BIOMASS COMBUSTION SYSTEMS, INC.

Fuel your
Profits with
Wood

BIOMASS ENERGY BCS CARBON INDUSTRY

BCS WOOD FIRED INDUSTRIAL SHOP HEATERS

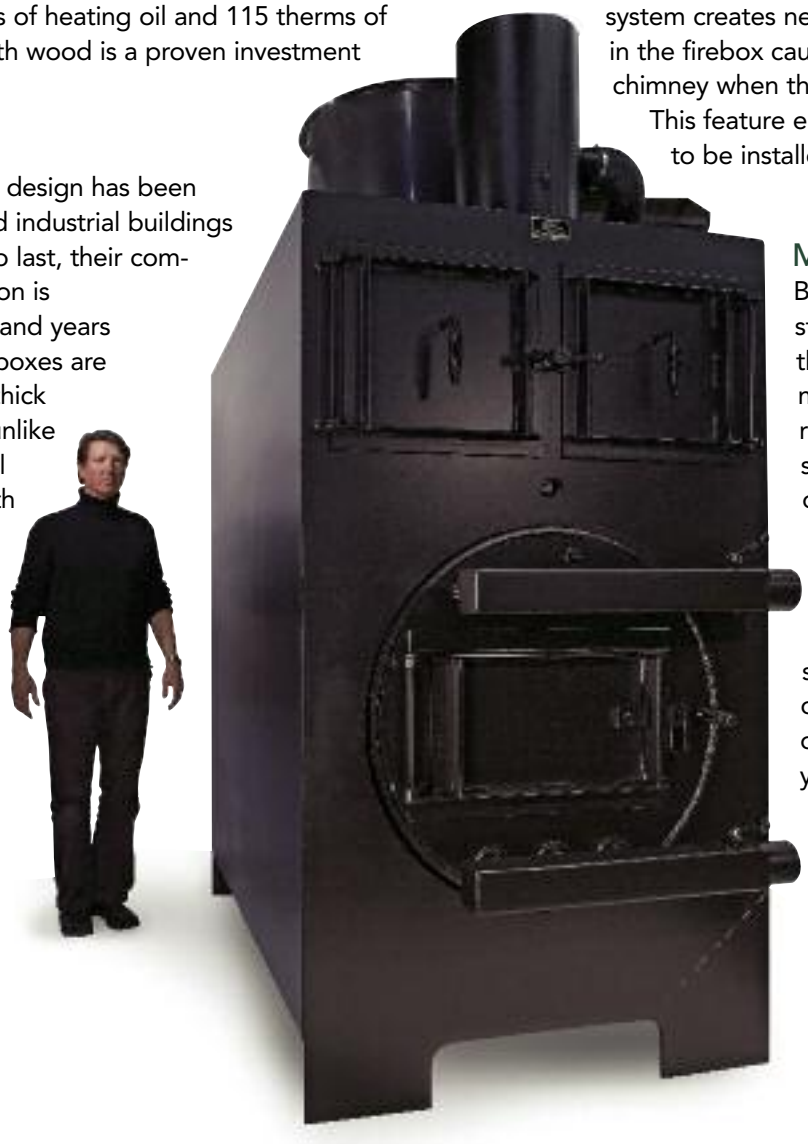
COST-EFFECTIVE • TIME-TESTED • DURABLE

CONTROLLING BUSINESS COSTS

Managing fuel costs in the current climate of fluctuating fuel prices is difficult. Wouldn't you like to reduce and control your fuel cost…and not just for this season, but for years to come? Convert your low cost wood to fuel and immediately reduce your operating costs, but more importantly, gain control over ever-unpredictable and rising fuel prices. Imagine, one ton of dry wood is the BTU equivalent of 85 gallons of heating oil and 115 therms of natural gas! Heating with wood is a proven investment for the long term.

DURABILITY

Since 1985, this proven design has been heating commercial and industrial buildings with wood. Designed to last, their compact all-steel construction is ruggedly built to withstand years of hand-firing. BCS fireboxes are engineered with extra thick steel end walls, which unlike refractory fireboxes, will not crack and break with repeated hand-firing. In addition, our unique cylindrical firebox design allows for natural expansion and contraction thereby reducing stress on the steel.



EFFICIENT COMBUSTION

When properly operated, our EPA-approved systems are virtually smoke-free with no impact on neighbors or the environment. BCS' patented After Burner Chamber minimizes unsafe particle emissions by re-burning flue gases through four separate right angle turns, maximizing combustion. Smoke will not escape when loading wood either. An induced draft fan located at the top of the system creates negative pressure in the firebox causing smoke to go up the chimney when the loading door is open. This feature enables many of our systems to be installed directly on the shop floor.

MAINTENANCE

BCS all-steel systems' simple, straightforward design makes them easy to operate and maintain. Featuring front and rear access for cleaning, the system is easy to clean and operate.

DEPENDABLE SERVICE

These furnaces have been successfully field-tested for over 20 years and we stand by our product. In fact, we invite you to talk with one of our many satisfied customers to get a feel for the advantages of using a BCS Shop Heater.

