



**Wood Biomass Boilers - 11kW to 125kW**  
(Chips, pellets and logs)

**Danish manufacturing**  
Certification NF-EN 303-5 Class 3

**Fully automatic with PID**  
Internet management (option)

## KSM Tuxedo - Wood Chips, Pellets and Logs



**Supplied by:**  
Core Biomass Ltd  
Company No. 08880409

**COREBIOMASS**

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## Biomass boilers for combined fuel wood max. 35% humidity: Wood Chips (max.P45) - Wood pellets 6/8/10 mm - dry wood logs

Electronic PID manages the combustion, controlling the output to match the heat demand. The System includes a 5.7" colour screen, oxygen sensor (Lambda), temperature probes (water and exhaust gas). The electrical cabinet is delivered fully wired and tested at the factory.

Cleaning: automatic tube cleaning and ash removal from the heat exchanger.

Safety: Sprinkler system with tank and thermal valve

### KSM Tuxedo optional accessories:

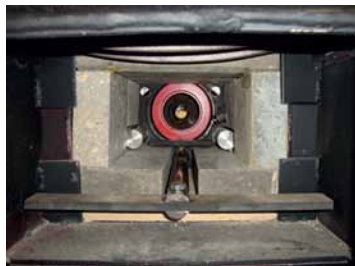
- Automatic ash removal
- Larger ash containers
- Automatic ignition
- Draft fan extractor with or without frequency control
- Silo extraction systems:
  - Hydraulic scrapers
  - Sweep auger
- Silo fill level monitoring
- SMS Alarm



#### Automatic ash removal system.

A horizontal auger through the combustion chamber removes the ashes from furnace and fly ash from the fire tubes of the heat exchanger.

Ash is moved into a 100L container. Automatic ash removal increases efficiency as this reduces the cleaning frequency



#### ← Automatic scraper removes ashes from furnace

The scraper is operated by an electrical actuator that removes the fine ash from the furnace and helps prevent clinker build up.

→ **With auto-ignition the boiler starts automatically.** The heating cycle can be controlled by the thermostat.

Automatic ignition is achieved via an ignitor which creates electrical resistance over a coil which generates heat, a fan then blows the hot air (800° C) through a nozzle pointed at the fuel in the furnace.

Automatic ignition is not recommended when using fuels over 25% moisture.



← **PCT 400**, electronic PID control with oxygen and temperature sensors.

Settings for selected fuels pre-programmed into control board (additional setup may be required)

Remote management and monitoring – via internet  
Error alarm system – via SMS (Requires internet)



## Tuxedo Range:

The Tuxedo range is suitable for domestic and small commercial applications and is available in 5 different configurations, each optimised to suit varying fuel specifications and accessible installation space.

The Tuxedo range is available from 11kW to 125kW

### Tuxedo Standard: 11kW - 35kW ( Wood Pellets )

Tuxedo Standard boilers are delivered fully assembled and ready to start. The boiler includes an integrated fuel hopper available from 275L to 400L. This system can utilise gravity fed fuels such as pellets.

### F- Auto: 11kW to 125kW ( Wood Chips )

Boilers are equipped with a large air valve designed to accept fuels from external fuel silos. The F-Auto can be fitted with a sweep auger or moving floor silo able to store hundreds of m<sup>3</sup>.

### Auto: 11kW to 125kW ( Wood Pellets )

Similar to the F-Auto, these boilers are equipped with an air valve designed to accept fuel from an external fuel silo, but unlike the F-Auto, the fuel must be gravity fed. These boilers can be fuelled from gravity fed silos such as grain bins.

### FX: 11kW to 125kW ( Wood Chips )

These boilers are equipped with a prefabricated silo manufactured from steel panels. The silo can be located externally which allows for easy refilling. Pre-fabricated hoppers are available in the following sizes: 0.5m<sup>3</sup>, 1m<sup>3</sup>, 2m<sup>3</sup>, 4m<sup>3</sup> and 6m<sup>3</sup>.

## RHI Scheme

A selection of KSM boilers are domestic and non-domestic **RHI compliant** and have been tested with a range of fuels. For further details on RHI compliant fuels and suitable boilers please contact your supplier.

