STATIONARY MACHINES
SHREDDING | SCREENING | SEPARATION
Komptech is a leading international technology supplier of machinery and systems for the mechanical and mechanical-biological treatment of solid waste and for the treatment of biomass as a renewable energy source.

The product range includes over 30 different types of machines, that cover all key process steps in modern waste handling - shredding, separation, and biological treatment.

By combining the right products from our own portfolio with proven components, we can deliver solutions to address complex challenges.

The focus is always on innovative technology and solutions that ensure the maximum customer benefit.
SHREDDING
TERMINATOR ............................................................................................... 10/11
Single-shaft shredder
CRAMBO ....................................................................................................... 12/13
Dual-shaft shredder

SCREENING
DRUM SCREENS ........................................................................................... 14/15
MULTISTAR .................................................................................................... 16/17
Star screens
FLOWERDISC ..................................................................................................... 18
Disc screen

SEPARATION
HURRIKAN ......................................................................................................... 19
Windsifter
STONEFEX ......................................................................................................... 20
Stone separator
HURRIFEX ......................................................................................................... 21
Stone and light material separator
BALLISTOR ..................................................................................................... 22/23
Ballistic separator
Electrically powered machines are ideal for large plants, stationary facilities and wherever mobility is not required. Komptech offers an extensive range of stationary electric-powered shredding, screening and separating machines.

Designed for continuous operation and precisely adapted to their task and site, these machines are often the key components in recycling systems and perform a wide range of functions. With the right combination of our own products and market-proven components from established manufacturers where needed, we provide efficient all-in solutions that can accomplish complex tasks, such as prepping material for anaerobic fermentation or refuse-derived fuel production.
THE COMPLETE PERFORMANCE CHAIN

Turnkey waste processing technology requires solid expertise and resources along the entire performance chain. Our capabilities extend from the initial idea to professional handling including installation to user training.

We are your expert contact for all areas of stationary systems, and everything from individual machines to entire processing lines.

SERVICES AT A GLANCE

- Initial ideas
- Flowcharts incl. material stream representation
- Assistance with permitting
- Engineering
- Definition of interfaces between all process steps

- In-house fabrication of key components
- Project leader as contact for the customer
- Complete installation with own construction supervision
- Commissioning
- Training of operating personnel
The reuse of materials and energy from waste is central to modern waste management. The foundation for it is laid by mechanical preparation in the form of waste splitting. In it, recyclables are recovered from the waste stream and high-yield combustibles are separated out for further processing as refuse-derived fuels (RDF).

The remaining residue fraction can be stabilized and then landfilled. The process technology developed by Komptech revolves around shredding, screening and separating. Low-speed shredders with adjustable degree of shredding generate a homogeneous material stream at the desired particle size. The machines can be driven by hydraulics or high-efficiency mechanical systems.

Following shredding a range of technologies can be deployed, depending on the specific material and conditions. These include all-purpose drum screens, ballistic separators with rotating screen elements to separate flat from three-dimensional fractions, or disc screens that work efficiently even with material that tends to wrap and tangle.

WASTE SPLITTING
MECHANICAL TREATMENT AS THE FOUNDATION FOR RECYCLING

- Municipal solid waste, residual waste, mixed waste
- Waste wood, bulky waste
- Commercial waste, production waste
- Special batches: Tires, tar paper etc.
**SCREENING:** Robust, reliable drum screens separate the shred into over- and undersize fractions.

Thanks to Komptech’s wide range of screens, there is a model for virtually any application. Star screens are used to clear contraries from organic waste.

**SHREDDING:** Shredding generates a defined grain for downstream separating steps. The Terminator is known for its wide range of uses and high resistance to contraries while the Crambo has two shredding drums for aggressive intake of bulky material.

**SEPARATING:** The Ballistor has proven its ability to separate out light, mostly high-calorific materials as well as heavy contraries. The new Hurrifex combines a stone separator and windsifter in a single machine. Compost and biomass fractions are cleaned from stones and light materials in one pass.

