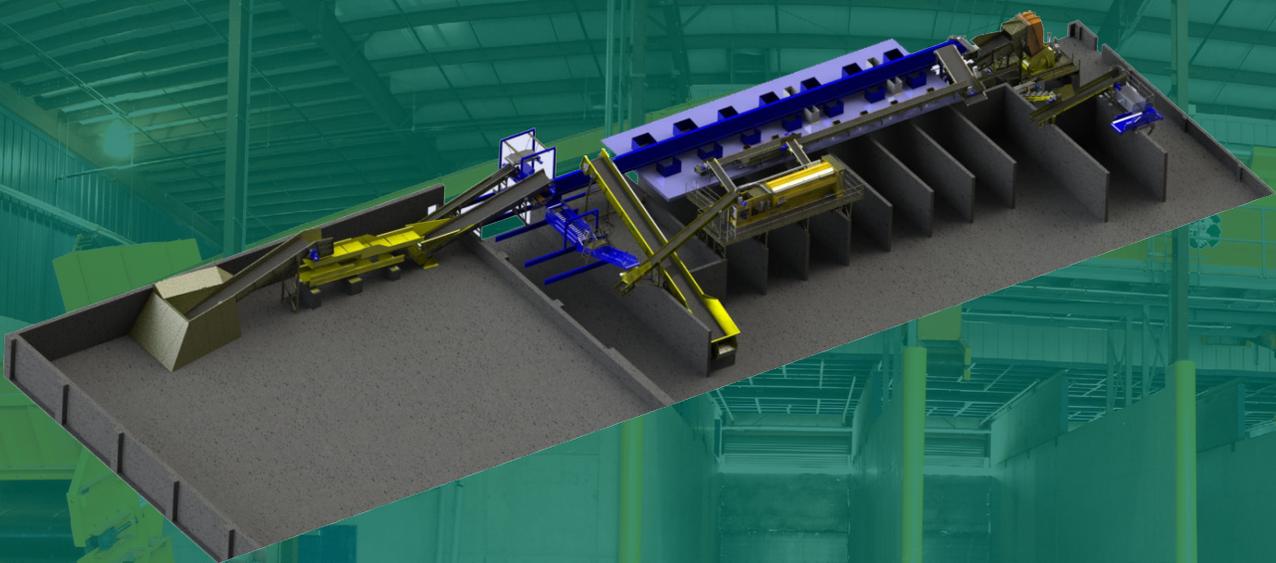




A TEREX BRAND

# CBI Stationary Systems Built to Fuel the Future



GRINDING • SHREDDING • CHIPPING • SCREENING • SORTING

# OUR BIOMASS BACKBONE

# CBI GRIZZLY MILL

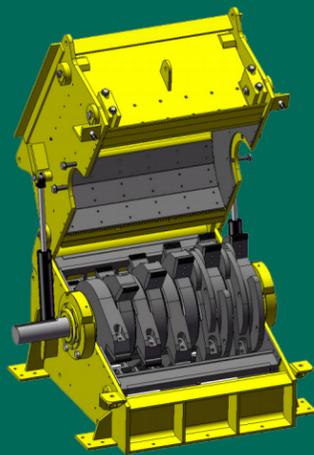


Recognized worldwide as the toughest and most productive wood grinder ever built, the CBI Grizzly Mill is backbone of our biomass recovery systems. With multiple rotor types and sizes available, it can be configured specifically as a primary, secondary or tertiary grinder for waste wood applications. The Grizzly Mill is capable of grinding waste wood material such as stumps, logs, demolition debris, MSW, telephone poles, railroad ties, stringy bark, yard waste and more. End product ranges from 15mm - 500mm.

