

Cobalt Gas-Fired Heaters



You've waited a long time to have a powerful heater. The technician checks wiring, purges the gas line and asks, "ready to give it a try?" Ready...set...start! The dark insides of your heater body burst into the bright blue color signature to Samuel Jackson heaters. This always brings a smile to a ginner's face...and ours.

We call that blue flame color "cobalt" and it's created by just the right combination of burner design, air velocity and gas flow. One of the many new features of Cobalt heaters is Constant Velocity Shutters. As air volume changes while ginning, these shutters adjust automatically to maintain correct air velocity through the heater for a consistent cobalt blue flame all the time.

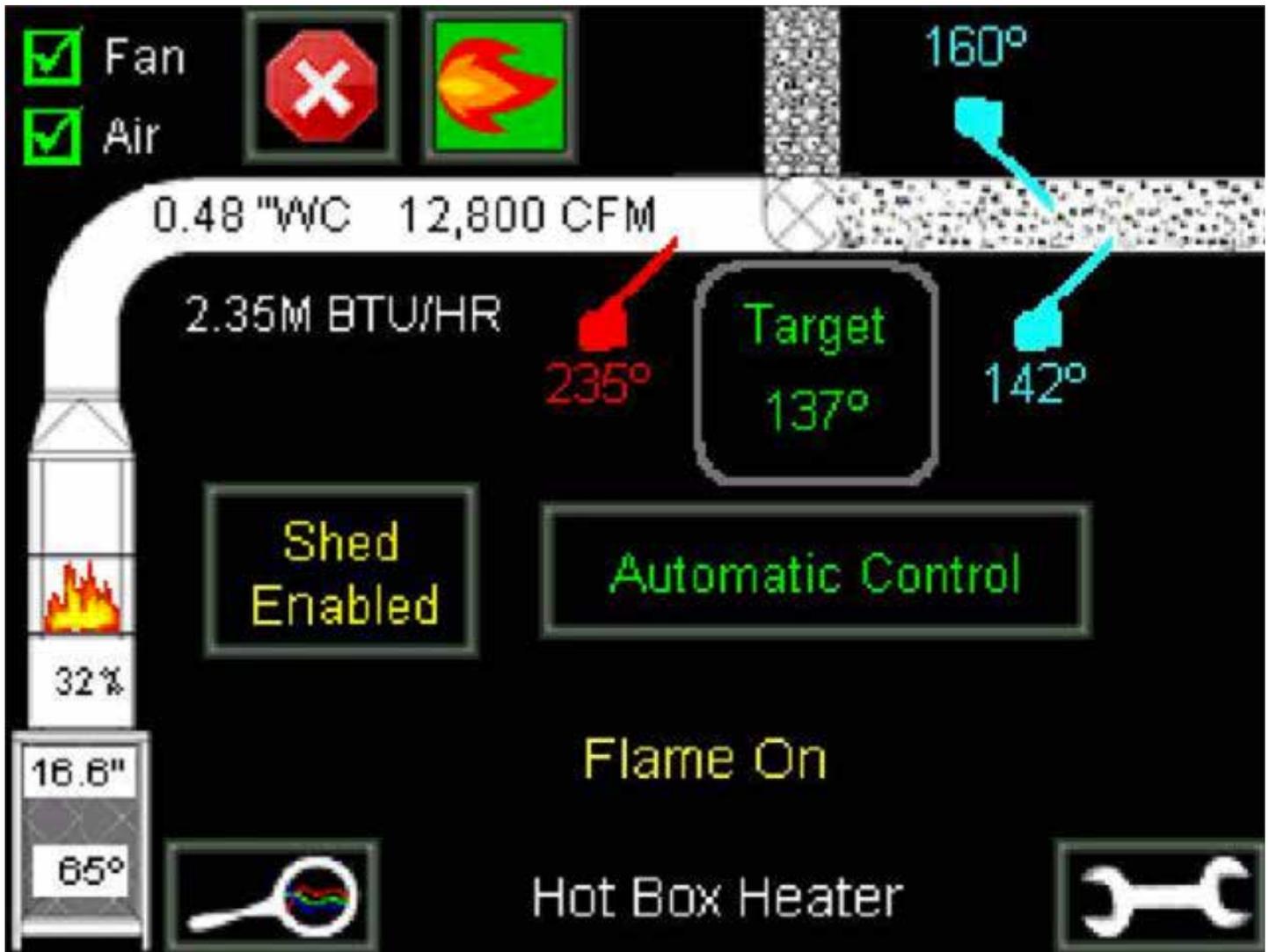
The most immediate stand-out feature of Cobalt Heaters is Instaflame Technology. Lighting times average between 1-2 seconds! That's up to 30 times faster than typical gin heaters and twice as fast as our quick lighting Delta Heaters. Combined with a Tex-Max module moisture sensor, your heaters can automatically light and be ready for wet cotton before it enters the drying system.

