

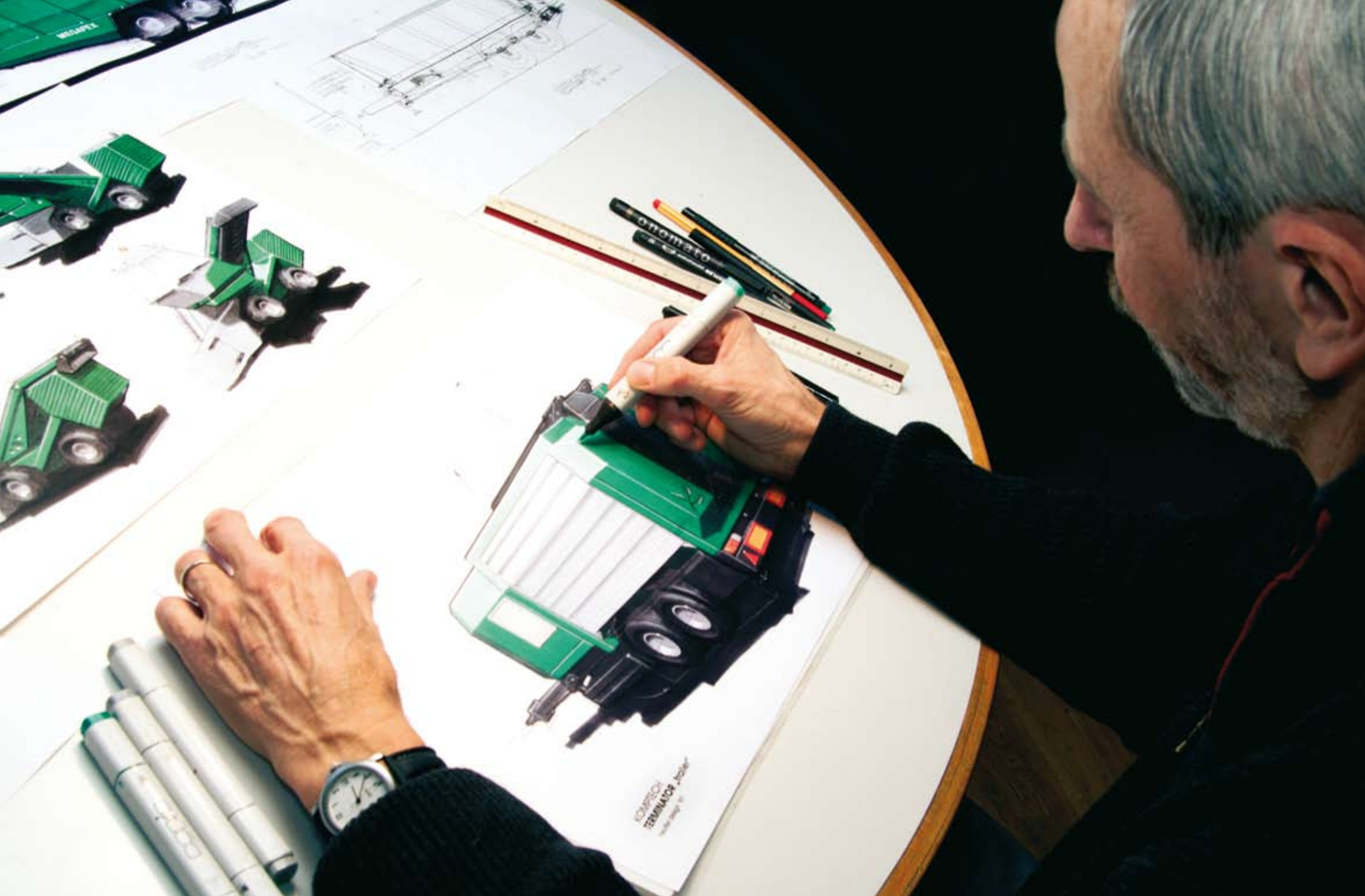


KOMPTECH[®]

