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Grinds Anything, Goes Anywhere

JTS Inc. and Bradco Industrial turned to the versatility, mobility, and reliability of the CBI 6800T Magnum Force horizontal hog

By Bob Bruce

As more cities, counties, and even states (in the case of California) adopt stricter no-burn policies concerning biomass waste, companies who make grinders and chippers have been busy designing ever more powerful and portable machines. Unlike the towed chipper/shredders of the past, these behemoths must be: mobile enough to navigate all sorts of difficult terrain under their own power; sturdy enough to deal with large diameter stems with minimal prep work; and able to run at, or near, capacity for extended periods of time in order to service the needs of places like landfills and biomass drop-off yards.

Magnum Force Makes the Cut

The CBI 6800T "Magnum Force" horizontal hog, developed by Continental Biomass Industries out of Newton, NH, is one of these new generation monsters. With a 60-inch wide mouth that leads to a rotating set of 24 hammers, which is in turn powered by a 12-cylinder 1050 hp CAT engine, the 6800T can swallow entire trees and has a rated throughput of up to 200 tons per hour.

Justin Watson is the owner of JTS Inc. in Arroyo Grande, Calif. What started out as a "small residential tree company," has grown to a multifaceted commercial operation that provides land clearing, forest land fuel load reduction, and landfill work, in addition to the residential tree service.

Watson's primary requirements for a grinder were versatility, mobility, and reliability. With the CBI 6800T, he says he has found pretty much the best combination of everything. "There was just nothing out there that could really touch it. Because it weighs less than 80,000 pounds, we can do a normal transport with it, and because it has tracks, we can handle a variety of roadways — we can basically track right into someone's back yard and get within 20 feet of their house if we need to."

The Advantages of Tracks

Having such grinding capacity on a set of tracks is a big plus for Watson. "It lets you walk out onto sand and terrain that you couldn't pull a machine of similar power across without developing a road. You can't imagine the places you can get in with this machine," he says.

“The major problem in this area is the wood is barely salvageable, so on any job with high volume, basically the only thing you can do with it is grind it.” And he’s not talking about small twigs and brushy undergrowth either.

A recent job involved clearing a 160-acre plot of mostly eucalyptus trees to make way for a golf course. “We had a feller buncher and a skidder going out knocking down oversize material. As we went through each of the blocks, the skidder had to actually stack up material ahead of time before we got into it. We had our two excavators (a Hitachi 220 with a rotating grapple and a Hitachi 330 with a shear) feeding the 6800T, and once the grinder got running, we were breaking everything down and grinding it faster than the skidder could keep up.” And this, he notes, was with oversize material as much as 40 inches in diameter.

That particular job also demonstrated the benefit of having the grinder on tracks — instead of bringing the material to the grinder, the grinder could finish one pile and move on to the next, saving a lot of time. “You just take the machine right up to the pile. You process it right through and out into a truck.” As for the 1050hp engine, “It burns the fuel, but it’s just phenomenal. When we’re grinding, it can fill a 40-foot-long semi truck in anywhere from 12 to 20 minutes,” says Watson. On a recent project the 6800T was producing 2,000 pounds a minute — both hardwood and softwood. The challenge wasn’t in the grinding, but in moving the material fast enough.

“The machine is made to last,” adds Waston. “It seems like a lot of the machines out there get into 4,000 hours, or so, and they start breaking down and having problems, but the CBI machine is designed more after the aircraft ideology where you have different parts that can be replaced, but the frame itself is made to last. Some of these CBI machines have over 20,000 hours on them, and they’re still running strong.”

Biomass Recycling

Brad Bauder of Bradco Industrial in Sky Forest, Calif., also runs a CBI 6800T in his operation — along with a Morbark 1300 tub grinder, a Morbark “Mountain Goat” track-mounted 50/48 whole tree chipper, and a Peterson 6700B. Like Watson, Bauder handles land clearing and waste management at landfills and transfer stations, but he also does a lot of Forest Service work clearing fuel breaks or contract grinding slash piles left by logging operations.

Bauder uses his 6800T primarily for biomass recycling at county landfills. “That machine works strictly on contract for one county, servicing every landfill and transfer station in the county on a 90-day rotation basis. Every 90 days, we move the machine to a new location and grind up their accumulated green waste,” he says.

Bauder appreciates the machine’s ability to handle contaminants mixed with wood fiber.

Easy Transportation

Like Watson, Bauder finds the ease of transport is a big plus with the 6800T, as is the fact that it is mounted on tracks. “There’s enough wood waste recycling that needs to be done around here that when we look at grinders we only buy the largest machine that we can easily transport on a 5-axle, without having to upgrade to 7- or 9-axle. We’d never get a 9-axle in the places we need to go for Forest Service and other land clearing operations.”

As far as tracks are concerned, “I love machines on tracks. It makes life so much more productive and easier out here in the field. It gives us versatility — we can move the machine around the site easily, and if we get caught up on the contract, we can haul it out on five axles,

bring it out to our forestry division, and be tracking around our fire roads and handling brush piles out in the middle of the woods."

No Contamination

For Bauder, the main benefit of the 6800T's extra power, combined with its replaceable hammers and beefy frame design, is its ability to handle contamination mixed in with the wood fiber.

"Our 50/48 uses knives so it has zero tolerance for contamination, which is why it's only out in the woods. With green waste, you're hitting truck axles and hydraulic pumps and all sorts of stuff that people throw away. So if you've got the same truck axle for example, it's going to be more devastating to a smaller machine with smaller hammers and smaller parts than it will be to a larger machine with larger hammers and larger screens, etc." "That's why we don't ever want to be underpowered or undersized for anything. There's always other work you can do if you finish early. There's nothing wrong with finishing early."