

# Coal Gun

Residential

Automatic Coal-Fired

Stoker Boilers

20 Year Warranty

THE ANSWER
to your High
energy expense...
Smokeless and
Labor friendly!



**Anthracite (Hard) Coal** 

**Alternate Heating Systems** 

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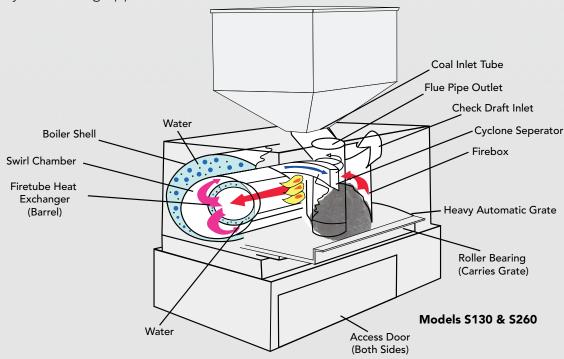
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### Alternate Heating Systems Commitment to Quality...

Every **AHS Coal Gun**® is manufactured from the highest quality materials by highly trained, dedicated technicians. Every unit is tested extensively before it leaves our factory to ensure its adherence to our high standards of quality. In fact, we guarantee that our product is free from defects in materials and workmanship\*. Each **AHS Coal Gun**® comes complete with all controls necessary for operation and safety. Standard equipment includes an insulated boiler jacket, totally enclosed motor and drive systems, primary and backup aquastat thermostats, thermo ash-monitoring control and pressure relief valve.

Our **Coal Gun**® boilers are some of the most durable heating units available. The AHS commitment to quality leads to a long boiler life (some reported at 30 years and counting) and years of hassle-free operation. The bottom line is that a quality-manufactured **AHS Coal Gun**® will save you both time and money in your heating application.



# How It Works...

Pea or buckwheat sized anthracite coal is transferred to the coal pot through the gravity feed hopper. A fan induced draft pulls air through the barrel enhancing combustion of the coal. The hot exhaust gasses then spin through our unique swirl chamber heat exchanger and into the cyclone separator where any fly ash is removed.

## **Fuel Consumption...**

The amount of fuel used depends on a great many factors, including the weather, type of installation, and building construction. Due to its high efficiency, however, the **AHS Coal Gun®** uses less fuel than other units on the market and will substantially reduce your annual heating costs.



# **AHS Coal Gun® Specifications**

<b>Assembled</b> Boiler	S130	S260	S500	S1000
Width	22"	26"	34"	40"
Height (w/o hopper)	42"	47"	58"	66"
Length	48"	62"	82"	102"
Weight	875 lbs	1,275 lbs	2,200 lbs	3,800 lbs
Water Capacity	27 gallons	56 gallons	115 gallons	220 gallons
Area Heating Capacity	4,000 ft <sup>2*</sup>	8,000 ft <sup>2*</sup>	15,000 ft <sup>2</sup> *	30,000 ft <sup>2</sup> *
BTU/hr (Gross Input)	130,000	260,000	500,000	995,000
Flue Size	5"	6"	8"	10"
Return Tapping	1 1/2" NPT	(2) 1 1/2" NPT	(2) 2" NPT	(2) 2 1/2" NPT
Supply Taping	1 1/2" NPT	1 1/2" NPT	2" NPT	(2) 2 1/2" NPT

<sup>\*</sup>Depending on building construction, use, and insulation.



- The AHS Coal Gun® can be found in service in a variety of commercial and residential areas including car washes, egg processing plants, motels, Laundromats, private residences, apartment houses, retail stores, greenhouses, etc.
- The efficient AHS Coal Gun® can pay for itself over a two year period