**SHOWCASE**

Processing plant for commercial waste

Commercial waste is shredded with a Terminator and then separated into over- and undersize fractions with a Flowerdisc. A Ballistor separates out the high-calorific fraction from the oversize fraction for RDF production. The undersize fraction goes to a star screen for separating. The oversize and screen fraction from the Ballistor constitute a medium-calorific fraction that can also be used for RDF.
Fermentation gives the maximum yield for fermentation.

For some types of organic waste, fermentation is the most suitable treatment method from an economical and ecological standpoint. The organics break down to give clean energy sources while the fermentation sludge is useful as compost and liquid fertilizer.

But packaging, contraries and inert materials get in the way, so organic waste require special processing before it can be fermented. With the proper machinery, organics, leftovers, severely contaminated market waste and expired foodstuffs in various degrees of packaging can be prepared for problem-free fermentation.

The substrate that results after the packaging and contraries are removed goes to wet fermentation in sealed reactors, where it is used to make biogas. This can be used in various ways depending on the site, from fuel for cogeneration plants to scrubbing and subsequent feed into natural gas grids.

Separately collected biodegradable household waste
Restaurant leftovers
Expired food from supermarkets and market waste
Food industry waste
**PROCESS**

**SHREDDING:** Shredding with Crambo eliminates oversizes and makes sure that packages are opened up. Organic materials are thus exposed and ready for the next step, pulping.

**PULPING:** The waste is homogenised with process water and further reduced in a pulper in batch operation. The high flow speed empties and cleans out packages. Heavy matter is separated out through a sluice.

**SCREENING/SEPARATING:** A downstream Multistar star screen dependably removes large contraries from the fermentation substrate. The substrate is then pumped through a grit separator into a storage tank for the fermenters, while the oversize fraction goes to a press.

**SHOWCASE**

*Prep line for organic waste and expired food*

A wheel loader loads waste into a Crambo, where it is shredded to under 125 mm before a screw conveyor moves it to a pulper. The pulper turns the material into a pumpable substrate for wet fermentation. Up to 90 percent of the input ends up in the substrate, which now has the properties needed for easy anaerobic fermentation.

All figures in percentage by weight.
TERMINATOR
SINGLE-SHAFT SHREDDER FOR PRE-SHREDDING

- Shredding of the most difficult materials
- Rugged design as pre-shredder provides high degree of shredding
- Variable particle size by adjusting cutting gap
- Direct-drive with 2-speed transmission (Terminator direct or hydraulic drive with constant power control)

**Materials**

- Household waste
- Bulky waste
- Commercial waste
- Waste wood
- Tires

1. Drum drive on both sides (S-types)
2. Extremely large feed area (3000 x 2000 mm)
3. Shredding drum with replaceable teeth
4. 2-speed-transmission with overload protection
5. Hydraulically adjustable counter comb
**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Terminator direct</th>
<th>1700</th>
<th>2200</th>
<th>3400</th>
<th>3400 S</th>
<th>5000 S</th>
<th>6000 S</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Drive</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power (kW)</td>
<td>1 x 75</td>
<td>1 x 132</td>
<td>1 x 160</td>
<td>2 x 75</td>
<td>2 x 110</td>
<td>2 x 160</td>
</tr>
<tr>
<td><strong>Shredding unit</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drum length (mm)</td>
<td></td>
<td></td>
<td>3000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drum diameter (mm)</td>
<td></td>
<td></td>
<td>1050</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drum rpm</td>
<td>14/10</td>
<td>17/13</td>
<td>19/14</td>
<td>14/10</td>
<td>20/14</td>
<td>28/20</td>
</tr>
<tr>
<td>Weight (t)</td>
<td>~ 13.6</td>
<td>~ 13.6</td>
<td>~ 14.0</td>
<td>~ 15.0</td>
<td>~ 15.3</td>
<td>~ 15.8</td>
</tr>
<tr>
<td>Throughput</td>
<td>up to 15</td>
<td>up to 20</td>
<td>up to 30</td>
<td>up to 35</td>
<td>up to 55</td>
<td>up to 75</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Terminator</th>
<th>2200</th>
<th>3400</th>
<th>3400 S</th>
<th>5000 S</th>
<th>5000 S</th>
<th>6000 S</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Drive</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power (kW)</td>
<td>1 x 132</td>
<td>1 x 160</td>
<td>1 x 160</td>
<td>1 x 200</td>
<td>1 x 200</td>
<td>2 x 160</td>
</tr>
<tr>
<td><strong>Shredding unit</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drum length (mm)</td>
<td>3000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drum diameter (mm)</td>
<td></td>
<td>1050</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drum rpm</td>
<td>max. 29</td>
<td>max. 29</td>
<td>max. 27</td>
<td>max. 29</td>
<td>max. 29</td>
<td>max. 38</td>
</tr>
<tr>
<td>Weight (t)</td>
<td>~ 15.1</td>
<td>~ 15.5</td>
<td>~ 16.5</td>
<td>~ 15.8</td>
<td>~ 16.8</td>
<td>~ 17.1</td>
</tr>
<tr>
<td>Assembled unit</td>
<td>~ 13.6</td>
<td>~ 13.6</td>
<td>~ 14.0</td>
<td>~ 15.0</td>
<td>~ 15.3</td>
<td>~ 15.8</td>
</tr>
<tr>
<td>Throughput</td>
<td>up to 30</td>
<td>up to 45</td>
<td>up to 50</td>
<td>up to 60</td>
<td>up to 80</td>
<td>up to 100</td>
</tr>
</tbody>
</table>