Technology for a better environment

Stationary machines





LEWIS
TERMINATOR
1/18

TABLE OF CONTENTS

| | | | |
|------------|--------------------------|--------------------|---------|
| SHREDDING | Single-shaft shredder | TERMINATOR | 6 - 7 |
| | Single-shaft shredder | RASOR | 8 - 9 |
| | Dual-shaft shredder | CRAMBO | 10 - 11 |
| TREATMENT | Screw mixer | MASHMASTER | 12 - 13 |
| SCREENING | Drum screens | 1845 / 2055 | 14 - 15 |
| | | 2255 / 2278 / 2290 | 16 - 17 |
| | | 2590 / 25120 | 16 - 17 |
| | Star screens | MULTISTAR 2-SE | 18 - 19 |
| | | MULTISTAR 3-SE | 20 - 21 |
| | Disc separator | FLOWERDISC | 22 - 23 |
| SIFTING | Windsifter | HURRIKAN | 24 |
| SEPARATION | Solid / liquid-separator | MASHSEPARATOR | 25 |
| | Ballistic separator | BRINI MK | 26 - 27 |

KOMPTECH GMBH

Komptech is a leading international supplier of technology for machines and plants for the mechanical and biological treatment of solid wastes and biomass.

The Komptech product portfolio comprises more than 25 different types of machine, covering the key process stages in a variety of waste treatments – shredding, separation and biological treatment.

Self-contained all-in-one solutions for mastering complex challenges can be created by combining products from our own portfolio with proven components from reputable manufacturers where required.

With project offices in Germany and Austria, Komptech Anlagenbau GmbH assumes overall responsibility for worldwide project management.

Innovative technology and solutions that maximise customer benefit are always our focus.







KOMMA



TERMINATOR Single-shaft shredder - pre-shredding

SHREDDING

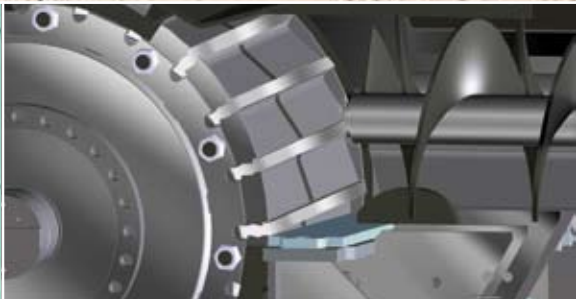
| Technical specifications | 500 | 2200 | 3400 | 3400S | 5000 | 5000S | 6000S |
|---|---|--|--|---|--|---|---|
| Motor Asynchronous motor Hydraulic rating: Mechanical rating: | - 1 x 37 kW | 1 x 132 kW - | 1 x 160 kW 1 x 160 kW | 1 x 160 kW 2 x 75 kW | 1 x 200 kW - | 1 x 200 kW 2 x 110 kW | 2 x 160 kW - |
| Weight (assembled unit) | ~ 11,8 t | ~ 18,4 t | ~ 18,8 t | ~ 19,8 t | ~ 19,8 t | ~ 20,8 t | plant specific (only separated unit possible) |
| Cutter / drum Length: Diameter: rpm-hydraulic system: rpm-mechanical system: | 3000 mm 1050 mm - max. 3 min ⁻¹ | 3000 mm 1050 mm max. 29 min ⁻¹ - | 3000 mm 1050 mm max. 29 min ⁻¹ max. 19 min ⁻¹ | 3000 mm 1050 mm max. 27 min ⁻¹ max. 14 min ⁻¹ Drum drive on pboth sides | 3000 mm 1050 mm max. 29 min ⁻¹ - | 3000 mm 1050 mm max. 29 min ⁻¹ max. 20 min ⁻¹ Drum drive on pboth sides | 3000 mm 1050 mm max. 38 min ⁻¹ max. 28 min ⁻¹ Drum drive on pboth sides |
| Throughput (dependent on material) | to 6 t/h | to 30 t/h | to 45 t/h | to 50 t/h | to 60 t/h | to 80 t/h | to 100 t/h |

The TERMINATOR is a slow-running single-shaft shredder for all types of waste. Robust teeth mounted on the shredding rotor and an opposing counter comb can produce a coarse pre-crushing to a defined shredding size.

