**BIOMASS BOILER SYSTEMS**

Energy solutions based on biomass and bio-fuels provide clean and renewable energy for large national and international companies. Green-thinking companies are now using biofuels to mitigate the impact their activities have on the environment by reducing emissions of greenhouse gases. This can also generate earnings for your company by saving money on energy costs, and by the sale of carbon credits. Achieve energy independence, get off the Gas Grid, and no longer be at the mercy of the oil markets. Hurst Boiler is a leader in the development of boiler technology and energy management projects through sustainable solutions for renewable energy and energy efficiency by biomass. HURST Biomass, Gasification and Gasifier Boiler Systems will strengthen your bottom line by reducing, or even eliminating your energy and disposal costs altogether, through the combustion of renewable fuel sources, also known as Biomass.

Consider trading fossil fuels for agricultural biomass, wood, bark, agave fiber, rice husk, chicken manure, sugar cane bagasse, king grass, MSW, construction debris, nuts, shells, husks, paper, card/board products, hog fuel, sawdust, shavings, and/or sludge. Alternative Fuel Solutions and Hurst packaged projects can help you reduce carbon, reduce emissions, and reduce both operating and fuel costs, as well as being eligible to sell your carbon credits.

Hurst Boiler provides its clients with the support and expertise necessary to design, fabricate and install complete solid fuel boiler systems, from the fuel storage system thru exhaust gas emission mitigation. Various Boiler designs are suitable for applications to produce high pressure steam or hot water in ranges from 3,450 - 60,000 lbs/hr (3.4 mmBTU - 60 mmBTU) output from 100 up to 900 PSI.

As the overall market sets on the path of environmental sustainability and energy costs continue to increase, industry leaders will be hard pressed to find economically viable solutions to stay ahead of the curve. Profiting from the implementation of energy efficient and sustainable technology will be necessary to maintain a competitive advantage. Hurst Biomass Boiler Systems provide successful strategies and technology which can reduce the operational costs of current facilities and provide an ROI from installation in new construction.

Energy Efficient & Environmentally Sustainable Building Technologies using Biomass

Let Hurst Boiler help you implement the next generation of technologies in todays facilities. Discover how to obtain immediate benefits from current environmental initiatives. Take advantage of environmental and energy reducing strategies in new construction and retrofit projects. These are just some of the latest developments in Biomass Boiler Technology that Hurst can provide to benefit your business and your bottom line!

Sustainable Operations Green Retrofit & Construction

1、Integrating sustainability initiatives in your business model

2、Establishing performance metrics and benchmarking programs to quantify results

3、Selling the ROI and competitive advantage gained from sustainability programs

4、Measuring efficiency through the implementation of environmental management systems

5、Waste reduction and risk management

6、Successful programs to reduce water usage in facilities

Objectives, Strategies and Implementation in:

1、Profitable implementations of Biomass, CHP and other co-generation technologies

2、Corporate strategies to reduce overall facility operating cost in new development

3、Tackling excess energy expenditures in HVAC, Lighting and legacy equipment

4、mplementing LEED and Green design principles from the onset of new construction and retrofit projects to achieve higher cost savings

CHP/CHCP: (Combined Heat and Power/Combined Heat, Power and Cooling)

5、Engineering and Design for utilizing and implementing Combined Heat and Power (CHP)

6、Specifications for Turbine, Steam GenSets, and ORC (Organic Rankine Cycle) Equipment and Technologies

7、Competitive advantages of CHP/CHCP applications for the coverage of energy demand (i.e. electricity, heat and cooling) in the industrial and commercial sectors

8、Permitting, regulatory and grant information and guidance

Energy Management:

1、Creating an overall strategy for applying cost effective renewable energy technologies

2、Reduction of risk and expenditures on energy in your operations

3、Ensuring the reliability of your energy infrastructure as new equipment is implemented

4、Maximizing the benefits of renewable energy credits, offsetting and government programs

5、Learn more about HURST Biomass Boiler Systems and see models and plan views, click here.

Elimination of Biomass Emissions

Generally speaking, the combustion of biomass material produces emissions that can prove to be undesirable. Maintenance is typically also an issue with regular tube-cleaning and ash removal. HURST has virtually eliminated those potential undesirables through engineering, and a proven system.

Hurst Boiler & Welding Co., Inc manufactures its biomass boiler systems with an extended burn chamber, increasing dwell time for the combustion of any unwanted particulates and emissions before they are able to exit the system, making the process much cleaner, which reduces maintenance time and costs.

Through the effective use of combustion air, a HURST system is capable of burning material with 0-50% moisture content. In fact, the Primary Combustion Zone reaches temperatures as high as 1850°F.

Automated Ash Removal

This system removes the ash from the unit automatically into self-contained ash bins, allowing for continual operation; thus, eliminating costly downtime and unnecessary labor and operational costs. In addition, its hands-free operation, makes the system much safer.

Cast Refractory Ceramic Lining

HURST Biomass Boiler Systems are equipped with high temperature cast refractory ceramic lining for longer life. This cast refractory/ceramic lining was designed to be completely modular, which makes for easy repair and replacement.

PLC Controls

The HURST PLC Control System is one of the most advanced systems available for biomass combustion in todays market. The Control Panel is fully automated and continually monitored via a Programmable Logic Controller. The air flows and fuel feed rates are constantly and automatically adjusted by way of variable frequency drives to ensure a hot water or warm air temperature that is maintained within 3 to 5 degrees of the desired set point. Fuel feed motors, combustion fans, and the induced draft fan all run on variable frequency drives to ensure the proper mix of combustion air to fuel. The unit adjusts itself automatically according to load demand. The system can also operate on "Maximum Fuel Consumption" Mode to utilize the capabilities of the specific burner and combust as much fuel as possible. All controls and monitoring of the system are accessed via 10-inch color touchscreen monitor located on the front of the main control panel.

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