



EMERALD

ORGANIC SYSTEMS



CRUSHING ■ SCREENING ■ MATERIAL HANDLING ■ WASHING ■ WATER TREATMENT ■ ORGANICS

ORGANIC AND WASTE RECYCLING

CBI is an industry leader in the design and manufacture of wood processing, biomass and recycling equipment. The range of innovative machines are manufactured to provide efficient production, low operational costs and ease of maintenance.

UPSWING GRINDER

Rotor spins in an upward direction which allows the materials to be pulled over and across maximizing the exposure to the screens.

Grinding material across a larger surface area allows increased production.



CBI 6800 BT



CBI 6800BT Upswing	
Drum Size	40" x 60"
Powerunit	1050hp/1200hp

CBI 5800 BT



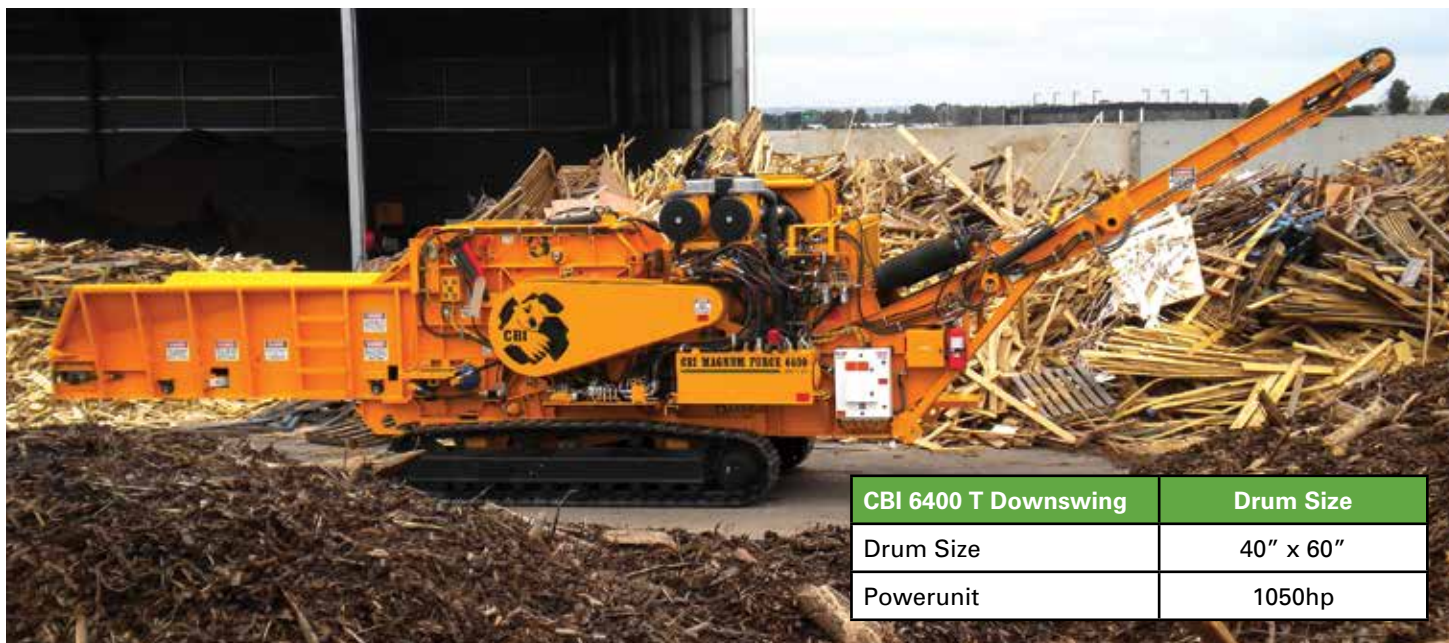
CBI 5800BT Upswing	
Drum Size	40" x 48"
Powerunit	765hp

DOWNSWING GRINDER

Rotor spins in a downward direction pulling the materials down and through the screens.

More forgiving to contaminants.

CBI 6400 T



CBI 6400 T Downswing	Drum Size
Drum Size	40" x 60"
Powerunit	1050hp

CBI 5400 T



CBI 5400 T Downswing	Drum Size
Drum Size	40" x 48"
Powerunit	765hp

CHIPMAX WHOLE TREE CHIPPER

Available as track or wheel portable, the CBI 484 is used to chip whole trees in land clearing, biomass fuel & wood chip industries.