The continuous cutting gap adjustment allows tailoring of the particle size produced to suit its subsequent use. A choice of drives is available – either a hydraulic system with optional disconnection from the shredding unit or a mechanical direct-drive with optimum degree of efficiency.

- shredding of the most difficult materials
- rugged design as pre-shredder provides high degree of shredding
- variable particle size by adjusting cutting gap
- hydraulic drive with constant power control and optional separated design or direct-drive with optimum degree of efficiency





| Technical specifications | 3600 | 5400 |
|--|--|---|
| Motor Asynchronous motor rating: | 1 x 160 kW | 1 x 250 kW |
| Material feed Type: Number of screws: | electric 2 x 7,5 kW 2 | electric 3 x 7,5 kW 3 |
| Cutter / rotor Length: Diameter: rpm: Cutter: Screen basket hole size: | 880 mm 1000 mm 93 min ⁻¹ 2 x 12 35, 60 mm | 1320 mm 1000 mm 93 min ⁻¹ 3 x 12 35, 60 mm |
| Weight | ~ 10000 kg | ~ 13000 kg |
| Dimensions Length: Width: Height: | 4250 mm 2050 mm 2620 mm | 4250 mm 2550 mm 2620 mm |
| Throughput (dependent on material) | to 10 t/h | to 15 t/h |

The RASOR is a post-shredder for the generation of refuse derived fuels from pre-treated waste fractions. The continuous material feed, using two or three feed screws, ensures uniform power consumption.

The material is shredded by slow-running cutters in the enclosed shredding unit in a practically dust-free process. The automatic cutting gap adjustment guarantees minimum energy expenditure during the shredding process. Minimal downtime is ensured by tool-free exchange of the counter-cutter, all wearing parts and screen baskets.

- Continual material feed with automatic cutting gap adjustment for uniformly low power consumption
- low rotor rotation speed ensures shredding with low levels of dust and vibration
- Swivelling counter-cutter carrier provides optimal service accessibility
- Exchange of wearing parts without the need for tools means minimal servicing times





| Technical specifications | 3400 | 5000 | 6000 |
|--|---|--|--|
| Motor Asynchronous motor rating: | 1 x 160 kW | 1 x 200 kW | 2 x 160 kW |
| Weight (assembled unit) | ~ 19,0 t | ~ 20,5 t | plant specific (only separated unit possible) |
| Shredding tools Number of screws: Length: Diameter: rpm: Cutting elements: Screen basket hole size (in mm): | 2 2820 mm 610 mm max. 30 min ⁻¹ 134 80,100, 125, 150, 180, 250, 300 | 2 2820 mm 610 mm max. 30 min ⁻¹ 134 80, 100, 125, 150, 180, 250, 300 | 2 2820 mm 610 mm max. 40 min ⁻¹ 134 80, 100, 125, 150, 180, 250, 300 |
| Throughput (dependent on material) | to 60 t/h | to 85 t/h | to 120 t/h |

The CRAMBO dual-shaft shredder shreds all types of wood and green waste to a fixed particle size. Slow speed, high torque rotors with shredding tools minimise the fine particle and noise/dust emissions and build up resistance to contaminants.

The particle size generated is adjustable by simply exchanging screen baskets. A hydraulic drive with load-dependent speed control ensures maximum utilisation of motor performance. Optional disconnection of the shredding unit from the drive simplifies integration into the system.