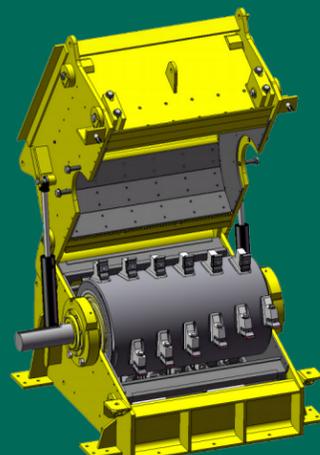
The heavy duty shear pin protected anvil is a 6" - 7.5" thick solid steel plate covering the full width of the housing. A high wear-resistant liner covers the complete face of the anvil and is replaceable. It is also equipped with adjustable blocks to support the shear pins, which allow the anvil/rotor clearance to be adjusted and shear pins to be easily replaced. Engineered for superior strength and the industries longest life, the grate is made of 1" - 2" thick (depending on size and application) 450-500 BHN abrasive resistant alloy with a 180 degree cutting surface. Optional hole patterns are available for different applications and end-product requirements. Grates are protected by four shear pins.

The superior design of our solid steel rotors (available with optional brute package) allows it to turn at half the speed of a conventional hammer-mill's rotor, saving up to 90 percent of maintenance costs. The rotational speed is fast enough to make a highly uniform end product but slow enough to make the Grizzly Mill extremely tolerant to rock and metal contamination. All rotors are locked to the high strength alloy shaft by two B-Loc locking assemblies.

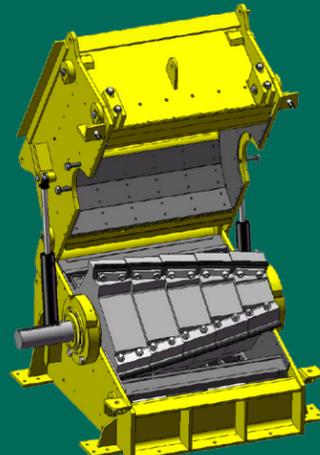
## - MODEL TYPES -



6" SEGMENTED ROTOR PACKAGE



DRUM ROTOR (C-MODEL)



12" SEGMENTED ROTOR

## GRINDERS



MAGNUM FORCE 8600

A 50" diameter, 4" thick high-strength forged steel rotor with bolt-on hammers and tips; designed for yard waste, stumps and logs. The rotor has 24 machine pockets to accept CBI's patented 5-bolt hammer and tip combination.



REGRIND PRO XL 406

Designed to regrind a wide variety of material to a small uniform end product. It can also be configured as an asphalt shingle grinder (CBI Shingle Pro XL 406) for recycling asphalt shingle material.

## GRINDERS/CHIPPERS



TBG 635 (CBI MAGNUM FORCE 5400B)

Can be configured as either a grinding or chipping unit with multiple rotor options available. Produce chips 2-30mm in fiber length one day, grind contaminated railroad ties the next. CAT C-18, 765 HP electric engine.



TBG 660 (CBI MAGNUM FORCE 6400)

Can be configured as either a grinding or chipping unit with multiple rotor options available. Produce chips 2-30mm in fiber length one day, grind contaminated railroad ties the next. CAT C-27, 1050 HP electric engine.



MAGNUM FORCE 8400

The ultimate processor of railroad ties, telephone poles, C&D waste, stumps and logs at a throughput rate of up to 200 tons/hr. Its high-strength forged drum rotor is 50" in diameter and includes weld-on hammers and tips.

## SCREENING/SORTING SYSTEMS



AIRMAX

The CBI AirMax material separator serves as an efficient alternative to air knife separators. It is designed primarily for separating C&D material. It requires minimal power as it is powered by four motors that total 32 HP.



TROMMEL SCREEN

Utilized for the removal of fines from bulky or preclassified materials. Its rotating drum passes larger pieces over to allow all fines to flow down and through the trommel screen plates.



TAPER SLOT SCREEN

Designed to separate material in the most challenging of applications that conventional screens cannot process. This system is provided in custom sizes with multiple options currently available.

## FLAILS/CHIPPERS



STATIONARY FLAIL (pictured with CBI 8400 Grinder)

Optimum debarking action and production level while reducing fiber loss and chain wear. Long and deep chain curtain prevents bark and branches from "surfing" and discharging with the debarked logs. Built to be the industry's most rugged and productive delimeter/debarker, a beneficial product for pulp and paper industry.