There are a lot more smile inducing features available on new Cobalt Heaters including real-time fuel statistics, Super Heat Mode and more!

Cobalt Heater Features

Touch Screen Home Screen

Every Cobalt includes a local touch screen with all the information you might need and then some!



The Home Screen above or the diagnostic and setup screens on the next page are there to make sure your heater is running great.

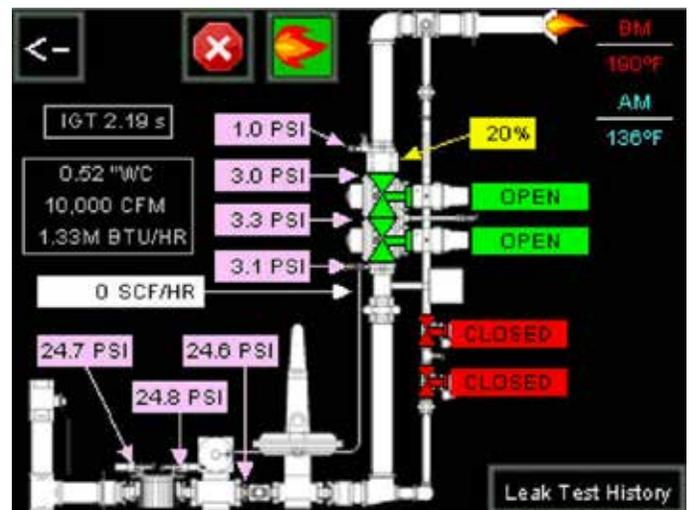
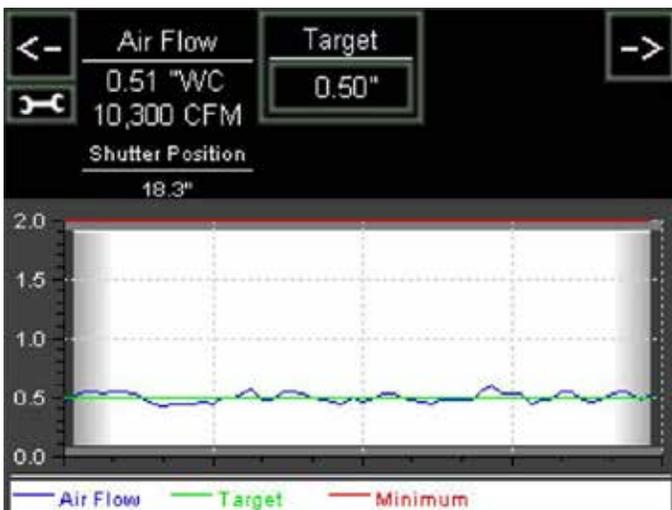
Touch Screen Diagnostic Screens

If knowledge is power, these are the most powerful heaters in the world in more ways than one!



This screen displays a list of error events. It includes a close button (X), a page indicator (p2/10), and navigation arrows. Each entry shows an error code, a description, a timestamp, and a search icon.