ChipMax 484 BT

Rotor Options:

- High-quality fuel chips custom sized from ½"–1"
- Micro-chips from 0"–½" from logs up to 24" diameter
- 2 pocket or 4 pocket rotors



ChipMax 484 BT	
Infeed (wxh)	48" x 52"
Drum Rotor (dxw)	40" x 48"
Knives (lxw)	24" x 7 3/4"
Pockets	Staggered
Engine	CAT C18-765hp

ChipMax 484 BP



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Drum Rotor (dxw)	40" x 48"
Knives (lxw)	24" x 7 3/4"
Pockets	Staggered
Engine	CAT C18-765hp

Neustarr provide a compact range of material handling and processing equipment available as wheel or track machines.

3000 Series Compact Trommel

3000 series is ideal for contractors and landscapers who process material within a small footprint.

- Compact design allows ease of movement from site to site
- Screen drum is wheel drive which negates friction losses and aids removal.
- Conveyors and screen drum are variable speed.
- Optional oversize conveyors.



T3000 /W3000 Series Compact Trommel	
Screen Drum Size	13'x5'
Drum Speed	Variable
Engine	CAT C2.2 60hp

T3000 Trommel



T3000 Trommel	
Discharge Height conveyors	6' 11"
Weight w/o oversize conv	18,700 lbs
Weight oversize conv fitted	20,900 lbs

W3000 Trommel



W3000 Trommel	
Discharge Height conveyors	6"11
Weight w/o oversize conv	13,200 lbs
Weight oversize conv fitted	15,400 lbs

ORGANIC AND WASTE RECYCLING

Powerscreen trommels are manufactured to provide efficient production, low operational costs and ease of maintenance.

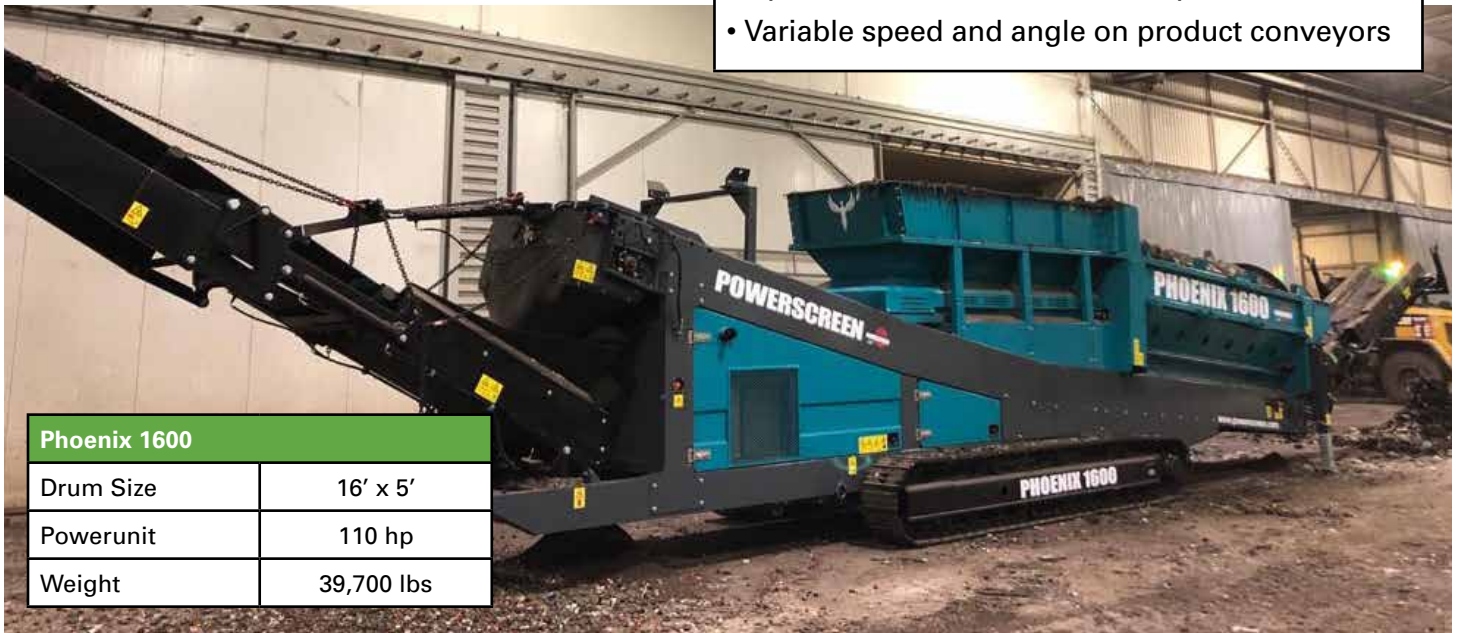
TROMMELS

Utilized in organic and recycling applications for effective separation of wet and dirty materials.

