

Bandit Beasts Turn Grass Into Biomass in Poland

Bandit Beast Recyclers are playing an important part in the expanding international biomass fuel markets by reducing wood and grassy materials.

For over a decade, Bandit's whole tree chippers and Beast Recyclers have played a big role in utilizing unwanted wood waste for wood fuel. Recently, the Beast has been used to reduce various grasses into useable biomass fuel.

Several diesel-powered Beast Recyclers have been working in Poland processing grasses into biomass fuel for approximately a year, and a new electric powered Beast will go into operation in November to convert baled grasses into usable biomass fuel.

Artur Glowa of Zaklad Urzadzania i Utrzymania Zieleni (ZUUZ), Bandit's dealer in Poland, said, "In our experience, there are three types of related material: straw bales that are crunchy and relatively easy to grind; barley or wheat straw bales are a bit harder to grind, and the most difficult to grind are grass and hay bales." Glowa has demonstrated Bandit's Beast Recyclers in a number of applications over the years, but grinding grass is a relatively new application, and proving very successful.

A 700-horsepower Model 3680 Beast is currently supplying grasses for a cellulose paper plant in Swiecie, Poland. The plant uses the ground grassy material to fire a boiler that supplies steam and electricity to the plant. The higher horsepower machine (700-horsepower+) is preferred over a 500-horsepower machine, to allow for a reduction in fuel consumption per cubic meter of ground material. Although the round bales are larger than the opening into the Beast, the top feed wheel extends over the top of the bales of material and rolls the bales into the cuttermill, easily processing the material. Because of the long infeed bed, bales can continuously be set into the machine ensuring steady production. The end product is of ideal size for boiler fuel.

Beast Recyclers are also being used in tough grass grinding applications. One power plant located in Opele, Poland had a large supply of wet straw that couldn't be processed by any other machine.

Glowa explained, "They asked us to try to process the wet straw with our equipment to make a product with a certain size requirement." Glowa proved that a 540-horsepower Model 3680 Beast Recycler with a 3" diamond screen and a combination of Shingle, Carbide, and Butcher Fan teeth would produce about 12 – 14 tons per hour.



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The ground grassy material was then fed to the power plant. “Because of our success grinding the wet straw, we are now testing a Beast that will be used as the primary reduction machine in a straw pellet application,” adds Glowa.

The new knife option offered for the Beast Recyclers holds a lot of promise in the tougher grass applications. When processing grass and hay, production was as high as 30 to 35 tons per hour with the knives. Some bales have a considerable amount of stone in them. When processing hay bales with stone, Butcher Teeth are preferred over the knives and perform very well in breaking down the hay bales.

As biomass plays a bigger role in meeting our worldwide energy needs, Beast Recyclers will play a big role in processing grassy materials into a burnable fuel.