**MECHANICAL DRIVE:**
The cost-effective mechanical drive offers low energy costs due to high efficiency. The installation into the plant chain is simple: Set up - connect - power on. Further features are two speeds for adaption to material and automatic reverse control.

**SHREDDING:**
Applications of the drum/counter comb system range from coarse pre-crushing to defined shredding. The hydraulically adjustable cutting gap between the counter comb and the drum gives precise control of the output particle size for the next process step.

**HYDRAULIC DRIVE:**
Besides the standard stationary frame, separation of the drive unit from the shredding unit is provided as an option. The advantages: Better protection of drive unit (less dust, better cooling) and space-saving integration of the shredding unit into the process cycle.

**SHOWCASE**
Machine type: TM 5000 S
Application: Commercial waste
Throughput: 50 t/h

The highly variable content of commercial waste can require extreme shredding power – which is exactly what you get from the Terminator S version, with its dual drum drive. The hydraulic drive provides the highest shredding power and prevents jamming and blockages. Clearing by reversing is possible at all times.

**TECHNOLOGY FOR A BETTER ENVIRONMENT**
CRAMBO
DUAL-SHAFT SHREDDER FOR WOOD AND GREEN WASTE

- High throughputs with general-purpose use
- Aggressive feed with 2820 mm long, counter-rotating shredding drums
- Quick-change system for screen basket and tools – change particle size in minutes
- Direct drive with automatic 2-speed transmission (Crambo direct) or hydraulic drive with constant power control

01 Extremely large feed area (3000 x 2000 mm)
02 Shredding drums with aggressive cutting tools
03 Intelligent automatic transmission with 2 speeds
04 Drive container with service doors
05 Swivellable screen basket cartridge

MATERIALS
Waste wood  Green waste  Root stocks  Forestry waste
**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Drive</th>
<th>Shredding unit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power (kW):</strong></td>
<td><strong>Number of screws:</strong> 2 2 2 2 2 2</td>
</tr>
<tr>
<td>1 x 160 1 x 200 2 x 160 1 x 160 1 x 200</td>
<td>2 2 2 2 2 2</td>
</tr>
<tr>
<td>5200</td>
<td>6200</td>
</tr>
<tr>
<td>4200</td>
<td>5200</td>
</tr>
<tr>
<td>direct</td>
<td>direct</td>
</tr>
<tr>
<td><strong>Drum rpm:</strong></td>
<td>10/28 23/34 29/44</td>
</tr>
<tr>
<td>610</td>
<td>610</td>
</tr>
<tr>
<td><strong>Drum length (mm):</strong></td>
<td>2820</td>
</tr>
<tr>
<td><strong>Drum diameter (mm):</strong></td>
<td>610</td>
</tr>
<tr>
<td><strong>Cutting elements:</strong></td>
<td>134</td>
</tr>
<tr>
<td><strong>Weight (t):</strong></td>
<td>~ 16.0 ~ 16.8 ~ 17.1 ~ 17.7 ~ 18.0 ~ 18.2</td>
</tr>
<tr>
<td><strong>Assembled unit</strong></td>
<td>up to 45 up to 60 up to 100 up to 55 up to 80 up to 120</td>
</tr>
<tr>
<td><strong>Throughput (dependent on material):</strong></td>
<td>up to 45 up to 60 up to 100 up to 55 up to 80 up to 120</td>
</tr>
</tbody>
</table>