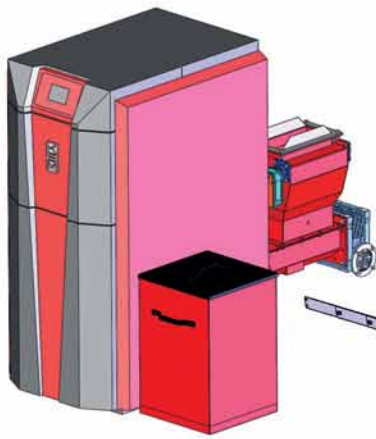
To read more about the RHI scheme and how to claim please visit: [www.corebiomass.co.uk/rhi](http://www.corebiomass.co.uk/rhi)



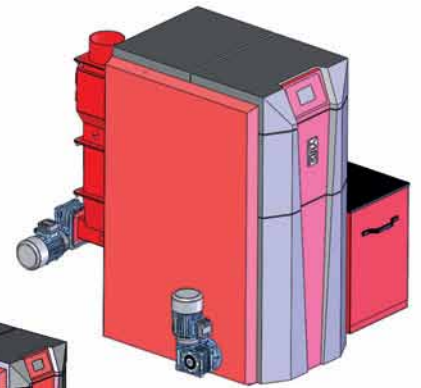
KSM Tuxedo	10	20	30	50	75	100	125
Rated Power (Pellets)	11kw	19kw	35kw	50kw	75kw	95kw	125kw
Volume Of Water In Heat Exchanger	90 l.	110 l.	145 l.	180 l.	210 l.	290 l.	290 l.
Log Door Dimensions	25x35cm	25x35cm	25x35cm	35x55cm	35x55cm	35x55cm	35x55cm
Efficiency	92%	92%	92%	92%	92%	92%	90%
CO Emissions (Wood Chip)	89ppm	30ppm	17ppm	85ppm	89ppm	73ppm	126ppm
Minimum Operation Load	25%	25%	25%	25%	25%	25%	25%
Width	69 cm	69 cm	69 cm	92 cm	92 cm	92 cm	92 cm
Length	90 cm	97 cm	104 cm	140 cm	149 cm	155 cm	155 cm
Height	125 cm	145 cm	145 cm	165 cm	165 cm	165 cm	165 cm
Total Length With Integrated Silo	150 cm	157 cm	164 cm	-	-	-	-
Total Length Model F-Auto	170 cm	177 cm	184 cm	215 cm	224 cm	230 cm	230 cm

Please note, KSM biomass boilers are designed to burn a wide range of fuels, but it is the responsibility of the customer to correctly set up and operate the boiler should the fuel be changed after commissioning. We cannot guarantee the output of the boiler when fuels other than dry clean wood are used.

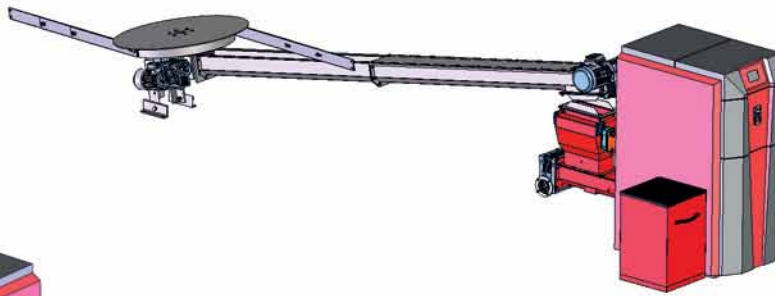




**F-Auto**



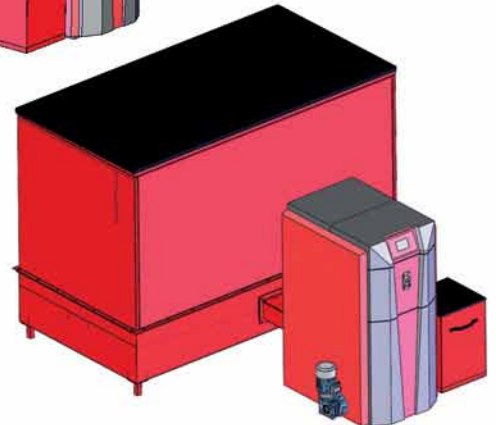
**Auto**



**Standard**



**FX**



Sweep auger. Walls and floor are constructed onsite (not included in equipment supplied by KSM)



Prefabricated hopper manufactured from steel panels.



Brochure sent by:

**Manufacturer:**

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