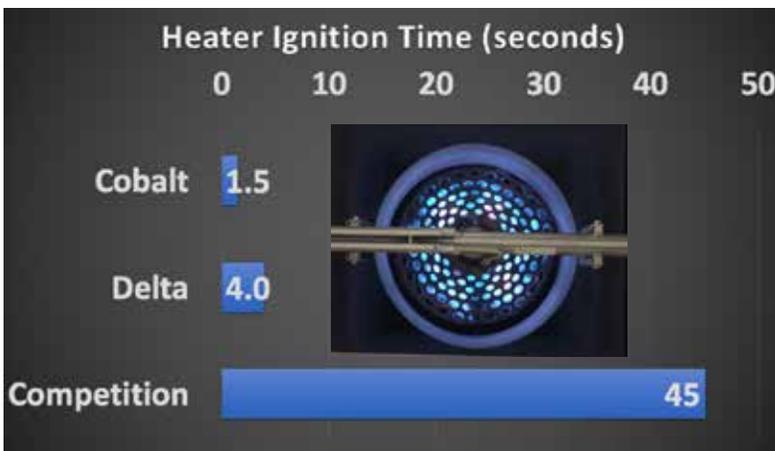
Error Code	Description	Timestamp
E618 x1	No fan interlock. Are all fans running?	2018 / 01 / 28 20 : 45 : 42
E603 x2	Burner A failed in operation. Increase Min Fuel Valve During Run	2018 / 01 / 28 20 : 03 : 20
E446 x1	Excessive flame failures.	2018 / 01 / 28 19 : 57 : 22
E603 x6	Burner A failed in operation. Increase Min Fuel Valve During Run	2018 / 01 / 28 05 : 34 : 24
E618 x1	No fan interlock. Are all fans running?	2018 / 01 / 28 03 : 43 : 34



Cobalt Heater Features

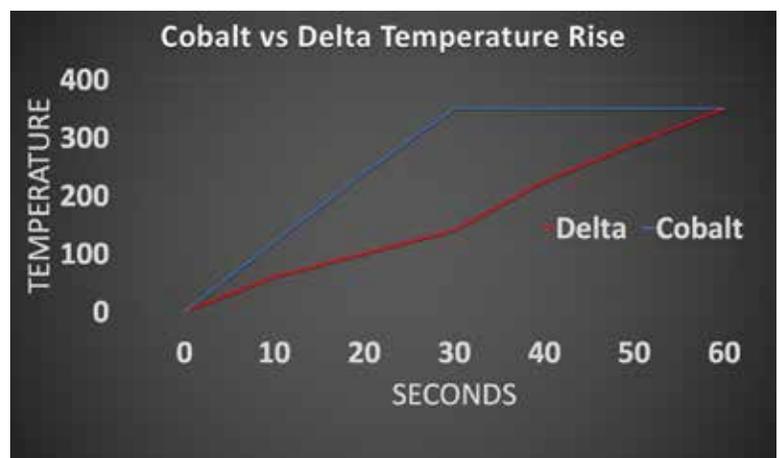
The Need for Speed

*One feature stands out among many on Cobalt Heaters...
super fast lighting and impressive temperature rise!*