# CBI STATIONARY SOLUTIONS

CBI stationary systems are available in all shapes and sizes -- for both indoor and outdoor applications. Saw or paper mills in need of a stand-alone CBI Grizzly Mill or complete C&D multi-dimensional system facilities that incorporate various combinations of our equipment are guaranteed to produce a specific product size to keep up with market demands. CBI slow speed shredders, chippers, flails, screeners, conveyors, picking stations, water tanks and secondary and tertiary grinders are designed to give the end user a consistent end product no matter the size or application.

We utilize only the highest quality components from manufacturers such as Caterpillar, Hägglunds, Rexroth and Brevini. These sub assemblies come together to last tens of thousands of hours in the most extreme environments to limit downtime and meet production standards. When our philosophy of More Value By Design is paired with the latest in proprietary technology that is constantly updated and improved by our world-class engineering team, your results are guaranteed.

↓ **Below: Ties<sup>2</sup> of Superior, WI grinds 600-800 tons of railroad ties daily**

# POWER TO UNDERSTAND



ENGINEERING



PARTS



SERVICE

CBI is the only supplier in the industry that handles every aspect of configuring building, installing and supporting a complete materials processing system. The process always starts with gaining a complete understanding of work requirements. No two projects are alike, which enables our engineers to meet with every stakeholder involved in the project to analyze variables such as:

- Incoming material composition and quantity*
- Required end-product parameters*
- Infrastructure (building size and configuration, available space, power requirements)*
- Operating environment (dust, noise and odor control)*
- Truck flow*
- Material flow*
- Neighborhood issues*
- Future growth needs*



*"CBI is built to do the job because it makes the heaviest built grinder that can handle the abuse that railroad ties give it. This system holds up well to the operations that we put it through."*  
 - Ties 2 Operations Manager Chris Weides



Action Taper Slot® Vibratory Screen



CBI Grizzly Mill Primary Grinder



Sorted Metal from Magnetic Pulley



Ground End Product

# CUSTOMER CASE STUDIES



**Location:** Superior, Wisconsin **Installed:** Winter 2016



CBI designed and installed an electric stationary system that is customized to grind 600 - 800 tons of railroad ties on a daily basis. The challenge was to create an electric system that could withstand the tough and gnarly material that hard-wood railroad ties often present while producing high amounts of consistent end product. Much of the system's success can be attributed to the CBI Grizzly Mill Primary Grinder. This unit features a 60" x 60" solid steel rotor that is the largest rotor design ever manufactured by CBI. Before the ties are initially ground, they are loaded onto an Action TaperSlot® Vibratory Screen to remove dirt and debris. Following the primary grind, the ground ties pass through a magnet tower to ensure all existing metal is removed before moving onto the CBI Prescreener. Any material that the screener identifies as oversized is then passed through a CBI Grizzly Mill Secondary Grinder (48" x 72" rotor) while material that is not oversized is discharged into a top load trailer. Material that passes through the secondary grinder is discharged into a second top load trailer as well.



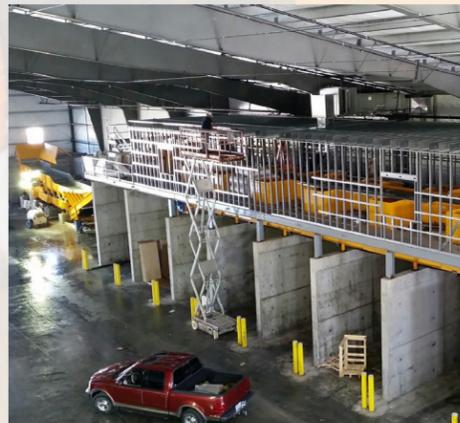
**Location:** North Andover, Massachusetts **Installed:** Spring 2008



TBI was established in 1994 as a hauling business. Eventually, the Thomson's decided to build a recycling facility to help the environment. After 10 long years of fighting permits, they were able to start looking at equipment. Bill Thomson, Jr. traveled all over the United States to do research on which vendor's equipment and design capabilities would best fit TBI's needs. Once CBI was chosen, they went to work on designing a state-of-the-art facility to meet current markets and yet be flexible enough to change with market trends. The design of this system has a little bit of everything. Primary shredder, Primary Screen for 10" material, an Action Vibra-Snap® screen for 1/2" minus material, and an Air Separator to pull out 3 products -- heavies, middles and super lights. The sorted wood goes directly to the grinder to be processed into boiler fuel and is stock piled in large self-leveling storage bins. This system has been running since November 2008.