**SHREDDING:**
Low-speed drums with shredding teeth minimize fine particle and noise/dust emissions and resist contraries. The particle size is configurable by simply exchanging screen baskets.

**DRIVE SYSTEM:**
The drum drive offers a choice between highly efficient mechanical drum drive with automatic transmission (Crambo direct) or the familiar hydraulic drive with load-dependent speed regulation.

**OPTIONS:**
For the hydraulic version separation of the drive unit from the shredding unit is provided as an option. The advantages: Better protection of drive unit and space-saving integration into the process cycle.

**SHOWCASE**
Machine type: Crambo 5200 direct
Application: Green waste
Throughput: 60 t/h

In the generously dimensioned shredding area, two 2820 mm long counter-rotating drums provide active feed. The teeth seize the material and press it in a cutting/splitting action against the cutting edge and screen baskets located underneath. Slow turning (rotation speeds up to 34 rpm) results in a lumpy shred initially.
**DRUM SCREENS**

**TYPES:** 1845, 2055, 2255, 2278, 2290, 2560, 2590, 25120

- Designed for continuous use, trouble-free drum operation and reliable cleaning
- Variable configuration for perfect adaptation to application and site
- Options:
  - Screen segment drum for changing segments without removing the drum
  - Special drum with anti-dirt strips for screening residual waste
  - Three-fraction screening by using different screen drum hole sizes
  - Special carrier drum with interchangeable screen segments
  - Different screen segment materials for different applications

**01** Variable design of fundament and service platforms

**02** Robust tarpaulin cover for easy cleaning access

**03** Electric direct drive for highest efficiency

**04** Maintenance free supporting wheels and drive in one unit

**05** Reliable drum cleaning with brush or scraper

---

**MATERIALS**

- Compost
- Biomass
- Waste wood
- Waste
- Soil, Gravel, Sand
### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Drive</th>
<th>1845</th>
<th>2055</th>
<th>2255</th>
<th>2278</th>
<th>2290</th>
<th>2560</th>
<th>2590</th>
<th>25120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power (kW):</td>
<td>2 x 5.5</td>
<td>4 x 4.0</td>
<td>2 x 9.2</td>
<td>2 x 11</td>
<td>2 x 11</td>
<td>2 x 9.2</td>
<td>4 x 7.5</td>
<td>4 x 9.2</td>
</tr>
<tr>
<td>System:</td>
<td>electrically via direct drive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screening drum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diameter (mm):</td>
<td>1800</td>
<td>2000</td>
<td>2200</td>
<td>2200</td>
<td>2200</td>
<td>2500</td>
<td>2500</td>
<td>2500</td>
</tr>
<tr>
<td>Length (mm):</td>
<td>4500</td>
<td>5500</td>
<td>5500</td>
<td>7800</td>
<td>9000</td>
<td>6000</td>
<td>9000</td>
<td>12000</td>
</tr>
<tr>
<td>Effective screening area (m²):</td>
<td>22.5</td>
<td>30</td>
<td>32</td>
<td>48</td>
<td>56.5</td>
<td>39</td>
<td>62.5</td>
<td>86</td>
</tr>
<tr>
<td>Drum shell area (m²):</td>
<td>25.5</td>
<td>35</td>
<td>38</td>
<td>54</td>
<td>62</td>
<td>47</td>
<td>71</td>
<td>94</td>
</tr>
<tr>
<td>Dimensions (without walkways)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length (mm):</td>
<td>6250</td>
<td>7650</td>
<td>7500</td>
<td>9800</td>
<td>11100</td>
<td>8100</td>
<td>11100</td>
<td>14100</td>
</tr>
<tr>
<td>Width (mm):</td>
<td>2280</td>
<td>2480</td>
<td>3100</td>
<td>3100</td>
<td>3100</td>
<td>3400</td>
<td>3400</td>
<td>3400</td>
</tr>
<tr>
<td>Height (mm):</td>
<td>2980</td>
<td>2980</td>
<td>3600</td>
<td>3600</td>
<td>3600</td>
<td>4000</td>
<td>4000</td>
<td>4000</td>
</tr>
<tr>
<td>Throughput (dependent on material)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Throughput performance (m³/h):</td>
<td>up to 120</td>
<td>up to 160</td>
<td>up to 190</td>
<td>up to 250</td>
<td>up to 250</td>
<td>up to 225</td>
<td>up to 275</td>
<td>up to 300</td>
</tr>
</tbody>
</table>

