TECH REVIEW - Portable Grinders

Bandit Industries

The Model 2600 and Model 2700 towable stump grinders combine aggressive horsepower in compact, lightweight designs that make stump grinding as easy as driving to the jobsite. Available with numerous options and reliable, beltless hydrostatic drive, the Model 2600 and 2700 are exceptional performers for rental companies, municipalities, and stump grinding professionals.

The hydrostatic direct-drive has no belts, jackshafts, bearings, or associated parts to maintain, making the operation and maintenance of these machines extremely simple and cost-effective. Power application with hydrostatic direct-drive is typically much smoother than traditional belt driven stump grinders, making these models a breeze to operate from swing-out control panels or optional radio remotes.

The Model 2600 features a 61hp diesel engine, and the Model 2700 features a 97- or 115-hp diesel engine. Both models have a wide swing arc and adjustable tongues to help these machines grind even large stumps without needing to reposition the whole unit.

Both machines ride on a rugged Torflex axle and go after stumps with swing arcs greater than five feet. Both come standard with the Revolution cutter wheel featuring telescoping tongues to help fine-tune their position at the stump. www.banditchippers.com

Continental Biomass Industries

CBI created their Magnum Force 5800 Grinder, applying the same principles to a machine designed for contractors dealing with lower production needs or transportation restrictions. The 5800 is a mid-sized upswing grinder built without compromising strength or performance.

One of the primary design goals of the 5800 was to decrease the headaches caused by load restrictions and permitting. The offset helix rotor, anvil, and screen designs and dimensions remain similar to the 6800, while the rotor width has been decreased to less than 8'6". The end result is a high volume grinder weighing 64,850 lbs with the capability of producing up to 100 tons per hour.

The Magnum Force 5800 grinder is engineered for land clearing and logging companies as well as yard waste and demolition wood processors, and mulch yards who demand high-volume throughput and maximum reliability. The 5800 features a high lift upper roll for ease of maintenance; high torque, hydrostatic feed system; PT Tech hydraulic PTO; and a Caterpillar engine. The high strength drum rotor and screen system are shear pin protected. The entire system is controlled by CBI’s IntelliGrind logic incorporating a variable infeed speed that automatically adjusts to engine load and an optional modem communications system that provides real-time system diagnostics. www.CBI-INC.com

Diamond Z

Diamond Z provides recycling firms worldwide with horizontal track grinders, featuring a tri-axle transporter option to meet the increased mobility requirements of today’s waste contracting firms.
The DZH4000TKT is capable of processing in excess of 500 cubic yards of construction/green waste per hour.

This midsize waste grinder with tri-axle transporter has a total transport weight of 98,000 lbs, with a fuel efficient Caterpillar C18 ACERT diesel available in all Tier II thru Tier IV Interim and Final versions. The key benefit of utilizing a Fluid Coupler transmission drive unit is that it produces a long-term service factor compared to competitive clutch options.

The DZ4000TK features a feed opening (54”x52”) and mill swing diameter (42”) that allow for oversized grinding requirements. The dual screen area is 3,800 square inches total, with screen change-out timeframes of twenty minutes or less. www.diamondz.com

Doppstadt

Doppstadt’s DW-Series Slow Speed Shredders shred various materials such as biowaste, C&D, waste wood, tree stumps, MSW, commercial and industry waste, and aggregates. The company uses a single-shaft roller and a nitrogen accumulator, which allows the comb to break away and reposition during operation, preventing uncrushables from damaging the machine and teeth.

The DW shredders feature a hydraulic cooling system and fluid coupling power transfer. Options include Bio-Power, a tougher drive unit, higher throughput capacity, and an aggressive shredding roller offering 42 teeth (twice the standard 21 teeth). Other available options include a powerful Neodym Magnet for iron separation and a remote control for all main functions making it easy for one-man operation.

These machines are powered by fuel efficient Mercedes Benz diesel engines that provide up to 610hp. Fuel consumption is as low as 11gph depending on the machine and material being fed.