**Location:** St. Charles, Missouri **Installed:** Spring 2015



Loads consisting of wood, concrete, drywall, plastic, metal, cardboard, aggregates and other recyclable materials are processed through this stationary processing system designed and manufactured by CBI. As the windows of other landfills are beginning to close within the St. Louis Metropolitan area, LEDR Recycling operates 8-10 hours a day, 5-6 days a week. Its stationary system produces over 50 tons per hour of throughput. Instead of waiting upwards of nearly an hour between loads, trucks can now resort to LEDR Recycling's 3-acre concrete plot to drop off waste materials without any wait. CBI's stationary processing system is joined by a customized CBI Magnum Force 5400 Stationary Grinder. The system features an Action Taper-Slot® Screener, fines conveyor, fines magnet, incline conveyor, mezzanine, picking conveyor and in-line electromagnet. The fines magnet picks up any steel in the two inch fines cut while anything over two inches in size continues down the conveyor to those picking the debris by hand. The in-line electromagnet gets any steel missed by the pickers.



**Location:** Richmond, Virginia **Installed:** Spring 2008



S.B. Cox started out in 1963 as a demolition contractor and now has two landfills in the Richmond, Virginia area servicing the Demolition Division and the Ready Mix Division. They have opened the doors to their second C&D recycling system in Virginia. The first system was designed by CBI with simplicity in mind. The Primary Screen is a large heavy-duty C&D Trommel with a hexagon shape for easy screen changes and durability. The overs are then conveyed to the picking room for easy recovery of the recyclables. The picked wood is conveyed to a stock pile and a wood grinder has since been installed at that end. It is a fairly straight forward layout, but one that meets their recycling needs and reduces the amount of material going into the landfills.



**Location:** Canadian Province of Ontario **Installed:** Winter 2015



Rentech, a major processor of natural resources including wood chips, wood pellets and natural gas, utilizes CBI equipment for its two Canadian biomass plants in Wawa and Atikokan (both locations are within the Ontario province). Rentech now continues its pellet processing and sustainable practices at an efficient rate of 120+ tons/hr. CBI came up with a debarking line consisting of a feed conveyor, 2-roll flail debarker and a 1200 HP CBI Magnum Force 8400 Stationary Chipper that features a 5-pocket microchip rotor. Each system has production capabilities of up to 120 tons per hour. Two CBI flail/microchipping systems were installed at Rentech's Wawa facility and a singular CBI flail/microchipping line was installed at Rentech's Atikokan facility. At Atikokan, CBI also delivered a CBI Grizzly Mill to grind the bark into the proper size for boiler fuel. These CBI microchip systems eliminate the hammermilling of wet product prior to entering the dryer.



**Location:** Taunton, Massachusetts **Installed:** Summer 2005



This system had to have flexibility designed in for the changing markets. They wanted to recover a high percentage of recyclables — so the system is designed to recycle 8 different products and process wood for pellets and boiler fuel. It's equipped with a heavy duty C&D trommel with hexagon shape as a primary screen, which removes the 1/2" dirt for cover. The overs are conveyed to the Picking Conveyor where each man can pull wood and a designated recyclable such as metal, aggregate, cardboard, etc. The wood is conveyed directly to the CBI Grizzly Mill and is ground and loaded directly into trucks. This eliminates having to handle the wood twice or even three times like most facilities without grinders. The non-recyclables go into the large 4872 Grizzly Mill for size reduction. This Grizzly Mill was preowned at the time of installation and now has over 35,000 hours and still looks and runs like new.

# NEWTON

22 Whittier Street  
Newton, NH 03858

Tel: +1 (603) 382 0556

Fax: +1 (603) 382-0557

---

Dealer Stamp:

---



A TEREX BRAND



CBI videos on YouTube: [www.youtube.com/user/cbimaterialrecovery](http://www.youtube.com/user/cbimaterialrecovery)

Get the Terex Environmental Equipment product information instantly  
with the Terex Environmental Equipment App from the Apple iStore