### DRIVE:
The screen drum is driven by two to four direct drive units. Power is transferred directly to the supporting wheels via a pinion slip on gear mechanism and then on to the screen drum via traction. The positioning of the drive motors is freely selectable.

### SCREEN DRUM:
On stationary screen machines, drums up to 2.5 meters in diameter and up to 12 meters in length are used. A high throughput performance is guaranteed by feed screws welded on the inner side of the drum.

### MAINTENANCE:
A high degree of flexibility applies to the design of the gangways, steps etc. - everything can be tailored to customer requirements. Doors and a removeable tarpaulin cover allow comfortable access to the screen drum for cleaning.

### SHOWCASE
**Machine type:** SM 2278  
**Application:** Household waste  
**Throughput:** 160 m³/h

Ample space between screen drum and sidewalls also makes operation with large screen hole sizes go smoothly. For these hole sizes, 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.
MULTISTAR

STAR SCREEN

- Separation into two, three or four fractions, wind sifting, magnet-separation in one compact machine
- Patented Cleanstar®-cleaning system for high throughput and precise selectivity – even with moist materials
- Simple speed control at the screen deck to change particle size in seconds
- Flexibly tailored solutions for specialist customer applications

01 Coarse screen deck with robust rubber stars

02 Windsifters for medium and coarse fraction (option)

03 Fine screen deck with elastic stars and cleaning elements

04 Variable design of fundament and service platforms

05 Screen deck-drive via electric motors with frequency converter

MATERIALS

- Compost
- Biomass
- Bark, wood chips
- Waste wood
- Waste
### SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>MULTISTAR 2-SE</th>
<th>MULTISTAR 3-SE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Drive</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power (kW)</td>
<td>22 (Fine screen)</td>
<td>12 (Coarse screen)</td>
</tr>
<tr>
<td><strong>Screen unit</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length x width (mm) / area (m²)</td>
<td>5985 x 1200 / 7.2 (Fine screen)</td>
<td>or 5863 x 1200 / 7.0 (Fine screen)</td>
</tr>
<tr>
<td></td>
<td>and 5863 x 1200 / 7.0 (Coarse screen)</td>
<td>3998 x 1200 / 4.8 (Coarse screen)</td>
</tr>
<tr>
<td><strong>Feed hopper (Option)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hopper volume (m³)</td>
<td>-</td>
<td>20</td>
</tr>
<tr>
<td><strong>Screen sections</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fine (mm):</td>
<td>8 .... 20</td>
<td>8 .... 20</td>
</tr>
<tr>
<td></td>
<td>10 .... 25</td>
<td>Standard 10 .... 25</td>
</tr>
<tr>
<td>Coarse (mm):</td>
<td>30 .... 60</td>
<td>30 .... 60</td>
</tr>
<tr>
<td></td>
<td>60 .... 90</td>
<td>Standard 60 .... 90</td>
</tr>
<tr>
<td></td>
<td>90 .... 120</td>
<td>90 .... 120</td>
</tr>
<tr>
<td></td>
<td>120 .... 150</td>
<td>120 .... 150</td>
</tr>
<tr>
<td><strong>Throughput (dependent on material)</strong></td>
<td>up to 180</td>
<td>up to 250</td>
</tr>
<tr>
<td>Throughput performance (m³/h)</td>
<td>up to 180</td>
<td>up to 250</td>
</tr>
</tbody>
</table>

### DRIVE:

The core of the star screens consists of one or more screen decks, depending on the model. The electrical drive of the star shafts with electric motors and frequency converters gives quiet, efficient and economical operation.