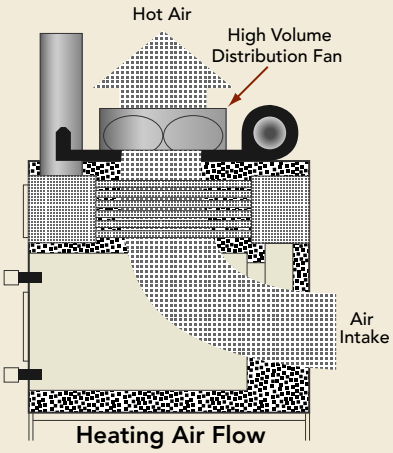
SPECIFICATIONS
800,000 BTU PER HOUR SHOP HEATER

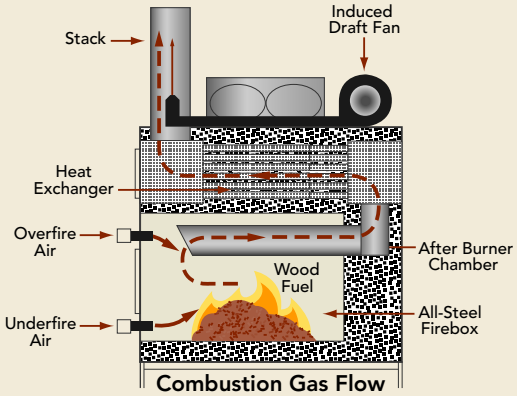
FIREBOX
3/4" steel end walls
5/8" plate steel cylinder
36" diameter firebox x 60" length
35.34 cu. ft. volume
15" x 22" loading door
Induced draft/forced draft fan with 1 HP motor
12" diameter stack

OVERALL DIMENSIONS
Width: 48" **Length:** 88"
Height: 108" **Weight:** 6,000 lbs.

HEAT EXCHANGER
(32) 2" diameter tubes x 48" length
(2) 17" x 17" clean-out doors
30" tube axial fan – 9,000 cfm@1/2 s.p., 2 HP

SAFE CLEARANCES
Allow for at least 36" from sides, 36" from back
48" from front, 18" from flue connector
12" from ducting and plenums





SPECIFICATIONS
500,000 BTU PER HOUR SHOP HEATER

FIREBOX
1/2" steel end walls
3/8" plate steel cylinder
30" diameter firebox x 57" length
21.5 cu. ft. volume
12" x 18" loading door
Induced draft/forced draft fan with 1/2 HP motor
10" diameter stack

OVERALL DIMENSIONS
Width: 40" **Length:** 82"
Height: 87" **Weight:** 4,300 lbs.

HEAT EXCHANGER
(20) 2" diameter tubes x 47.25" length
10" x 24" clean-out door
24" tube axial fan – 6,900 cfm@1/2 s.p., 1.5 HP

SAFE CLEARANCES
Allow for at least 36" from sides, 36" from back
48" from front, 18" from flue connector
12" from ducting and plenums

SPECIFICATIONS
250,000 BTU PER HOUR SHOP HEATER

FIREBOX
3/8" steel end walls
5/16" plate steel cylinder
26" diameter firebox x 40" length
11.2 cu. ft. volume
10.5" x 15" loading door
Induced draft/forced draft fan with 1/2 HP motor
8" diameter stack

OVERALL DIMENSIONS
Width: 34" **Length:** 60"
Height: 75 1/2" **Weight:** 2,200 lbs.

HEAT EXCHANGER
(17) 2" diameter tubes x 26" length
8" x 20 1/2" clean-out door
18" tube axial fan – 3,100 cfm@1/2 s.p., 3/4 HP

SAFE CLEARANCES
Allow for at least 36" from sides, 36" from back
48" from front, 18" from flue connector
12" from ducting and plenums

All output ratings are based on burning dry wood.

FEATURES AND BENEFITS

DURABLE ALL-STEEL FIREBOX

- **Rugged Steel Construction**
  Won't chip or crack like refractory brick
- **Thickened Steel End Walls**
  Built to withstand repeated hand-firing
- **Cylindrical Design**
  Accommodates heat expansion without stress to steel
- **Patented After Burner Chamber**
  - Multistage, maximum flue gas combustion
  - Virtually smoke-free operation

THE HEAT EXCHANGER

- **Large Heating Capacity**
  - Firebox functions as primary heat exchanger
  - Multiple tube secondary heat exchanger
- **Convenient Cleanout Design**
  Shortens maintenance time while enhancing combustion efficiency. Cleanout rod and brushes included.

HEATING AIR FLOW

- **High Volume Heat Distribution Fan**
- **Maximum Heat Output To Facility**

COMBUSTION AIR FLOW

- **Induced Draft System**
  - Powerful induced draft optimizes combustion
  - Safe and clean burning
  - Smoke and odor-free loading

EASE OF OPERATION

- **Over Fire/Under Fire Valves**
  Adjusts air flow for optimal combustion and heat management
- **Intelligent Thermostat**
  Automatically controls fan to conserve electricity
- **Firebox Dual Temperature Monitor**
  Monitors fuel loading requirements and stack temp for heat exchanger performance
- **Twenty Year Time-Tested Design**

OPTIONS

- **AFS- Automated Feeding System**
- **Green Fuel Forced Draft Kit**
- **Over 20 Years of References Available**

UL, CSA and Emission Test Results Available

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