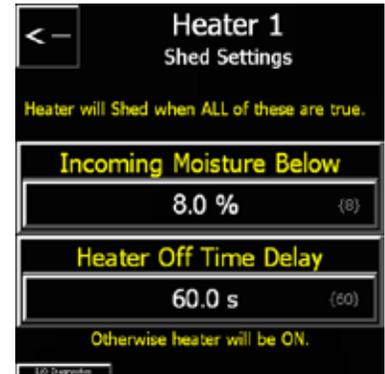
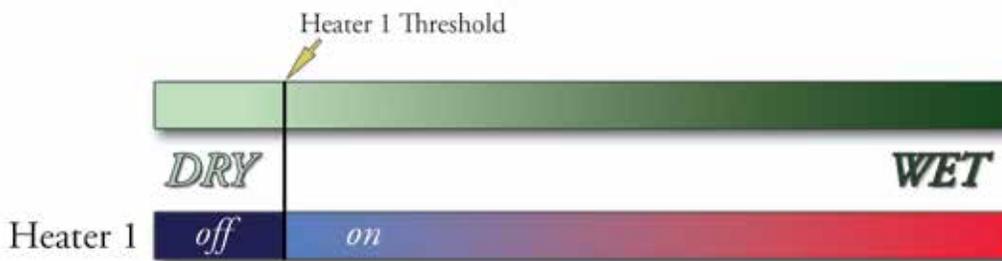
One Mississippi, two Missi...wow! “That thing is fast!” The Cobalt Heater comes to life in less than two seconds. That’s twice as fast as its predecessor and 30 times faster than the competition! If you want confidence to run the heat you need only when you need it, you’ll need a heater that can light “Cobalt fast”.

The Cobalt isn’t a one trick pony with regards to speed. The feature most impressive to our field representatives has been the “0-60” or time required for the temperature to rise from 0-350°F. The chart on the right illustrates that the Cobalt requires about half the time to reach 350°F versus the Delta Heater model.



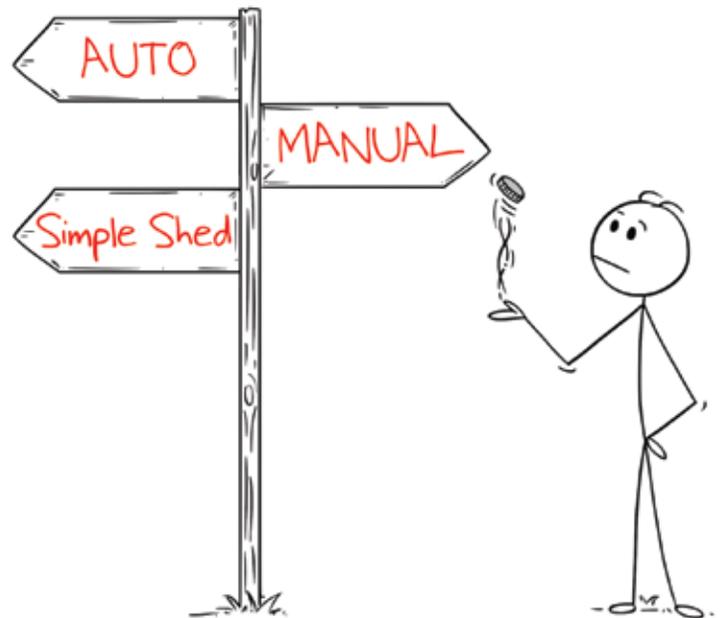
Simple Shed Technology Review

Simple Shed Technology works with Delta Series Heaters



Simple Shed (introduced in 2006) offers great gains in fuel efficiency by allowing your heaters to automatically turn off when you are ginning dry cotton and automatically turn back on as soon as the moisture exceeds the threshold that you set. You can even define different thresholds for each heater! It's very simple!

Simple Shed is a fantastic fuel savings tool. Like any tool, it is most effective in the hands of a trained and confident operator. Operators should avoid setting the moisture threshold so low that the heaters run all the time or so high that wet or trashy cotton enters the gin without drying potentially causing chokes or higher leaf grades. A trained operator with basic ginning knowledge can adjust the system for both of these scenarios to avoid over-drying and save fuel at the same time! Call us about our training resources today!



Save those coins and put them in the ginner training fund!

