

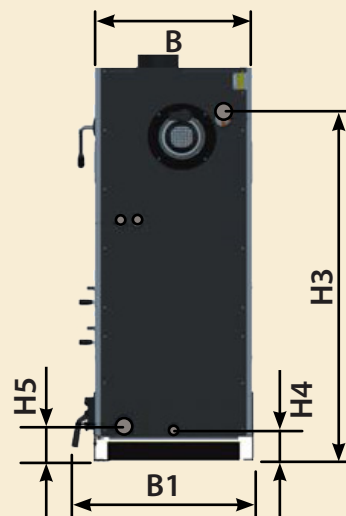
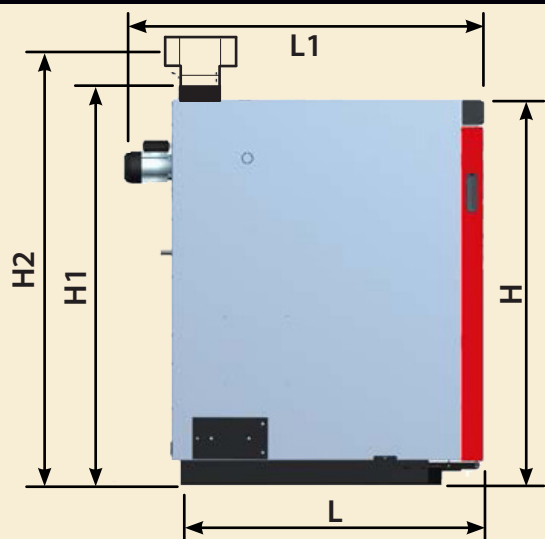
froling

**S3**

## Wood-fired Gasification Boiler

- Superior durability
- Exceptional features
- Our most efficient and easy to use wood boiler
- Approved for 2020 EPA emissions levels

- 1 Equipped with a variable speed, integrated, induced draft fan for easy boiler starts, even when the flue is cold. It also helps eliminate smoke leakage during start-up.
- 2 External heat exchange cleaning lever virtually eliminates the need for heat exchange hand brushing.
- 3 Superior insulation for radiation losses through the boiler jacket of less than .7%.
- 4 Lamdatronic controlled primary and secondary air dampers located out of harm's way.
- 5 Large ash clean-out openings, including easy access to below the heat exchangers.
- 6 Lambda control monitors and adjusts combustion through the entire burn cycle giving the cleanest burn possible and high efficiency levels.
- 7 Smoke extraction passage prevents smoke from escaping into the room while loading.
- 8 Steel cladding prevents wood bridging for more stable combustion and firebox wall protection.
- 9 Generous firebox sizes-beneficial for those with access only to soft woods, such as spruce, pine, fir, birch, and poplar.
- 10 Ignition port for fast and clean start-up. See video at [woodboilers.com](http://woodboilers.com).
- 11 Gasses enter into the vortex combustion chamber ensuring the right mixture of gases and pre-metered heated secondary air for complete combustion. Long combustion life with over 250 pounds of high grade refractory.



#### Dimension Data

	Unit	S3 Turbo 30	S3 Turbo 50
L Length of Boiler	inches	45 $\frac{3}{8}$	49 $\frac{1}{4}$
L1 Total Length Including Draft Fan	inches	49 $\frac{3}{8}$	53 $\frac{3}{8}$
B Width of Boiler	inches	22 $\frac{1}{2}$	26 $\frac{3}{8}$
B1 Width of Boiler Including Side Cleaning Door	inches	26 $\frac{3}{4}$	30 $\frac{3}{4}$
H Height of Boiler	inches	57 $\frac{7}{8}$	61 $\frac{3}{4}$
H1 Height of Boiler Including Flue Collar	inches	60 $\frac{1}{4}$	64 $\frac{1}{8}$
H2 Height, Flue Gas Connection (center)	inches	63 $\frac{3}{8}$ - 67 $\frac{1}{2}$ *	67 $\frac{3}{8}$ - 71 $\frac{1}{2}$ *
H3 Height of Supply Connection	inches	50 $\frac{3}{8}$	54 $\frac{3}{8}$
H4 Height of Drain Connection	inches	5 $\frac{1}{2}$	5 $\frac{1}{2}$
H5 Height of Return Connection	inches	4 $\frac{3}{4}$	4 $\frac{3}{4}$
Flue Collar Diameter	inches	6**	6**

#### Technical Data

	Unit	S3 Turbo 30	S3 Turbo 50
Weight - Empty	lbs	1179	1366
Water Contents	gals	32-	50
Loading Door	inches	13 X 14 $\frac{1}{2}$	13 X 14 $\frac{1}{2}$
Combustion Chamber Volume	cubic ft.	5	7.4
Recommended Wood Length	inches	18 - 21	18 - 21
Operating Temperature - Water	°F	180 - 194	180 - 194
Nominal Output	BTU/hr	95,539	163,783
Boiler Power Requirement	-	240V - 60Hz/15A	240V - 60Hz/15A
Electrical Consumption	W	180	180
Boiler Relief valve Setting	psi	30	30
Supply and Return Pipe Stub Size	inches	1 $\frac{1}{2}$	1 $\frac{1}{2}$
Minimum Boiler Loop Size	inches	1 $\frac{1}{4}$	1 $\frac{1}{4}$
Fill/Drain Valve Size	inches	$\frac{1}{2}$	$\frac{1}{2}$
Minimum Return Water Temperature	°F	131	131
Minimum Thermal Storage Tank Volume	gals	400	600
Wood Moisture Content	%	<25	<25

\*measurement is based on type of flue connection used.

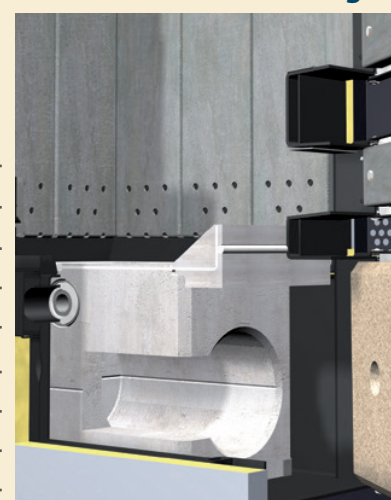
\*\*flue collar adaptor required.



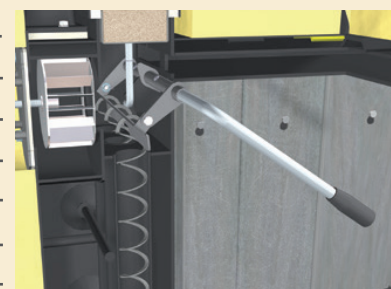
**LambdaTronic Control**



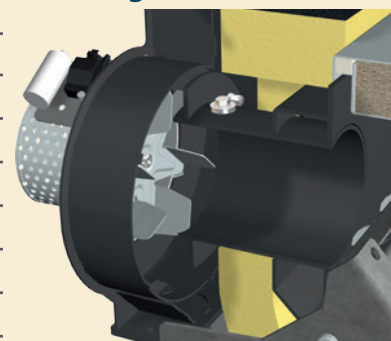
**Smoke Extraction Passage**



**Large Firebox and Robust Combustion Chamber**



**External Heat Exchange Cleaning**



**Variable Speed Fan**