Nemus is a class unto itself. Like no other, the Nemus combines the practice-proven virtues of its predecessors with new solutions for more convenience and performance. The large steep-walled hopper, and the screen drum with its improved material feed and high-performance discharge system, harmonize perfectly with the proven, robust diesel-hydraulic drive.

The control with visualization makes operation easier, and the longer discharge conveyors up to 3.5 metres boost flexibility in use. Practical details like the easy-cleaning two-stage radiator induction screen, larger material intake support wheels and the extremely good access to all maintenance points reflect close attention to customer feedback.
The sturdy hopper never stops feeding, even under heavy loading, since the hopper belt drive is on the drum intake side. The conveyor is pulled, not pushed, giving optimum friction engagement.

Now it’s easy for existing drum screen users to switch – the Nemus 2700 takes the drums of its predecessor machine, the Mustang, as well as drums from the Doppstadt SM 620 screen.

Sure feed

More throughput by a good margin

Within the drum itself, the improved material flow gives up to 10% more throughput. The greater clearance between drum and sidewall allows a wide range of materials with hole sizes up to 100 mm.

Clean discharge

The fine particles are discharged by a cross belt and a profiled discharge belt or a one-piece corrugated edge belt. This one-piece design prevents material trickle at transfer points, while also giving high capacity and low wear.

Numerous details reduce maintenance effort, time and expense, like the simplified diesel engine radiator cleaning, easier hopper belt replacement, the fines collection belt that comes out as a one-piece cartridge, and the elimination of rubber wear elements on the discharge belts.

The Nemus 2700 is now available in semitrailer configuration. The higher loading on the rear axle of the truck makes for better handling, and the shorter machine length makes shunting easier. The Nemus is also available with a tracked chassis.

Flexible drum choices

Maintenance made easy

Mobility the way you want it
NEMUS 2700

Professional machine for the highest expectations

The reinforced chassis, wider tires and stiff frame with high ground clearance easily handle difficult terrain. Four massive hydraulic supports give the Nemus a stable footing. The Perkins diesel engine has plenty of power for any situation, and can be ordered to the latest exhaust scrubbing standards. The electrical control with visualization feature enhances operability. An automatic start/stop function further boosts ease of use. The side wall can be folded up separately or together with the drum for drum changes and cleaning. A further benefit is that no tools are needed for drum change. Practical options let users configure the Nemus exactly for their needs: hopper sensor controller, central lubrication, and magnet drums on the discharge conveyors.

01 Hopper belt is driven on the screen intake side
02 Steep hopper walls with extensions that can be fitted on the right or left
03 Low wear DRUMGRIP drum drive
04 Electronic control panel with a visual display
05 Discharge of fines with corrugated belt conveyor

Hopper

- 4 m fill length, >5 m³ volume
- Efficient, low-wear hopper belt drive on the intake side
- Automatic hopper belt controller for precise straight line travel
- Engine compartment accessible from all sides, engine unit also extendable
- Two-stage induction screen for easy radiator maintenance
- Different exhaust scrubbing levels available

» Engine compartment accessible from all sides, engine unit also extendable
» Two-stage induction screen for easy radiator maintenance
» Different exhaust scrubbing levels available

» Electrical control for more functionality
» Display with visual representation of key functions

» Patented, self-tensioning and load-dependent DRUMGRIP drum drive
» Side wall folds out hydraulically 90° (with or without drum)
» Complete drum change can be done without tools

» Extended discharge belts with up to 3.55 m discharge height
» One-piece corrugated edge fines discharge belt (option) increases capacity and eliminates transfer loss
» Optional adjustable conveyor speed and magnet drums

» Nemus with tracked chassis
» Hopper pre-screen
» Hopper sensor controller
» Hydraulic connection, Cleanfix fan and more

Details

**Nemus 2700**

**Drive**
- Diesel engine (kW): 70

**Material feeding**
- Hopper volume (m³): > 5,0

**Screening drum**
- Length (mm): 5500
- Diameter (mm): 2000

**Dimensions**
- Transport dimensions (L x W x H (mm)): 12000 x 2550 x 4000
- Throughput (dependent on material) (m³/h): up to 170
- Collection belt and hopper belt as a one-piece cartridge for easy belt change

**Maintenance**
- Large doors and flaps for easy access
- Collection belt and hopper belt as a one-piece cartridge for easy belt change
MAXX

PROVEN QUALITIES

The Maxx drum screen machine is designed for medium to large compost operations. Its robust construction and performance components make it a professional solution for virtually any screening task, including for subcontractors. The generous feed area can handle large loader bucket loads, and the patented DRUMGRIP drive system provides quiet, low-wear power transfer to the drum.

In addition to proven hydraulic drive, there is also the Maxx E electric version, an economical choice for applications where operating hours are high. An extensive range of well-designed options meets every user need, from fill level control by the hopper sensor controller to extended discharge conveyors to the tough hopper pre-screen.

HIGHLIGHTS

» Large 5 m³ capacity hopper
» Robust tandem central-axle trailer frame
» Quiet-running, low-wear DRUMGRIP drive
» Simple drum change without tools
» Maxx E option: Electric drive for lower energy and maintenance costs
4 metre hopper intake length and over 5 cubic metres of capacity make work easier. The hopper discharge conveyor is kept permanently in the straight line travel position by an automatic control system.