- high throughputs with general-purpose use
- aggressive feed with 2820 mm long, counter-rotating shredding drums
- variable particle size spectrum with less overlengths and low fine fraction
- quick-change system for screen basket and tools – screen basket change in minutes





Technical specifications

| | |
|---|---|
| Drive | 2 x 75 kW electric |
| Dimensions | |
| Length: | 6740 mm |
| Width: | 2200 mm (without conveyer belt), 6135 mm (with conveyer belt) |
| Height: | 3265 mm |
| Weight: | 13700 kg |
| Container capacity | 15 m ³ |
| Mixing unit | 4 screws / mechanical drive |
| Throughput (dependent on material) | to 55 m ³ /h |

Wet organic waste, woody structure material and various aggregates (residue waste and sewage sludge) are treated by the general-purpose MASHMASTER mixing shredder into an output mixture ideal for the rotting process.

Four electrically driven screw shafts keep the material in an intensive mixing motion. Rugged tools on the screws disentangle the material and provide shredding and homogenisation.

- Shredding-mixing-homogenisation in one machine
- accurate definition of the mixing ratio and automation with conveyer belt feed possible with electronic weighing
- prolonged service life by using wear-resistant tools and tray with exchangeable base





| Technical specifications | 1845 | 2055 |
|---|--------------------------|--------------------------|
| Drive | | |
| Power: | 15 kW | 18,5 kW |
| System: | electrical via DRUMGRIP | electrical via DRUMGRIP |
| Screening drum | | |
| Diameter (exterior): | 1800 mm | 2000 mm |
| Length (exterior): | 4500 mm | 5500 mm |
| Screening area: | 22,5 m ² | 30 m ² |
| Machine dimensions (without walkways) | | |
| Length x width x height: | 6600 x 2350 x 3250 mm | 7600 x 2700 x 3000 mm |
| Throughput (dependent on material) | to 120 m ³ /h | to 160 m ³ /h |

With stationary drum screens, a corresponding screening machine is available for every system size. Screens for the mid-performance range boast high operational safety with long servicing intervals.

A welded screw conveyor in the drum ensures reliable material transport. Drive is provided via the proven, patented DRUMGRIP system.

- designed for continual operation: optimal screen drum operating characteristics with reliable cleaning
- simple servicing with easy accessibility to all power units
- options:
 - screen segment drum with segment exchange without dismantling of the drum
 - special drum with anti-dirt strips for screening residual waste
 - three-fraction screening using different screen drum hole sizes





2255 / 2278 / 2290 / 2590 / 25120 Drum screen machines

SCREENING

| Technical specifications | 2255 | 2278 | 2290 | 2590 | 25120 |
|---|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Drive | | | | | |
| Power: | 2 x 9,2 kW | 2 x 11 kW | 2 x 11 kW | 4 x 7,5 kW | 4 x 9,2 kW |
| System: | Electrically via direct drive | Electrically via direct drive | Electrically via direct drive | Electrically via direct drive | Electrically via direct drive |
| Screening drum | | | | | |
| Diameter (exterior): | 2200 mm | 2200 mm | 2200 mm | 2500 mm | 2500 mm |
| Length (exterior): | 5500 mm | 7800 mm | 9000 mm | 9000 mm | 12000 mm |
| Screening area: | 32 m ² | 48 m ² | 56,5 m ² | 61,5 m ² | 85 m ² |
| Machine dimensions (without walkways) | | | | | |
| Length x width x height: | 7600 x 3000 x 3600 mm | 9900 x 3000 x 3600 mm | 11100 x 3000 x 3600 mm | 11100 x 3400 x 4000 mm | 14100 x 3400 x 4000 mm |
| Throughput (dependent on material) | to 170 m ³ /h | to 200 m ³ /h | to 210 m ³ /h | to 220 m ³ /h | to 230 m ³ /h |

Drum screen systems for higher performance requirements are built for endurance. Directly driven heavy-duty supporting wheels provide quiet drum operation and an optimum degree of efficiency with reduced energy consumption and noise emissions. Variable machine configuration in terms of sub-structure, servicing accessibility, enclosure and drive simplify tailoring to on-site conditions.

