

RELIABLE  
FLEXIBLE  
COMMERCIAL **HEAT.**



COMMERCIAL BIOMASS SERIES

STRESS-FREE HEAT

# HEAT YOUR BUSINESS, GREENHOUSE, WORKSHOP, BARN, WAREHOUSE.



## 409 TITANIUM ENHANCED STAINLESS STEEL FIREBOX & WATER JACKET

Sourced only from domestic mills, our 409 Titanium Enhanced Stainless Steel provides the best combination of corrosion resistance, maximum heat transfer capabilities, and strength needed for the boiler firebox, water jacket and heat exchangers. When compared to all other steels, 409 Titanium Enhanced Stainless Steel is the best choice for outdoor furnace applications.



## AMERICAN MADE

All of our stoves are made with domestic stainless steel and produced in our International Falls, MN manufacturing facility.

# POOL, HOT TUB, AND EVERYTHING IN BETWEEN.



**FUEL STORAGE**

15 cubic yards of storage space, the bin is designed as a multi-fuel, auto-feed system, incorporating internal traveling augers to pull fuel from storage and transport it to the metering hopper

**AF-15 FUEL HOPPER**

**HOPPER LID**

Hydraulically operated covering for easy fuel loading and efficient observation of levels and conditions of loaded combustible material

**CROSS AUGER ASSEMBLY**

Effectively transports fuel from the bin to the metering hopper by incorporating multiple augers to pull combustibles from throughout the bin

**FRONT ACCESS DOORS**

Multiple latched doors for easy access to the mechanical hardware housed within the bin structure which allows for observance and general maintenance of the interior fuel delivery components

**METERING HOPPER AND AUGER ASSEMBLY**

Built in sensors ensure fuel presence for an adjustable speed auger feed system to efficiently shuttle fuel between the storage bin and the burn chamber

**CLASS A INSULATED CHIMNEY**

Incorporated into the 8" stack is a probe allowing the exhaust temperatures and quality to be monitored

**HEAT EXCHANGER DOOR**

This insulated door provides access to the triple-pass heat exchanger for general upkeep or inspection requirements

**FIREBOX DOOR**

Refractory lined and designed with our safety roller door latch system, this door provides access to the innovative "Omni-O" fire bed, making maintenance and combustion observance secure and risk-free

**CONTROL ROOM**

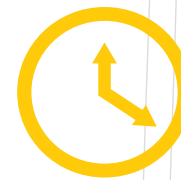
Spacious interior area which houses maintenance access while also providing climate refuge for the control panels

**BIO950 STOVE**





# MULTIPLE FUEL TYPES, ONE **AMAZING STOVE.**



## CONVENIENCE

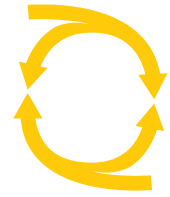
A fully automated fuel hopper system, designed for extended burn times, can be loaded to last anywhere from days to weeks, depending on your application. These systems are versatile, allowing for multiple fuel types without mechanical changes, all while providing not only heating but also unlimited hot water for various uses.



## COST SAVINGS

Efficiently heat multiple large spaces, reduce heating bills, and eliminate dependence on foreign fuels while promoting sustainability.