Phoenix 1600

Features

- 4 wheel friction drive drum
- Variable speed & angle
- Quick change design
- Hydraulic swivel on fines conveyor
- Variable speed and angle on product conveyors



Phoenix 1600

Drum Size	16' x 5'
Powerunit	110 hp
Weight	39,700 lbs



Phoenix 2100



Phoenix 2100	
Drum Size	6' 4" x 21' 2"
Powerunit	175 hp
Weight	60,500 lbs

Phoenix 3300



Phoenix 3300	
Drum Size	7' 7" x 30' 7"
Powerunit	175 hp
Weight	82,670 lbs

ORGANIC PROCESSING

STARSCREENS

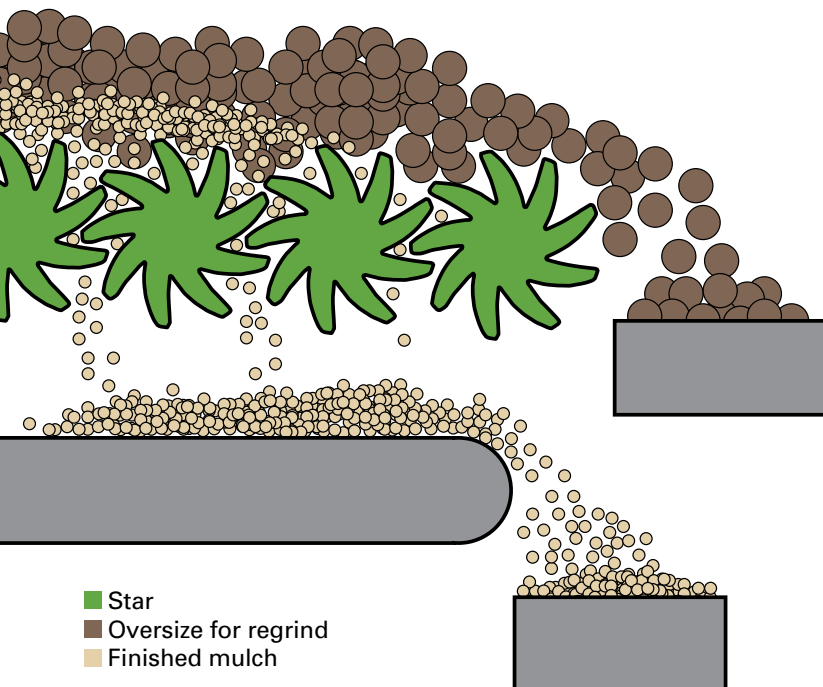
Star Screens can separate fines at high tonnages and boasts quick change deck configurations for ease of application transition. The unique screen configurations are both self cleaning and self blinding which aids uptime. Deck speed adjustable on all decks, allowing a variation in the final product size.

How does a StarScreen Work?

Stars are mounted on multiple parallel shafts to form a star bed. As the shafts rotate and the material is agitated, the finer particles drop down between the stars and the larger material travels across the top.

2 Fraction or 3 Fraction

- 2F & 3F StarScreen can be fed directly from a grinder
- 2 Fraction can produce a finished mulch and oversized material. This is ideal for limiting the amount of regrind materials
- 3 Fraction produces a finished mulch product (mid size), oversize for re-grinding and fines for compost. It reduces transport, dye and grinding costs.



3 IN 1 SAVINGS BY UTILIZING STARSCREEN

- Reduce grinding costs
- Reduced drying costs
- Reduced trucking costs



STAR DECK

- Space between the stars determines the range of particle sizes.
- The speed of the stars rotating on the shaft creates the actual particle size.
- The slower the shafts rotate allows more time and opportunity for the material to fall through the gap between the stars.
- The faster the stars rotate, the faster the material moves across the top of the stars. This allows only the finest particles to fall through the stars.
- Self cleaning stars provide similar product in dirtier material.

A single star deck can produce multiple sized products.