Cobalt Gas-Fired Heaters

New! Auto Shed

Auto Shed is the latest Fuel Saving Technology and only available on Cobalts

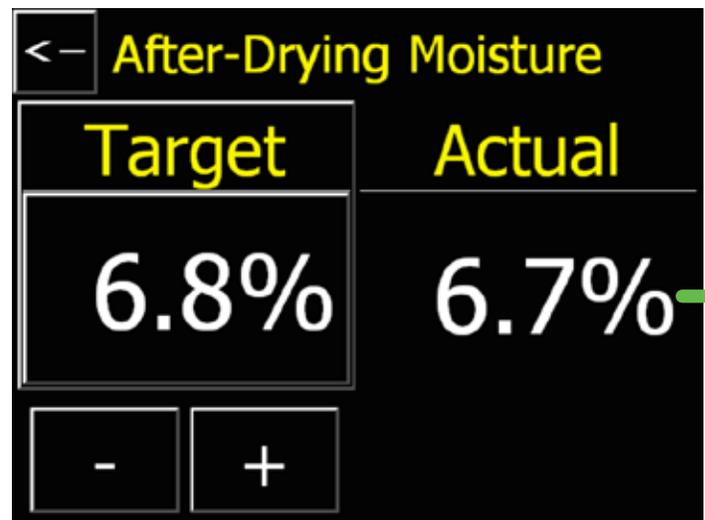
*Auto Shed works based on answering a very fundamental question:
Does this heater need to be running to dry cotton to the desired level?*

Look Mom...No Hands!

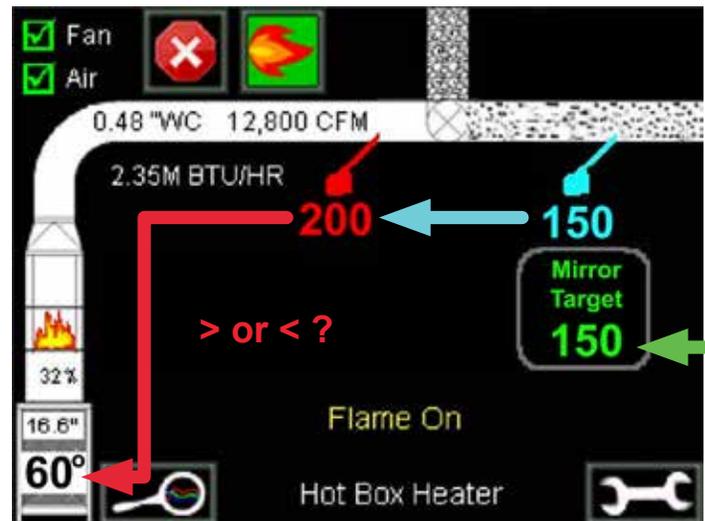


With Cobalt Heaters, saving fuel has never been easier! There are no required settings to adjust with Auto Shed. Tell the Mirror what moisture your gin stands operate best and it adjusts the heaters up and down and on and off...completely automatic.

Moisture Mirror Interface



Cobalt Heater Interface



New! Constant Velocity Shutters

New shutter design adjusts to real-time air changes to light the first time...every time.

Sam Jackson Heater Bodies have been solid performers for decades. One common challenge for any heater is that air flow changes during operation. Constant Velocity Shutters meet this challenge by keeping the air in the heater optimal. This results in extremely reliable lighting even when air flow changes. A secondary benefit of CV Shutters is combustion improvement observed by a cobalt blue flame.