Doppstadt West USA is the new, exclusive master distributor of high-quality Doppstadt machines and spare parts for the west coast: Washington, Oregon, Idaho, Nevada, California, Arizona, and Hawaii. www.doppstadtwestusa.com

Duratech

The 9564 Horizontal Grinder is equipped with a 48” wide oscillating stacking conveyor swings 40° from side to side and allows the operator to load material into a truck or onto an existing pile. An optional aluminum chute removes ferrous material from the finished product. The 9564 is powered by a 1050hp Caterpillar electronic diesel engine, housed in an enclosed engine compartment to protect the engine and reduce noise.

The 9564 horizontal grinder comes equipped with a 64”, 12,100-pound hammer mill with 24 hammers, which is fed by a self governing floor apron and feed roller though a 60”x40” feed opening. The high capacity 315 cu. ft. hopper will handle the largest trees and stumps.

A rotary self-cleaning screen provides constant air to the engine and radiator while reducing maintenance and providing easy access to the radiator for service. Four hydraulic stabilizer legs provide a steady platform while grinding.

The 9564 horizontal grinder also comes with a PT Tech HPPO-15 self adjusting wet clutch which is controlled by a microprocessor with a built in torque limiter and brake that provide protection for the engine and drive line. The wet clutch is connected to the hammer mill by a 10-groove belt drive.
In addition to the 9564 horizontal grinder Duratech also offers a complete line of tub grinders. www.duratechindustries.net

**Morbark**

The Morbark 6600 Wood Hog is an aggressive, productive grinder ideal for processing clearing debris, yard waste, storm debris and other mixed woody feedstocks into saleable products. With engine options up to 1,125hp, the 6600 has a 66” infeed opening for processing bulky material with ease.

Like all Morbark Wood Hogs, the 6600 comes standard with the Morbark Integrated Control System to maximize production and engine efficiency; a laser-cut, factory-balanced rotor for durability; and an aggressive feed wheel with an internal Poclain drive that has no chains or sprockets for more torque and reduced maintenance.

The proven breakaway torque limiter driveline protection system protects against catastrophic damage from contaminants.

With the optional Morbark Quick Switch Grinder-to-Chipper Conversion Kit, you can use the Morbark Wood Hog to produce high-quality biomass fuel chips or sawdust. Include the popular track option with 330L or 330EL Caterpillar undercarriage for the flexibility to easily bring the machine to the material. www.morbark.com

**Peterson**

Peterson’s largest horizontal grinder, the 6710D, is designed for operations that require a durable, high-output machine. It’s powered by a 1125hp Tier II Caterpillar C32 engine (or an optional Tier IVi Caterpillar C32 engine). With a feed opening of 50” x 66”, the 6710D can process large stumps that were formerly reserved for tub grinders. It is particularly suited for land clearing operations or other applications where mobility is desired.

With the R+ package, the 6710D can be configured as a mid-speed grinder to handle heavily contaminated piles or a high speed grinder for typical land clearing operations.

A three-stage grinding process with an up turning rotor and large grate area enables the 6710D to produce materials to exact specifications. The quick-change multiple grate system makes it easy to customize grate configurations to produce a wide variety of finished materials.

The 6710D features Peterson’s Adaptive Control System, which monitors the grinding load and varies the speed of the feed system, accelerating when the engine load is light, slowing when the load is high, and reversing if the engine speed drops. It even monitors the engine temperature and varies the cooling fan speed to minimize power usage fuel consumption.

Unique to Peterson Grinders is the innovative latching Impact release system, which minimizes damage from contaminants. The anvil and first grate open on a severe impact, allowing the contaminant to be ejected, and then re-latch to permit continuous grinding.

www.petersoncorp.com
Rawlings

The Rawlings Patented Super Hi-Inertia Hog is designed to run 24/7, 365 days a year. Its rotor is equipped with high mass moment of inertia and the operating costs per ton of material processed are low.

Operating at low RPMs, the Super Hi-Inertia Hog still provides the crushing and shearing power needed to handle really tough jobs, like green waste, cypress, redwood, cedar, poplar, and a wide range of other stringy and fibrous materials while cutting processing time dramatically. The Rawlings Super Hi-Inertia Rotor was designed to maximize inertia while minimizing its weight and the Rocwear striker system have less down time and easier maintenance.

