



Biomass Feedstock Preparation

Biomass feedstocks can be dried, ground and sized in the Biomass Storage and Pretreatment Building at the BioCentury Research Farm. Various dryers, grinders, mills and sieves are available to process biomass for biofuels and biochemical projects. The building also features a fine particle biomass preparation lab that is used for fine grinding, sieving, pelleting, milling, briquetting and particle size distribution determination. The lab is designed to accommodate 12 independent equipment stations. The BioCentury Research Farm is one of the few facilities in the nation capable of grinding and sizing large quantities of research quality biomass feedstocks while still accommodating small-quantity projects.

Accomplishments

- » The BioCentury Research Farm received and processed 60 tons of biomass feedstocks for the National Advanced Biofuels Consortium. Approximately 50 tons of ground biomass were shipped to eight NABC members.
- » Developed methods to receive and process small and large quantities of various biomass feedstocks.
- » Became internationally known for providing clean, high-quality ground feedstocks.
- » Provided 100 micron stover to the U.S. Department of Energy.
- » Successfully torrefied several feedstocks including stover.
- » Mechanically depithed corn stocks.
- » Successfully prepared a variety of feedstocks: alfalfa, aspen, bagasse, bean stover, eucalyptus, corn stover, eggshells, oak, pine, poplar, refuse derived fuel, sorghum, switchgrass and others.
- » Provided over 100 tons of modified material to every major university, company and national lab working with biomass-to-fuels or chemical-related projects.

Future Work

- » Develop standards for biomass feedstocks according to initial condition and end use.
- » Provide energy use data and throughput information summary.

Team Members



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