### PARTICLE SIZE:

Particle size can be controlled by varying the rotation speed of the star shafts. In just seconds the particle size can be changed within the range provided by the star size. The different star dimensions and arrangements cover screening sections from 8-150 mm.

### CLEANING:

On the Multistar screeners, the screen units are kept continuously clean by carbide, ceramic or specially coated cleaning elements, as appropriate for the specific application. This keeps wear to a minimum, for economical operation.

### SHOWCASE

- **Machine type:** Multistar 3-SE
- **Application:** Woody biomass
- **Throughput:** 200 m³/h

The Multistar is fed with shredded biomass by an upstream hopper with a capacity of 20 cubic metres. The screen separates into three fractions: Fines for composting, a fuel fraction with defined particle size, and woody oversizes which go back for reshredding. Electronic conveyor scales give precise data on output, which allows remote access at any time.
FLOWERDISC

DISC SCREEN

- Designed for separation of oversized particles from commercial waste, bulky waste, household waste and fresh bio-waste
- High throughput, low energy expenditure
- Sturdy design allows smooth, low-wear operation
- Modular design for flexible configuration in stationary systems

The Flowerdisc represents a further technology for the screening of pre-shredded commercial, bulky and bio-waste, a technology which combines high throughput, selectivity and resistance to contamination. Material is transported by shafts with rugged steel discs working on the disc screen principle. Movable jacketed pipes positioned between the discs prevent seizures and blockages by contraries.

<table>
<thead>
<tr>
<th>FLOWERDISC</th>
<th>Screen drive via electric motors with frequency converter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive (standard design)</td>
<td>Screen deck with steel disc and movable jacketed pipes</td>
</tr>
<tr>
<td>Power (kW):</td>
<td>Service covers for access to the screen deck</td>
</tr>
<tr>
<td>11</td>
<td>03</td>
</tr>
<tr>
<td>Screen unit</td>
<td>Screen deck with steel disc and movable jacketed pipes</td>
</tr>
<tr>
<td>Length x width (mm):</td>
<td>Service covers for access to the screen deck</td>
</tr>
<tr>
<td>4560 or 6080 x 1200</td>
<td>04</td>
</tr>
<tr>
<td>Screen sections</td>
<td>Variable design of substructure</td>
</tr>
<tr>
<td>FD 80 (mm):</td>
<td>04</td>
</tr>
<tr>
<td>80 ... 100</td>
<td></td>
</tr>
<tr>
<td>Throughput (dependent on material)</td>
<td></td>
</tr>
<tr>
<td>Throughput performance (m³/h):</td>
<td></td>
</tr>
<tr>
<td>up to 100</td>
<td></td>
</tr>
</tbody>
</table>

MATERIALS

- Household waste
- Commercial waste
- Bio waste

SHOWCASE

Machine type: Flowerdisc
Application: Commercial waste
Throughput: 95 m³/h

The Flowerdisc separates shredded commercial waste into large and small grain. The screen cut and throughput can be changed by adjusting the shaft speed. The shafts have flower shaped steel discs (“Flowerdisc”) that provide efficient transport. Between them are large diameter steel bushings that prevent wraparounds.
**HURRIKAN WINDSFITER**

- More than 90 percent selectivity by precise adjustment of settings to material properties
- Powerful S-version with enlarged suction section (2 suction fans)
- Outstanding windsifting performance using pressure-suction in conjunction with vibration
- Simple integration into new or existing systems

The stationary Hurrikan windsifter-system allows effective cleaning of over-sized screened particles. The unit is extremely compact for a windsifter and can be integrated easily into a system chain. The patented „pressure-suction“ principle is used to separate plastic with a high degree of selectivity.