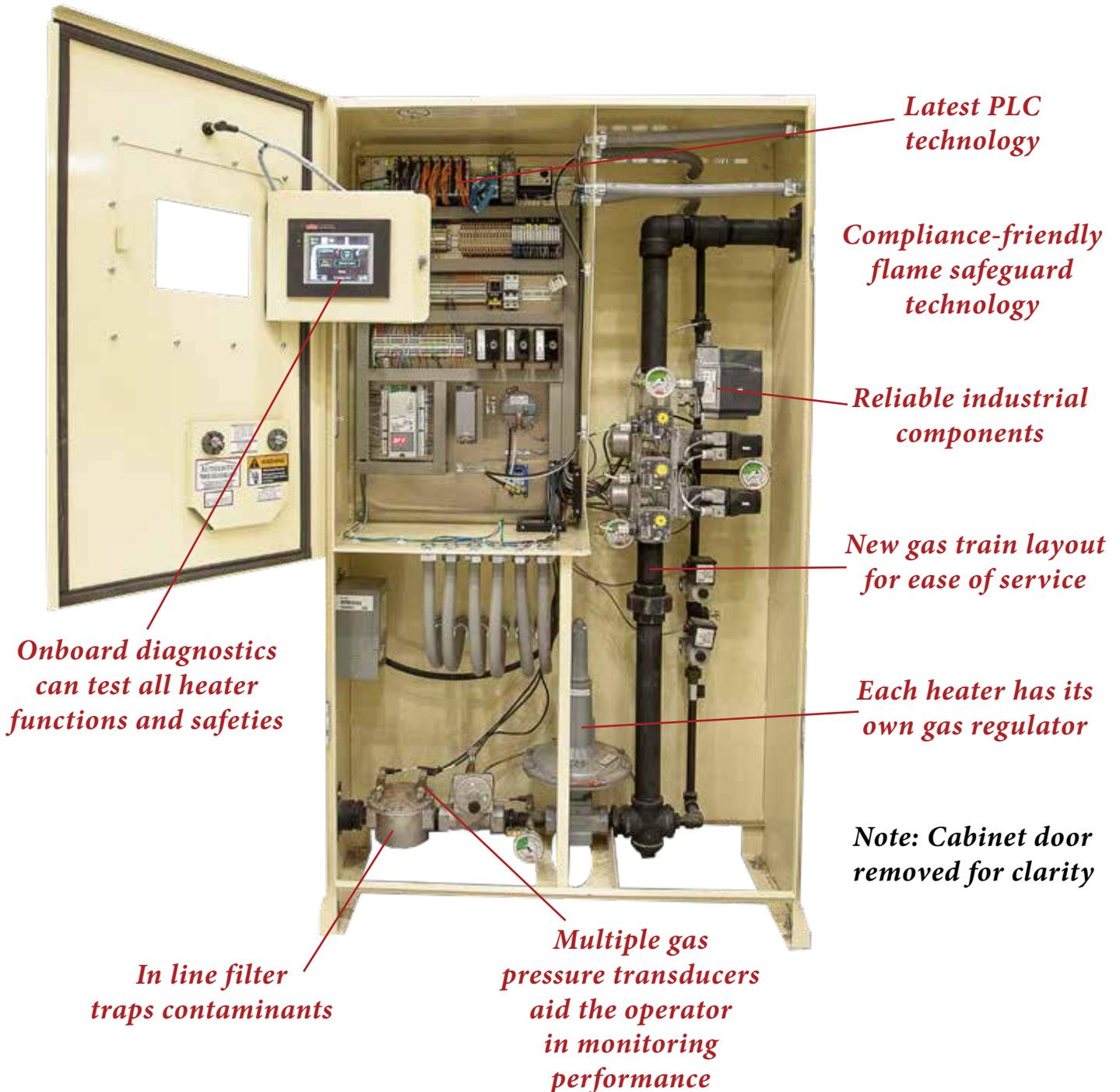
(Above: motor on the CV Shutters, below: Cobalt interface and cobalt blue flame)



Cobalt Gas-Fired Heaters

Control Cabinet

The new Cobalt Cabinet has a new layout, new control system and new gas train...you've never seen anything like it!



Heater Body

High-air volume design and automatic adjusting shutters turbo charges your high-air volume drying system.