# Fuel Cost BTU Conversion Chart (Assuming Equal Efficiency)

Anthracite Coal \$/ton	Heating Oil \$/Gal	Direct Electric ¢/kWh	Natural Gas ¢/ft³	Propane \$/Gal	Wood Pellets \$/ton		
800	4	9.7	2.9	2.61	467		
600	3	7.3	2.2	1.96	350		
580	2.9	7.1	2.1	1.89	340		
560	2.8	6.8	2.1	1.83	325		
540	2.7	6.6	2	1.76	315		
520	2.6	6.3	1.9	1.7	300		
500	2.5	6.1	1.8	1.63	290		
480	2.4	5.8	1.8	1.57	280		
460	2.3	5.6	1.7	1.5	270		
440	2.2	5.4	1.6	1.44	255		
420	2.1	5.1	1.5	1.37	245		
400	2	4.9	1.5	1.31	230		
380	1.9	4.6	1.4	1.24	220		
360	1.8	4.4	1.3	1.17	210		
340	1.7	4.1	1.2	1.11	200		
320	1.6	3.9	1.1	1.04	185		
300	1.5	3.7	1	0.98	175		
280	1.4	3.4	1	0.91	160		
260	1.3	3.2	0.9	0.85	150		
240	1.2	2.9	0.8	0.78	140		
220	1.1	2.7	0.7	0.72	125		
200	1	2.4	0.5	0.65	115		
150	0.75	1.8	0.4	0.49	85		
130	0.65	1.6	0.4	0.42	75		

#### How to use this chart...

Check the price of Anthracite coal in your area. Find that price in the first column above. In that row, you will find the prices of other heating fuels necessary to match the BTU/h output to price ratio for coal. For example, if coal costs \$130 per ton, to get the same amount of energy (BTU/h) for the same cost, heating oil would need to cost \$0.65 per gallon and propane would need to be \$0.42 per gallon. Information from US Dept. of Energy.



#### **Coal Gun Benefits:**

- Innovative Efficient Design
- Clean Burning and Smokless
- Automatic Feed
- Safe and environmentally friendly heat
- Burns clean anthracite coal
- Proven design, durable construction
- Larg firepot allows for long off cycles
- Self cleaning action in heat exchanger
- Most complete combustion with very low exhaust stack temperatures
- Large ash receptacle
- Able to operate for days unattended
- Few moving parts



### \*Limited Warranty

Alternate Heating Systems, Inc. boilers and furnaces are warranted against defects in materials and workmanship for the following periods:

- Boiler Vessel 20 years
- Grate S130/S260 -Lifetime
- All other components both manufactured by Alternate Heating Systems, Inc. and purchased from vendors will vary in length of warranty from 30 days

A copy of the complete warranty text, detailing coverage, limitations, warranty claim procedure and state law rights is available from Alternate Heating Systems, Inc.

#### Thermo Ash-Monitoring Control - Standard

All Coal Gun boilers feature a Thermo Ash-Monitoring Control which provides optimal use of your fuel. Ash that contains fuel that is not fully combusted will be a higher temperature than ash coming from thoroughly combusted fuel. The Thermo Ash-Monitoring Control automatically monitors the temperature of the ash leaving the coal pot and leaves the ash in place until complete combustion occurs before allowing it to fall away. No adjustment from the factory setting is typically necessary to have the boiler perform at peak power output throughout the burn season (a minor on-site adjustment may be necessary when the boiler is first installed). With the Thermo Ash-Monitoring controlled grate, it is possible for the fire to remain lit for days during low use periods.

# **Optional Coal Gun Accessories**

- Automated spiral auger
- Domestic hot water coil
- Belt driven induction fan for S130 (Standard on S260)
- Low water cut off
- ASME and UL Certified on request

#### ASME Certification

The American Society of Mechanical Engineers (www.asme.org) certification is available on any of our boiler lines for an additional charge. This certification assures that the pressure vessel has been designed and constructed in accordance with the ASME Code. This certification is required for all commercial installations. The certification is also required for some residential installations depending upon local codes - it is up to the homeowner to determine the need for an ASME certification on any boiler purchased.

#### **UL Certification**

UL certification is also available on all Coal Gun boilers for an additional charge. This certification assures that the boiler complies to UL 2523 Standards. Some insurance companies may require this certification and it is the responsibility of the homeowner to determine the need for a UL certification on any boiler purchased.



www.coalgun.com

Alternate Heating Systems manufactures alternative fuel burning heating equipment and sells (primarily direct) throughout the US, Canada, and internationally. Call us today to schedule a tour of our facilities, visit our showroom, and see a working demonstration of any boiler models.

**Alternate Heating Systems** 2393 Little Egypt Rd Harrisonville, PA 17228