- maintenance-free direct drive minimises energy costs, wear and noise emissions
- variable machine configuration for perfect tailoring to deployment and locality
- options:
 - screen segment drum with segment change without dismantling the drum
 - special drum with anti-dirt strips for screening of residual waste
 - three-fraction screening by using different screen drum hole sizes
 - special carrier drum with exchangeable screening segments





MULTISTAR 2-SE Star screen machine

SCREENING

Technical specifications

| | | |
|--|-------------------------------------|------------------|
| Power input (dependent on configuration) | 4 - 16 kW | |
| Screen segments fine or coarse Length x width: | 2000 x 600 mm to 12000 x 1250 mm | |
| Feed hopper (option) | 4 ... 30 m³ | |
| Screen sections (standard) | Star type | Separation range |
| | 166/12 | 10...25 mm |
| | or 330/12 | 30...50 mm |
| | or 340/8 | 60...80 mm |
| | or 340/8 | 80...150 mm |
| | or according to customer preference | |
| Throughput (dependent on material) | to 400 m³/h | |

Star screen technology from Komptech is regarded as one of the most effective separation methods for organic waste. Precise separation selectivity irrespective of material moisture and adjustment of the particle size at the press of a button are particular features of the MULTISTAR star screen.

Its compact design makes the MULTISTAR 2-SE star screen system simple to integrate. Its modular design and options such as chassis type, feed metering container with feed and discharge belts, wind sifting, etc. ensure customer requirements can be met perfectly.

- high throughput with 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





Technical specifications

| | | |
|---|-------------------------------------|----------------------------------|
| Power input (dependent on configuration) | 12 - 32 kW | |
| Screen segments | | |
| Length x width: | Fine | 2000 x 600 mm to 12000 x 1250 mm |
| | Coarse | 2000 x 600 mm to 12000 x 1250 mm |
| Feed hopper (option) | 4 ... 30 m ³ | |
| Screen sections (standard) | Star type | Separation range |
| | 166/12 | 10...25 mm |
| | or 330/12 | 30...50 mm |
| | or 340/8 | 60...80 mm |
| | or 340/8 | 80...150 mm |
| | or according to customer preference | |
| Throughput (dependent on material) | to 400 m ³ /h | |

MULTISTAR star screens are not only amongst the most powerful screening machines, they are also unparalleled in operating efficiency. Compost, bark and biomass is separated extremely reliably and quietly. Stationary MULTISTAR star screen systems leave no customer requirement unaddressed.

With its modular design, the screen decks, feed metering container, wind sifter and stone/magnet separation are tailored perfectly to the job at hand, generating up to four fractions in one operation.

- separation into three or four fractions, wind sifting, metal separation in one compact machine
- 4 - 30 m³ hopper, wide discharge belts for convenient working
- high throughput with precise selectivity – even with moist materials
- simple speed control at the screen deck to change particle size in seconds





Technical specifications

Power input

(dependent on configuration)

4 - 16 kW

Screen segments

fine or coarse

Length x width:

3000 x 1000 mm
to 12000 x 1200 mm

Screen sections

(standard)

| Typ | Separation range |
|-----------|------------------|
| FD 40 | 30...50 mm |
| or FD 80 | 60...100 mm |
| or FD 150 | 120...250 mm |

Throughput

(dependent on material)

to 40 t/h

The FLOWERDISC from Komptech represents a new technology for the screening of pre-shredded commercial, bulky and bio-waste, a technology which combines effectively high throughput, selectivity and resistance to contraries.

Material is transported by shafts having rugged steel discs working according to the disc screen principle. Movable jacketed pipes positioned between the discs prevent blockages by contaminants.

- 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 tailoring in stationary systems





HURRIKAN

Windsifter

SIFTING

Technical specifications

Drive

Power input: 28 kW

Dimensions

Length x width x height: 7250 x 2000 x 4200 mm
Weight: 3500 kg

Feed

Width feed belt: to 1200 mm

Throughput (dependent on material)

to 40 m³/h

The stationary HURRIKAN high-performance windsifter allows effective cleaning of over-sized screened particles. The unit is extremely compact for a wind sifter and may be integrated easily into a system chain.

The patented “pressure-suction” principle is used to separate lightweight materials with a high degree of selectivity.

