ASTEC

PHOENIX® COAL BURNER

The ASTEC Phoenix[®] Coal burner utilizes an innovative combustion technology to provide a reliable alternative energy source. Thanks to the latest multiple-fuel burning technology, the Phoenix Coal burner provides dependable performance by burning coal as an alternative to oil or natural gas.



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LATEST COMBUSTION TECHNOLOGY

Designed to burn bituminous coal, the Phoenix Coal's combustion system uses a coal preparation skid that pulverizes and delivers coal as the burner demand requires it. Another innovative feature of the Phoenix Coal burner is that it does not use a refractory combustion chamber.

MULTIPLE FUEL OPTIONS

The Phoenix Coal Burner uses either natural gas, #2 oil, recycled fuel oil, or liquid propane as a support fuel for continuous ignition of the pulverized bituminous coal. The

Phoenix Coal burner can also fire at 110% of rated capacity on the support fuel if the coal supply is not available.

ELECTRIC POWER EFFICIENCY

The variable speed main combustion blower drive helps provide precise firing rate control and uses significantly less electrical energy. It also eliminates the need for an air damper and for drive motor adjustments and maintenance.

NO VISIBLE STACK EMISSIONS

The Phoenix Coal produces emissions comparable to those achieved when burning waste oil as a fuel. In fact, the Phoenix Coal produces no smoke. Stack emissions are at 0% opacity, meaning nothing but sky can be seen through the plume.

FIRING EFFICIENCY & COMPACT FLAME SIZE

High quality mixing of air and fuel creates the most compact flame available with a small combustion zone. This ensures that all of the fuel is combusted for peak efficiency without taking away valuable dryer heating capacity.



ASTEC tests burners before shipping to ensure quality.

Model	Rated Capacity Millions of BTU/HR	Nominal Aggregate Drying Capacity TPH (at 5% moisture)	Burner Air Capacity SCFH (millions)	Integral Blower Horsepower	Oil Atomizing Air Requirement SCFM (Low Fire / High Fire)
PC 75	75	300	1.2	75	100 / 80
PC 100	100	400	1.6	75	100 / 80

LOW EXCESS AIR FIRING SPECS

Above conditions are standard at 75° F at sea level. See detailed capacity, performance sheets for each size for more information and specific flows and pressures. Nominal aggregate drying capacity based on typical exhauyst stack temperatures of 240° F, 0.2 BTU/Lbm F specific heat in the aggregate. Burner maximum design capacity is 110% of rated capacity. Advertised numbers are achievable in some conditions, but not guaranteed.