# HEAT THAT GOES ON AND ON AND ON AIR



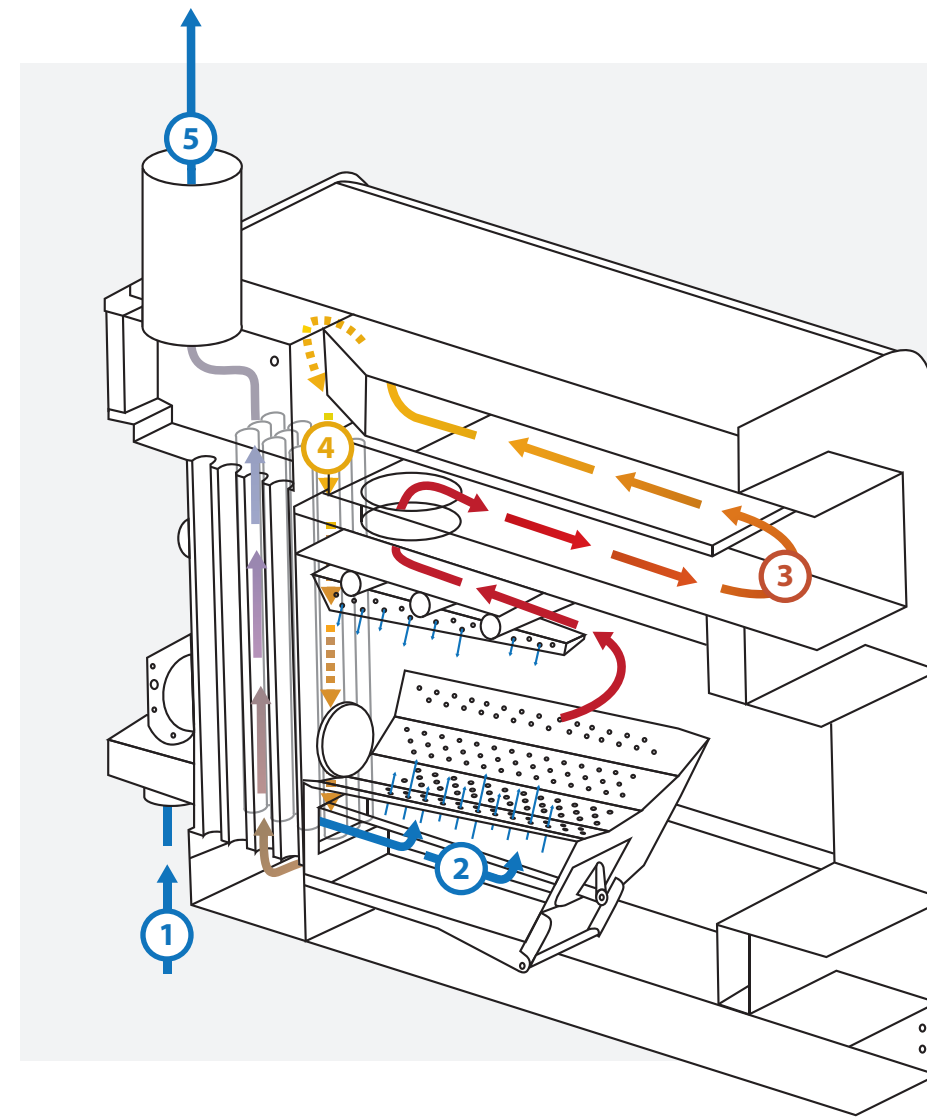
## POSITIVE AND NEGATIVE AIR PRESSURE COMBUSTION

The innovative "Omni-O" Fire Bed provides positive pressure combustion air 360 degrees around the firebox fuel, while promoting secondary combustion. The negative air pressure helps induce a draft through the multiple heat exchanger passes, optimizing heat transfer to the boiler water before exhausting impressively clean (nearly smokeless) and at low temperatures.