Optimized Screening after Grinding with a StarScreen

The most efficient way to screen mulch is with a StarScreen.



Screen directly after the primary grinder to screen out finished mulch.
 Typically 50% of material after the primary grinder is "finished" product.

COST SAVINGS

CURRENT SETUP		WITH STARSSCREEN
1,250	Hours to regrind	625
\$100,000	Grinder fuel costs (20gph x 4)	\$50,000
\$25,000	Grinder maintenance costs (\$20/hr)	\$12,500
\$125,000	Loader to feed grinder (\$100/hr)	\$62,500
\$250,000	Total cost to do regrind	\$125,000

250,000yards / year operation grinding 200 yards per hour on secondary grind.

ANNUAL COST SAVINGS ADDING 2F STARSSCREEN \$125,000



**SCREEN FINISHED
MULCH TO
REMOVE FINES!**

Two major costs savings by screening fines at 3/8" minus form finished mulch

Average dying cost per yard with fines: \$4
 Average dying costs with fines screened out: \$3
 Cost saving per Yard: \$1

ANNUAL POTENTIAL SAVINGS \$250,000

Reduced Weight for Transport

Unscreened mulch typically weighs: 800-900lbs / cubic yard
 Mulch screened at 3/8" weighs: 400-500lbs / cubic yard

Transport costs reduced 25% (depending on state transport laws)

ORGANIC PROCESSING

STARSCREENS

Star Screens can separate fines at high tonnages and boasts quick change deck configurations for ease of application transition. The unique screen configurations are both self cleaning and self blinding which aids uptime. Deck speed adjustable on all decks allowing variation in product size. Available in both Track or Wheel options.

2 FRACTIONS

Processes primary grind materials to produce a finished mulch and regrind material (oversize).

2F Starscreen	
Screen	22' 6" x 4' 1"
Powerunit	130 hp



3 FRACTION

Processes primary ground material to produce a finished mulch, oversize for regrind and a fines product

3F Starscreen	
Fines Deck	22' 6" x 4' 1"
Midsize Deck	21' x 4' 1"
Powerunit	173hp



ORGANIC PROCESSING

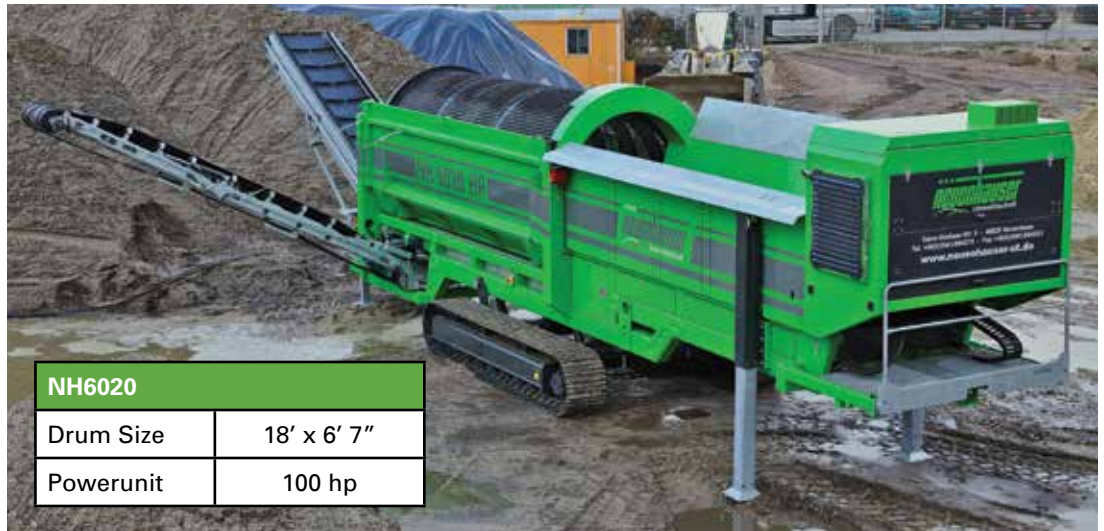
Neuenhauser offers a full range of track and wheel portable Trommel, Star, Flip Flow screens and Shredders for the Organics market yielding high tonnages at reduced costs.

NH6020 TROMMEL

European style drum reduces spearing, producing a higher quality end product.