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**SHOWCASE**

Machine type: Hurrikan S
Application: Screening residues from compost
Throughput: 55 m³/h

If the oversized fraction after screening is going to compost, noncompostables like plastic film need to be removed.
In the first step, material is separated by a pressure fan. In the second step, the lightweight material is drawn off by a two powerful suction fans. The suction performance is adjustable by changing the fan speed, fan distance and vent flaps.
Dependable removal of more than 90 percent of stones and inert items from the input material (dependent on material)

Throughput up to 100 m³/h designed for a input particle size of 10–20–150 mm

Wide range of application with simple adaption of separation criteria

Low energy costs due to electrical drive of all components

The stone separator Stonefex removes reliably and very effectively stones and inert items from biomass fuels. A patented system of pressure and suction blowers generates exactly the right air flow in the expansion chamber to remove stones and heavy objects from wood. The outcome is a fuel nearly free of stones which can be sold at a higher price. Furthermore fractions that were previously unusable due to their high amount of stones can now be processed into fuel.

**SHOWCASE**

Maschine type: Stonefex
Application: Woody biomass
Throughput: 80 m³/h

The input material is loaded onto the intake conveyor. In the expansion chamber the material is separated into a stone fraction and a cleaned usable fraction, which conveyors take out to opposite sides. Fines and any light materials are collected in the container downstream of the suction fan. The separation precision can be regulated by changing the speed of the conveyor, the fan speed, and by an adjustable separating vertex inside the expansion chamber.

**STONEFEX Stone Separator**

- Drive
  - Power (kW): 26

- Material feeding - Feed conveyor
  - Filling width (mm): 1200

- Discharge - Stone and wood fraction
  - Design: One-piece corrugated belt conveyor
  - Discharge height (mm): 2500 (Option 3700)

- Dimensions (Working position)
  - L x W x H (mm): 6850 x 7500 x 3800
  - Weight (t): 6.2

- Throughput (dependent on material)
  - Throughput performance (m³/h): up to 100

**MATERIALS**

Biomass

Compost
The Hurrifex combines a stone separator and wind sifter in a single machine. This makes it possible to clean compost and biomass fractions of stones and light materials - primarily plastic film - in one pass. Easily adjustable separation parameters give the Hurrifex a wide range of applications, and a separation efficiency of more than 90 percent.

**MATERIALS**

- Compost
- Biomass

**SHOWCASE**

Machine type: Hurrifex
Application: Screening residues from compost
Throughput: 55 m³/h

Stone fraction discharge is by a conveyor with corrugated sidewalls, light items are moved into two containers by a flexible duct. The flow of the material to be cleaned is straight, with no 90° turns. This greatly reduces the danger of blockages. The suction and conveyor fans are optimized and have a low power requirement.
**BALLISTOR**

**BALLISTIC SEPARATOR**

- Wide range of applications – from municipal waste (household waste, commercial waste) to potential recyclables and building material waste
- High degree of selectivity with setting of separation limit
- Efficient drive design with low power requirement
- Rugged design with long service life and low operating costs

**MATERIALS**

- Commercial waste
- Household waste
- Bulky waste
SEPARATION PHYSICS:
The 2-dimensional fraction is transported upwards. The 3-dimensional fraction is moved downwards by the ballistic movement, and removed. Variable hole sizes of the screen elements further sort the rising material to separate out the fine fraction.

RELIABLE:
A drive system using an electric motor, crankshaft, and elastic connecting link provides long service life. Automatic lubrication options combined with electronic monitoring make the machine dependable even under heavy-duty operation.

LOW OPERATING COSTS:
The low power requirements of the simple yet efficient mechanism keep energy costs low, they are at 4-8 kW. Three screen element designs and a choice of different materials lets the operator select the best configuration for the task, to reduce the wear and maintenance costs.

SHOWCASE
Machine type: 6400
Application: Commercial waste
Throughput: 100 m³/h

The rigid screen elements are arranged lengthwise and facilitate excellent turning of the material and hence a high degree of sorting. The separation threshold between the light and heavy fraction can be tailored to the material on site by adjustment of the in-feed flap and the inclination.
TECHNOLOGY FOR A BETTER ENVIRONMENT