- optimal wind sifting using “pressure-suction” principle in conjunction with vibrating feeder
- at high throughput in excess up to more than 90% selectivity by precise adjustment of settings to material properties
- simple integration into new or existing systems



MASHSEPARATOR

Solid / liquid-separator

SEPARATION

Technical specifications

| | |
|--|---|
| Drive | 1 x 132 kW electric |
| Mixing unit Container capacity: Mixing equipment: | 15 m ³ 2 screws / hydrostatic drive |
| Press Number of press screws: Length of press screws: Compression ratio: | 1 (Simplex) or 2 (Duplex) 4300 mm to 1 : 7 |
| Throughput (dependent on material) | Simplex: 6-10 t/h Duplex: 12-20 t/h |

The MASHSEPARATOR can separate wet bio-waste into a solid fraction for composting and a liquid fraction for wet fermentation.

Two screw shafts in the mixing container keep the material in an intensive mixing motion. Crushing is performed by one press screw in the separator part on the simplex unit (there are two press screws on duplex unit). Other applications include drainage of organic material leachate during fermentation processes.

- Mixing and crushing in one machine
- different degrees of crushing attainable using various screen baskets
- prolonged service life by using wear-resistant tools and tray with exchangeable base
- corrosion-resistant steel used for all parts coming into contact with material (with exception of the press screw)



| Technical specifications | MK 41 | MK 61 | MK 81 | MK 101 | MK 121 |
|---|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Motor rating | 5,5 kW | 5,5 kW | 2 x 5,5 kW | 2 x 5,5 kW | 2 x 5,5 kW |
| Machine dimensions | | | | | |
| Length 3 fraction machine: | 7475 mm | 7475 mm | 7475 mm | 7475 mm | 7475 mm |
| Length 4 fraction machine: | 8675 mm | 8675 mm | 8675 mm | 8675 mm | 8675 mm |
| Width 3 and 4 fraction machine: | 2400 mm | 3240 mm | 4480 mm | 5366 mm | 6220 mm |
| Height: (machine only) | 1930 mm | 1930 mm | 1930 mm | 2010 mm | 2010 mm |
| Weight 3 fractions machine: | 4200 kg | 5000 kg | 6000 kg | 6800 kg | 7900 kg |
| Weight 4 fraction machines: | 4700 kg | 5600 kg | 6700 kg | 7500 kg | 8700 kg |
| Screen | | | | | |
| Screen elements: | 4 | 6 | 8 | 10 | 12 |
| Screen elements L x W 3 fraction machine: | 5600 x 422 mm | 5600 x 422 mm | 5600 x 422 mm | 5600 x 422 mm | 5600 x 422 mm |
| Screen elements L x W 4 fraction machine: | 6800 x 422 mm | 6800 x 422 mm | 6800 x 422 mm | 6800 x 422 mm | 6800 x 422 mm |
| Screening area 3 fraction machine: | 9,7 m ² | 14,5 m ² | 19,2 m ² | 24,0 m ² | 28,8 m ² |
| Screening area 4 fraction machine: | 11,8 m ² | 17,6 m ² | 23,4 m ² | 29,2 m ² | 35,0 m ² |
| Throughput (dependent on material) | to 80 m ³ /h | to 120 m ³ /h | to 160 m ³ /h | to 200 m ³ /h | to 240 m ³ /h |

BRINI separators are used to separate out usable fractions from waste and potential recyclables. By combining ballistic separation with screening, separation is performed in one operation to give two- or three-dimensional, rolling, cubic, rigid or flat, soft and narrow, or undersized/oversized particles.

With a choice of separation into three or four fractions and light, standard and heavy-duty designs in five sizes, the BRINI separator can be tailored perfectly to the application.

- wide range of applications – from municipal waste (household waste, commercial waste) up to potential recyclables and building material waste
- high degree of selectivity with setting of separation limit
- proven, efficient drive design with low power requirement
- rugged design with high service life and low operating costs



Technology for a better environment

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