

Bioburn[®] Pelletizer



The bioburn energy system.

Energy production from unused biomass.

Biomass

The Bioburn pelletizer can produce pellets from almost all types of biomass, providing for resource recovery from unused, no longer recyclable or discarded local or regional biomass.

Feedstock

Most feedstock is mixed with one or more additional biomasses to obtain an optimal mixture for producing high quality pellets.

Pelletizing

The pelletizer is the centrepiece of the system. The whole system includes a mixer, a shredder, a drying hopper and a number of storage silos. The entire system is designed to achieve energy-efficiency with low energy consumption.

Pellets

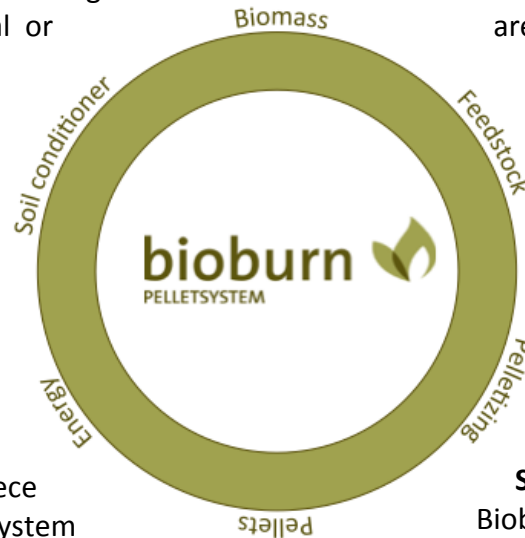
Bioburn pellets are the only pellets on the market formed with a helical extrusion, giving them a unique stability. Bioburn pellets are odourless and dust-free which guarantees clean and efficient transport, storage and combustion.

Energy

Bioburn pellets can produce heat or electricity with conventional combustion technologies available on the market, including gasification.

Soil conditioner

Bioburn pellets are valuable resources of nutrients and organics. Following energy recovery, the remaining ashes can be used in farming as a soil conditioner.



Bioburn energy system

The bioburn energy system provides an integrated closed loop between energy production and energy consumption. Thereby Bioburn acts as intermediary between our partners. Bioburn provides both machinery and knowhow to our pellet-producing partners, and markets the pellets to our energy-producing partners. To guaranty consistent pellet quality, Bioburn has developed a quality management system (QMS) which integrates initial biomass sourcing, pellet production, pellet combustion and phosphorus recovery from the combustion ash.

The industry's first wet feedstock pelletizer.

Energy saving system meets high quality pellets.

Pelletizing of wet biomass

The Bioburn pelletizer is the only biomass pelletizer on the market that can pelletize wet structured biomass. Depending on the feedstock, moisture contents can range between 20 and 55%, whereas particles sizes up to 20 mm can be processed.

Bioburn has expertise in pelletizing a wide range of feedstock including horse manure, wastewater and faecal sludge, brewery waste, chicken manure, compost, leaves and straw. Feedstock without sufficient binding properties (e.g. horse manure) can be co-processed with other biomass (e.g. brewery waste) to obtain high quality fuel pellets.

Energy savings of up to 50%

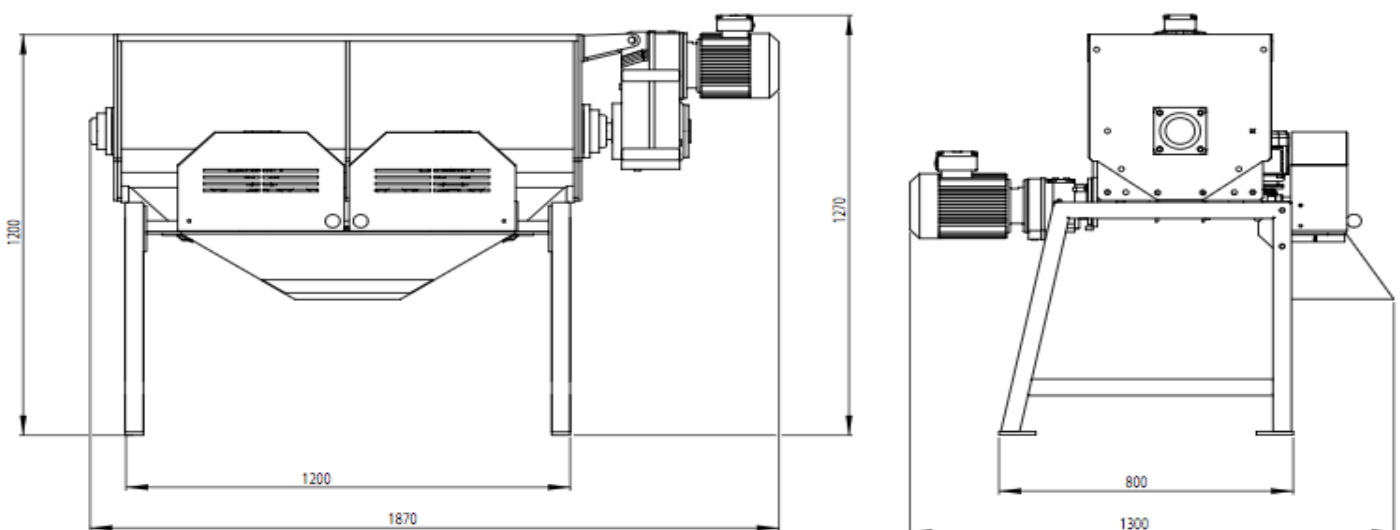
Because the Bioburn pelletizer can process wet and structured biomass, less pre-processing such as drying and grinding is required. Due to its unique properties, the Bioburn pelletizer requires only 6% of the realized energy to produce pellets. Compared to conventional pelletizers, the Bioburn pelletizer uses up to 50% less energy.

Modular System

The Bioburn pelletizer is part of a modular and expandable system. It consists of multiple pelletizing units, with a production rate of 35 kg per hour each. Therefore, the bioburn pelletizer can be customized to actual volumes of feedstock, from a production rate of 35 kg per hour up to 2000 kg per hour per system.

High quality pellets

The Bioburn extruder technology offers pellets formed by twisting not layering. This results in high quality pellets in terms of strength and abrasion. This property increases the pellet's storage, transportation and combustion quality. Analyses show up to 40% lower abrasion compared to layered pellets produced by common pelletizers.



Contact.

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