This grinder is protected by an Anvil Safety Shear Swing Away that allows metal and other damaging objects to drop through to the out-feed conveyor. When the pins are sheared, a protection circuit shuts down the hog and conveyor.

These wood waste recovery systems are available in stationary, portable, and skid-mounted systems; both vertical and horizontal models are available. Rawlings’ wood hogs come in all shapes and sizes, from simple stand-alone vertical hogs for saw mills, pulp, paper, power, and pellet plants to complete custom horizontal hog systems that can process material of any length such a logs, forest debris, and urban waste.

www.wastewoodhogs.com

Rayco

The RH1754 Track Horizontal Grinder is now available in a self-propelled version that rides on a heavy-duty, steel track undercarriage. This adds another element of versatility to the 240hp RH1754, making it easier to move the machine around job sites and perform tasks like windrowing material or sorting material into different piles.

With low operating costs and versatility to process a wide range of materials, the RH1754 is the economical solution for reducing green waste, pallets, and lumber scraps while making high quality mulch. A variety of tooth and screen options allow operators to tailor the end product.

Despite its compact size, the RH1754 has a wide infeed opening that accepts pallets and bulky material. Easily removable debris screens and reversing fans keep the radiator clear and extend service intervals. A magnetic head pulley on the discharge conveyor sorts out nails and light metals, and the screens can be changed in minutes to minimize set-up time. The towable version is light enough to be easily transported from one job to the next.

On tracks it weighs just 20,500 lbs and is just under eight feet wide, to avoid the need for trailering permits.

A wireless radio remote operates each track independently to provide precise control, and two-speed final drives allow for creep speed or high speed travel. www.raycomfg.com

Rotochopper

Rotochopper, Inc. manufactures an extensive lineup of wood grinding equipment. Rotochopper grinding equipment ranges from 127 to 950 hp. The grinders have superior particle size control and are popular in engineered fiber markets like colored landscape mulch, animal bedding, and fuel pellets.
For mobile-grinding applications, Rotochopper offers four diesel powered grinders. For companies that do not require mobility, Rotochopper electric-powered grinders offer the same “Perfect In One Pass” technology with enhanced efficiency and less maintenance downtime.

Rotochopper offers a variety of portable horizontal grinders from the 41’, 700-950 hp B-66 that produces high volumes of engineered fiber commodities by matching rugged reliability to precision grinding technology to the 35’, 275-350 hp MP-2 with its infeed design and patented colorizer system, that can convert a wide range of raw materials—wood chips, pallets, sorted C & D, slabwood—into premium colored landscape mulch.

Rotochopper also manufactures specialized grinding systems, such as the CP-118 Wood Chip Processor. The CP-118 is designed exclusively to regrind and color wood chips to produce premium landscape mulch in a single pass.

Rotochopper prides itself on customer support. Throughout North America, Rotochopper customers, Rotochopper equipment is sold and supported by factory-direct representatives, rather than dealerships. www.rotochopper.com

**Vermeer**

Suitable for everything from large land-clearing jobs to green-waste recycling, the Vermeer Tier 4i (Stage IIIB) HG4000, HG6000, and HG6000TX horizontal grinders have a number of features that make them ideal for a wide array of operators including the all-new chip drum, which allows the grinder to produce a consistent sized chip necessary for many applications such as biofuel chip production.

The chip drum is a more robust, fully dedicated drum with knives, so there’s no switching back and forth as you would with a fuel chip attachment.

One of the premier enhancements is the ability to modify chip size. Operators can add or remove spacers to achieve the desired chip size. The chip drum can produce chip sizes ranging from 0.125 to 1.50 inches with 0.125-inch increment adjustments.

Another advantage of the new chipper drum is serviceability. A number of the high wear areas of the drum are protected by hardened steel parts providing longer life. These hardened steel parts are also replaceable via threaded fasteners to reduce labor costs and minimize downtime.

Helping to minimize operator cost, screws have replaced the need for Babbitt on the knives. A user can now simply adjust the knife via thread fasteners quickly and safely rather than melting Babbitt. www.vermeer.com