Cobalt Heater Body



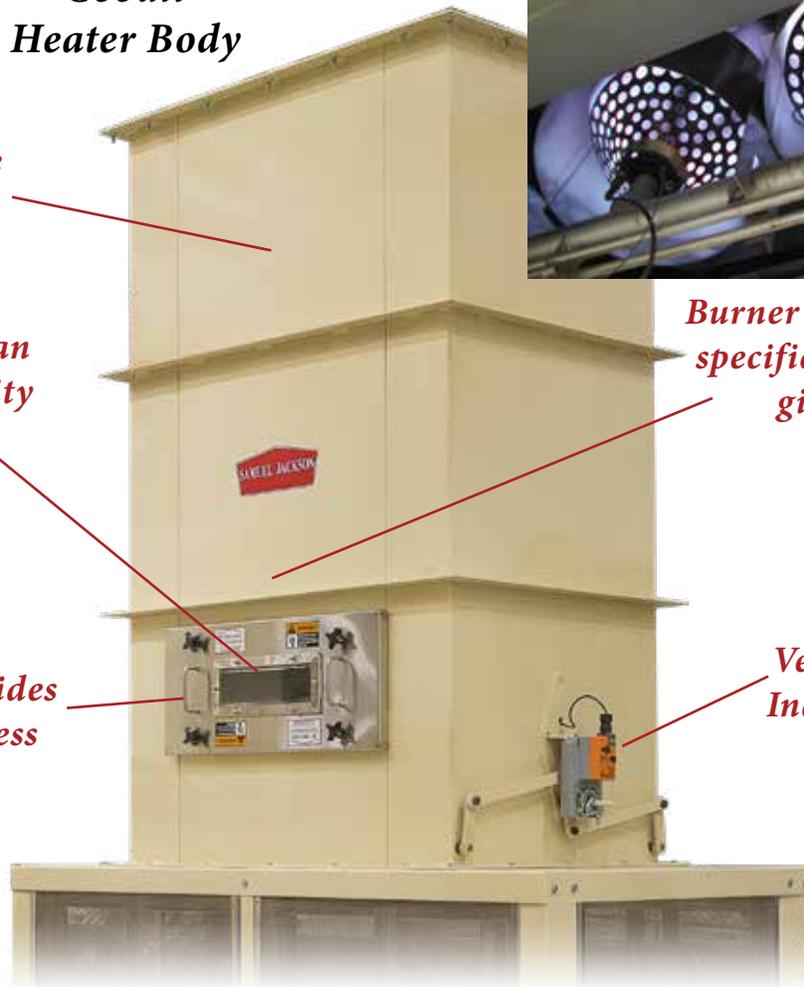
*High-air volume
friendly design*

*Windows to keep an
eye on flame quality*

*Burner heads designed
specifically for cotton
gin systems*

*Rugged door provides
easy & quick access*

*New! Constant
Velocity Shutters with
Industrial mod motors*



You probably haven't given a lot of thought to your heater body. Don't worry...we have! The Cobalt 2 above (two burner heads) and the Cobalt 1 (one burner head) designs ensure they are simple to install, easy to maintain, and deliver superior results in operation. Delta Series Heaters enjoy the same heater body less the Constant Velocity Shutters (only Cobalts have CV shutters). Don't let your heater be a weak point in your air handling system.

Cobalt Gas-Fired Heaters

Pull-Through Installations

Our heaters are great for pull-through applications and you'll appreciate all of the thoughtful touches on our screen support design.

Samuel Jackson Heaters can be equipped with Screen Support Stands for applications requiring pull-through operation. These sturdy stands have a stainless steel screen and generous surface area, increasing the time in between cleaning. Screens also remove easily, without bolts or latches, for fast access to the burner heads.

*(Right: a Cobalt 1 Heater,
below: three Cobalt 2 Heaters)*



Push-Pull Installations

Versatile mounting options easily accommodate push-pull applications.



Samuel Jackson Heaters can be equipped with a push fan kit, allowing them to be mounted on the outlet of a push fan. Push fan kits include an air diffuser sheet to reduce turbulent air flow across the burner head for more reliable lighting and operation.

(Left: Heaters in a basic push-pull installation, below: Heater push-pull installation with a plenum)

The Push Plenum provides a more advanced installation option for push-pull systems, yielding many benefits. The Push Plenum reduces turbulence through the heater, improving turn-down and saving fuel. Plenum users also experience less trouble with flame rod and spark plug fouling and have easier internal access for those rare times when maintenance is required.