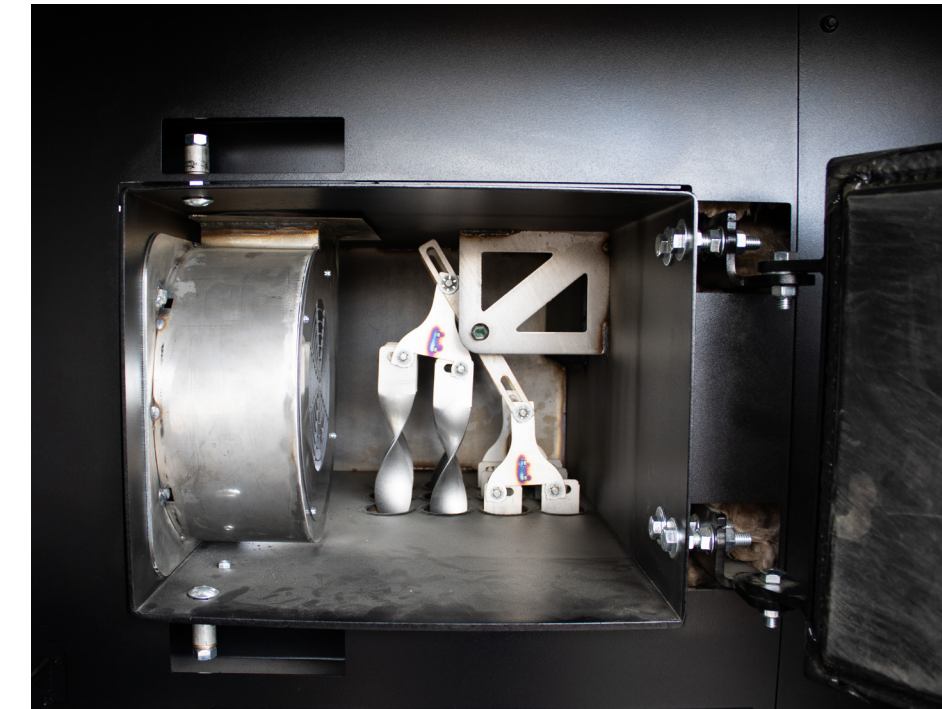
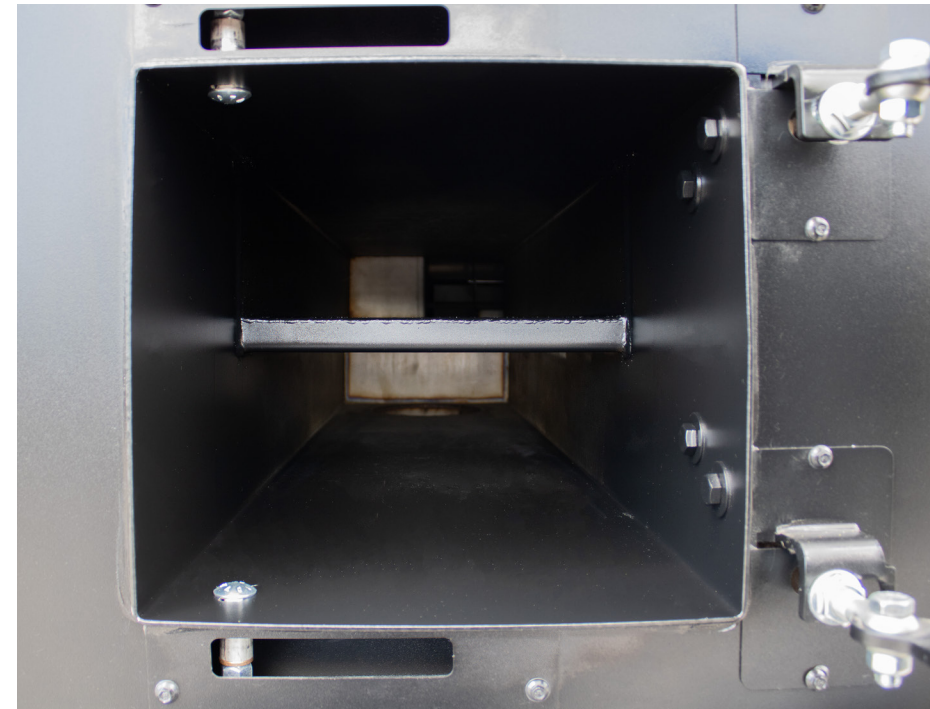
## MULTIPLE HEAT EXCHANGERS

The Bio950 boiler utilizes three different heat exchanger technologies maximizing heat transfer throughout various stages of the combustion process and enable fast heat recovery. The efficiency of these combined methods is proven as low exhaust temperatures are observed, ultimately resulting in lower fuel consumption rates.



## AIR TRAVEL PATH

1. Ambient air enters stove - Fresh air is drawn in to provide oxygen to the firebox.
2. Air is pushed through the "Omni-O" - Positive and negative air pressure forces air all around the fire cradled in the firebox, providing for high efficiency combustion.
3. Hot air traverses the water-filled triple-pass heat exchanger - Super-heated air enters a twisting, water-surrounded chute, heating the surrounding water.
4. Hot air moves through 2 sets of turbulated heat exchangers - Hot air then moves first down one set of water-surrounded tubes and then back up a second set.
5. Exhaust air exits the boiler - Low temperature air passes out of the boiler through the class-A chimney.