The side walls can be hydraulically lowered and the drum lifted out for easy removal of crusted material. During operation, an adjustable round brush along the entire length of the screen provides efficient drum cleaning.

The patented DRUMGRIP drive system provides damped, low-noise and low-wear power transfer to the drum. As a result, all drive components have much longer service life than with conventional systems.

On the E version, electric motors are used instead of hydraulics. Power comes from the mains or an on-board diesel generator. In addition to significantly lower energy costs, this also gives lower wear and maintenance costs than hydraulic machines.

With the optional extended discharge conveyors the fines discharge height can go as high as 3.2 metres and the coarse discharge height all the way to 4 metres. Ferrous separator magnet drums add more application flexibility.
Efficient operation with large hopper
Steep side walls prevent bridging
Easy maintenance through ready access to all drives and simple drum change system
Numerous options to fit the application

The Primus is an entry-level drum screen. Designed as a tandem central axle trailer, the Primus has 16 m² of effective screening area, and offers a screen length able to handle big jobs. Solid, heavy-duty components like the hydraulic drum drive by roller chain and low-consumption diesel engine give it a great 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 and treatment plants, as well as for getting into the contracting business.
Hopper – the point of entry

Steep side walls in the hopper prevent material bridging. Good flow is ensured even with moist 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.

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.

Well conveyed

The discharge conveyors can be folded out manually or hydraulically (option) from the transport to the working position. In the base configuration, every screen has a sturdy cleated V-belt for the fine fraction and a smooth belt for the oversize fraction with bolt-on, replaceable cleats that minimize roll-back of cubic pieces.

Details

<table>
<thead>
<tr>
<th>Drive</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Diesel engine (kW):</td>
<td>38</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Material feed</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hopper volume (m³):</td>
<td>&gt; 3,0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Screening drum</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Length (mm):</td>
<td>4000</td>
</tr>
<tr>
<td>Diameter (mm):</td>
<td>1450</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimensions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport dimensions</td>
<td>9750 x 2550 x 4000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Throughput (depending on material)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Throughput performance (m³/h):</td>
<td>up to 70</td>
</tr>
</tbody>
</table>

Piled high with belt extension

A conveyor extension increases the Primus discharge height to almost three metres. Other options are adjustable belt speed and magnet drums for Fe-separation.

Separating off the coarse fraction

When working with excavated material, gravel or lightweight building rubble, a hopper pre-screen prevents damage by solid contraries. The sturdy coarse material grid folds hydraulically by radio remote control and has a chute to eject contraries beside the machine.
### TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>NEMUS</th>
<th>MAXX</th>
<th>PRIMUS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Drive</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diesel engine (kW)</td>
<td>70</td>
<td>62,5</td>
<td>38</td>
</tr>
<tr>
<td><strong>Material feeding - feeding hopper</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hopper volume (m³)</td>
<td>&gt; 5,0</td>
<td>&gt; 5,0</td>
<td>&gt; 3,0</td>
</tr>
<tr>
<td>Feeding length (mm)</td>
<td>&gt; 4000</td>
<td>&gt; 4000</td>
<td>&gt; 2900</td>
</tr>
<tr>
<td>Feeding width (mm)</td>
<td>1675</td>
<td>1675</td>
<td>1340</td>
</tr>
<tr>
<td>Feeding height (mm)</td>
<td>2850</td>
<td>2800</td>
<td>2640</td>
</tr>
<tr>
<td><strong>Screening drum</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diameter (mm)</td>
<td>2000</td>
<td>1800</td>
<td>1450</td>
</tr>
<tr>
<td>Length (mm)</td>
<td>3500</td>
<td>4500</td>
<td>4000</td>
</tr>
<tr>
<td>Effective screening area (m²)</td>
<td>30</td>
<td>22,5</td>
<td>16</td>
</tr>
<tr>
<td>Drum rpm (min⁻¹)</td>
<td>max. 23</td>
<td>max. 23</td>
<td>max. 21</td>
</tr>
<tr>
<td><strong>Material discharge (standard)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max. discharge height coarse fraction (mm)</td>
<td>3550</td>
<td>2550</td>
<td>2300</td>
</tr>
<tr>
<td>Max. discharge height fine fraction (mm)</td>
<td>3550</td>
<td>2150</td>
<td>2080</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport dimensions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L x W x H (mm):</td>
<td>12000 x 2550 x 4000</td>
<td>11250 x 2550 x 4000</td>
<td>9750 x 2550 x 4000</td>
</tr>
<tr>
<td>Working dimensions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L x W x H (mm):</td>
<td>14950 x 5970 x 3800</td>
<td>13200 x 5000 x 3750</td>
<td>11660 x 4810 x 3080</td>
</tr>
<tr>
<td>Weight (t)</td>
<td>17,0</td>
<td>16,0</td>
<td>9,0</td>
</tr>
<tr>
<td><strong>Throughput (depending on material)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Throughput performance (m³/h):</td>
<td>up to 170</td>
<td>up to 120</td>
<td>up to 70</td>
</tr>
<tr>
<td><strong>Options</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conveyor extensions, magnet drum, scraper for round brush, central lubrication, hopper pre-screening, hopper sensor controller, remote control, hydraulic extendable engine, attachment shoe, adjustable belt speed and more</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
NEMUS

NEMUS SEMI-TRAILER

MAXX

PRIMUS

*Option extended discharge belt
TECHNOLOGY FOR A BETTER ENVIRONMENT