Features:

- Starscreen inserts
- Track or Wheel
- Punch plate spiral drum
- Quick change drums
- Interchangeable style



NH6020	
Drum Size	18' x 6' 7"
Powerunit	100 hp



Star Deck Insert



Ease of Access to Drum

TARGO 3000 SHREDDER

Single shaft shredder designed to minimize and reduce waste in multiple applications such as MSW and organics.

The Direct drive reversible shaft maintains constant torque under pressure; Counter comb is equipped with hydraulic overload protection ensuring constant shredding in toughest of applications.



MATERIAL HANDLING

Portable bulk handling equipment such as telescopic track conveyors, hopper feeders and truck unloaders offer the the user multiple solutions

TC TRACK CONVEYOR



Model	Length x Belt Width
TC4262	62' x 42"
TC421	72' x 40"
TC624	80' x 40"
TC424X	80' x 42"
TCL100	100' x 36"

TC TRACK RADIAL

Model	Length x Belt Width
TC421R	72' x 40"
TC624R	80' x 40"
TC424R	80' x 42"



HOPPER FEEDERS

Features:

- Up to 1000tph
- Direct feed from loader / grab crane / excavator
- DDVG optional
- Optional 360° turntable



Model	Length x Belt Width
HF 518	62' x 42"
HF 520	66' x 42"
HF 521	70' x 42"
LF 520	66' x 42"
LF 823	75' x 42"

MH5680 MULCH HOPPER

Features:

- Up to 500tph
- Regulating Auger
- Direct feed from loader/ grab crane / excavator
- Variable angle
- Optional 360 degree rotation



Model	Length x Belt Width
MH 5680	75'x48"
Feeder	56"

MATERIAL HANDLING

Masaba provides a complete line of bulk handling and processing equipment such as HD telescopic radial conveyors, Truck Unloaders, Feed Hoppers and Surge Bins.

MATERIAL PROCESSING EQUIPMENT

Telescopic radial conveyors available 130' to 190' length



HOPPER FEEDER TELESCOPIC CONVEYORS

- Direct feed from loader / multiple grinders
- 20' hoppers
- Conical stockpile: 100,000yds cap.
- Radial available



TELESCOPIC CONVEYORS

HD radial telescopic systems which can be utilized in a range of applications such as organics, quarry and the port loading industry.

The PLC enables consistent fill patterns utilizing all available space.

Options include Genset.



	140'		150'		170'		190'
Width	36"	42"	36"	42"	36"	42"	36"
Discharge height	60' 9"	60" 9"	69' 4"	69' 4"	61"	61"	66' 3"
Capacity stph	1000	1500	1000	1500	1000	1500	1000

* With optional high-lift

AFTERMARKET SUPPORT

SPARE PARTS

Emerald® design, fabricate and supply a complete range of genuine spare parts that are competitively priced and of the highest quality to ensure maximum productivity of equipment. The knowledgeable product specialists help ensure you receive exactly what you need to get your equipment back on the job quickly and cost effectively.

The **ToughMAX** belting brand promotes longevity with less downtime whilst the custom screen cloths ensures a cleaner product even in the stickiest of applications

With over \$10m of spare parts inventory and dedicated Parts Specialists, Emerald can offer significant savings to the customer and customized aftermarket plans to minimize downtime.

Emerald's expansion now includes a 40,000ft² operations facility in PA, to complement their 75'000ft² head office in NY. The central position of both facilities enables enhanced service and after market support capabilities within the Northeast corridor.



EES® supply customized screens and belting manufactured inhouse



SERVICE & TECHNICAL SUPPORT

The Aftermarket specialist engineers are committed to supporting every aspect of the operation, from commissioning and servicing equipment to helping you improve productivity and lower operating costs throughout the working life of your machine.

Fully equipped service trucks allow the factory trained service technicians to be on your site quickly to keep your operations running smoothly whilst offering the best solution to maintain excellent up time of your machine.

The addition of a spray booth with sand blasting facility, fabrication workshop and an upgraded 10 bay shop allows multiple operations to run concurrently ensuring expedited service.



Our Service Department offers industry leading product knowledge and expert troubleshooting advice.

With a "one call" approach, service scheduling is made easy for whatever your situation requires.

Our in-house billing and warranty departments are ready at any time to assist our customers.





Page 5



Page 6



Page 8



Page 14



Page 13



EMERALD

ORGANIC SYSTEMS

NEW FOR 2021

INTRODUCING POWERSCREEN PHOENIX 1600 WHEEL & TRACK TROMMEL



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