# STRAIGHTFORWARD OPERATION, DEPENDABLE PERFORMANCE.



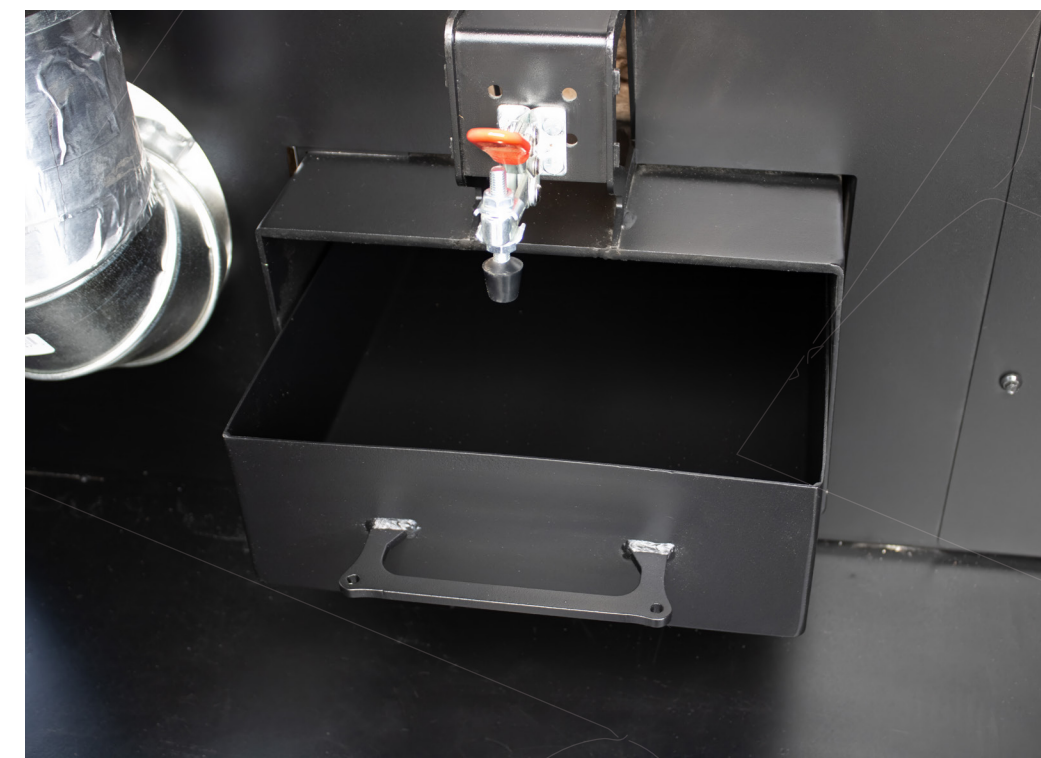
## EASY MAINTENANCE

Designed to ensure efficient, low-maintenance operation with multiple cleanout doors strategically placed to allow easy access to components. Extra large removable stainless steel ash pans simplify regular removal of ashes.



## SIMPLE DIGITAL CONTROLS

After initial set-up and tuning to the desired fuel, operation is automatically maintained with minimal user interface. Target water temperature and differential can be easily adjusted for optimal performance at various ambient temperatures.



## APPLICATIONS



COMMERCIAL BUILDINGS



BARNs & AGRICULTURAL BUILDINGS



WAREHOUSES



GREENHOUSES



RADIANT IN-FLOOR HEATING



POOLS / HOT TUBS



DOMESTIC HOT WATER



LARGE GARAGES & WORKSHOPS



FORCED AIR HEATING SYSTEMS



KILN DRY WOOD

### FIND MORE INFORMATION



### AUTHORIZED DEALER

	BIO950 BOILER	AF-15 FUEL BIN
ESTIMATED WEIGHT (EMPTY)	4,400 lbs	5,900 lbs
SIZE (W X L X H)	83" x 111" x 99"	97" x 173" x 100"
SLAB DIMENSIONS **	12' x 30'	-
CHIMNEY SIZE	8"	-
FIREBOX DOOR SIZE (L X H)	22" x 22"	-
SUPPLY / RETURN SIZE	(2) 2"   (1) 1-1/4"   (1) 3/4"	-
CAPACITY	400 gal (water)	15 Cubic yds (Fuel)
LOWER PRIMARY COMBUSTION	150 cfm	-
OVER FIRE COMBUSTION BLOWER	150 cfm	-
FORCED DRAFT FAN	300 cfm	-
APPROXIMATE SQ. FT.	20,000 - 32,000	-
APPROXIMATE BTU'S	950,000	-
INSULATION LEVEL ROOF/WALL	R49 / R30	-
409 STAINLESS STEEL	YES	-

*\*\*Please consult with a manufacturing representative to review Fuel Hopper to Biomass Boiler configurations for more accurate slab dimensions.*