

PYROT

Rotation combustion 150 – 540 kW

EN



FUELS:
Pellets, Woodchips, Wood Shavings

WOOD COMBUSTION SYSTEM

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»The combination of combustion technology and digital modulating output control enables efficiency levels of up to 94 percent.«

Rotation combustion

The patented rotation combustion system of the PYROT wood boiler is state of the art. A feed screw conveyor continuously conveys wood fuel onto a moving grate, where gasification of the fuel occurs (with Lambda regulated primary air supply). Continuous gasification occurs under air starvation. Rotary fans mix rising combustion gases with secondary air that has been atomised and subjected to angular momentum. This ensures thorough mixing with the combustion gases.

Clean and efficient combustion

The proven combustion technology of the PYROT achieves similar emission values to those of a modern gas combustion system and keeps the release of CO, NO_x and dust particles to a minimum, subject to fuel type. The combination of combustion technology and digital modulating output control enables efficiency levels of up to 94 percent.

Boiler control

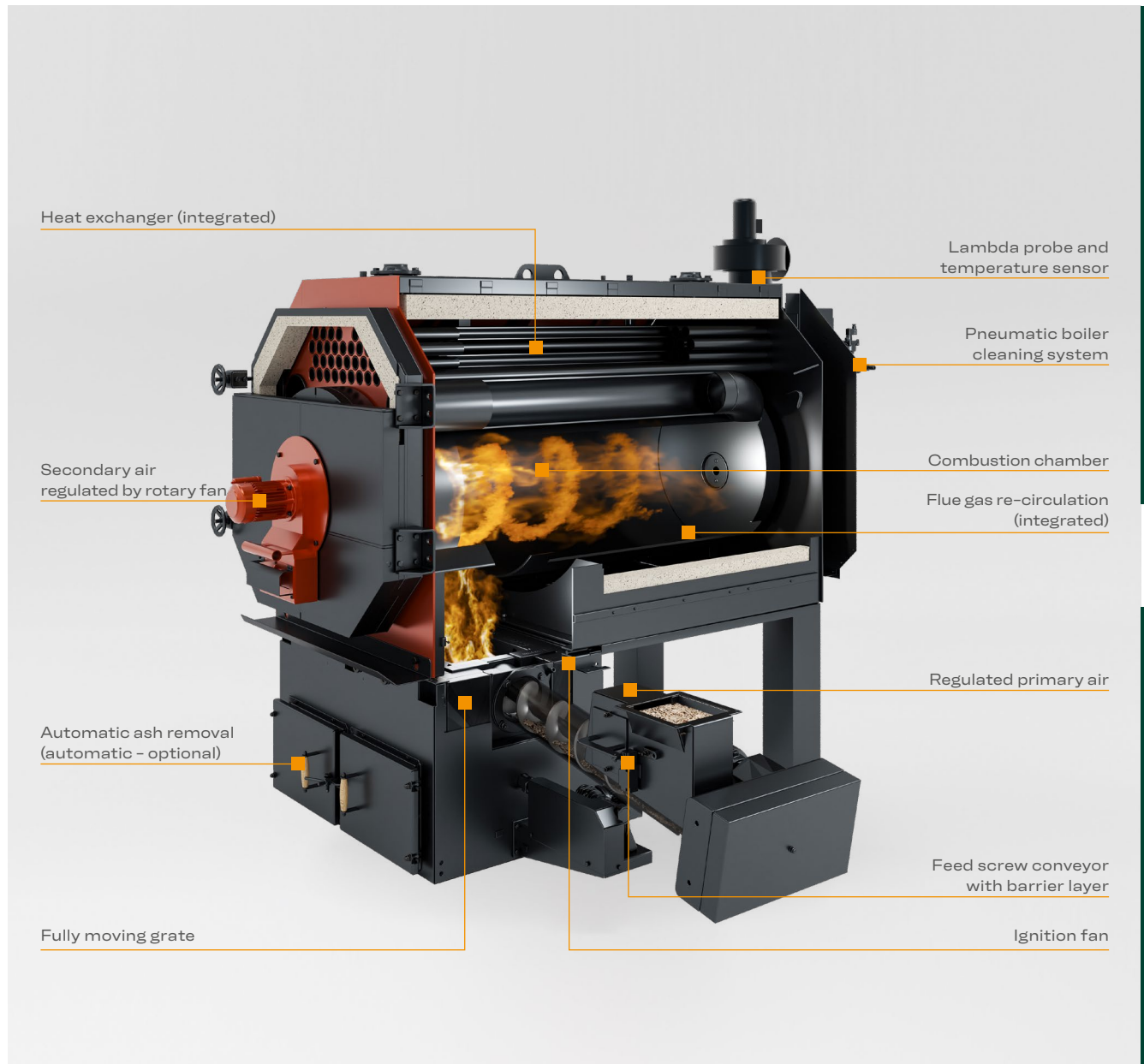
The digital modulating output control ensures optimum combustion by accurately controlling the relationship between the combustion air, recirculated flue gas and fuel. The control unit monitors:

- Flow and return temperatures of the wood boiler
- Condition of the firebed
- Light barriers on the supply system
- Flue gas temperature
- Oxygen content in the flue gas (Lambda probe)

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Design and performance



Take advantage of these benefits:

- Fully automatic biomass combustion system with rotation combustion 150 to 540 kW
- For dry wood fuels with a water content of 5 to 30%
- High efficiency of up to 94 %
- Modulating output control (4:1 control range)
- Hot water boiler with rotary combustion with exhaust gas temperatures below 190 °C at full load
- Low emissions during load operation thanks to regulated primary and secondary air supply and low-particle combustion
- Automatic ignition precludes the need for firebed maintenance and saves fuel
- Easy to service thanks to fully automatic ash removal, optional pneumatic cleaning system and flue gas dust extractor
- Available as a complete, ready-to-use containerised solution

TYPE	POWER RANGE*
150	38 to 150 kW
220	55 to 220 kW
300	75 to 300 kW
400	100 to 400 kW
540	135 to 540 kW

*depends on fuel and water content

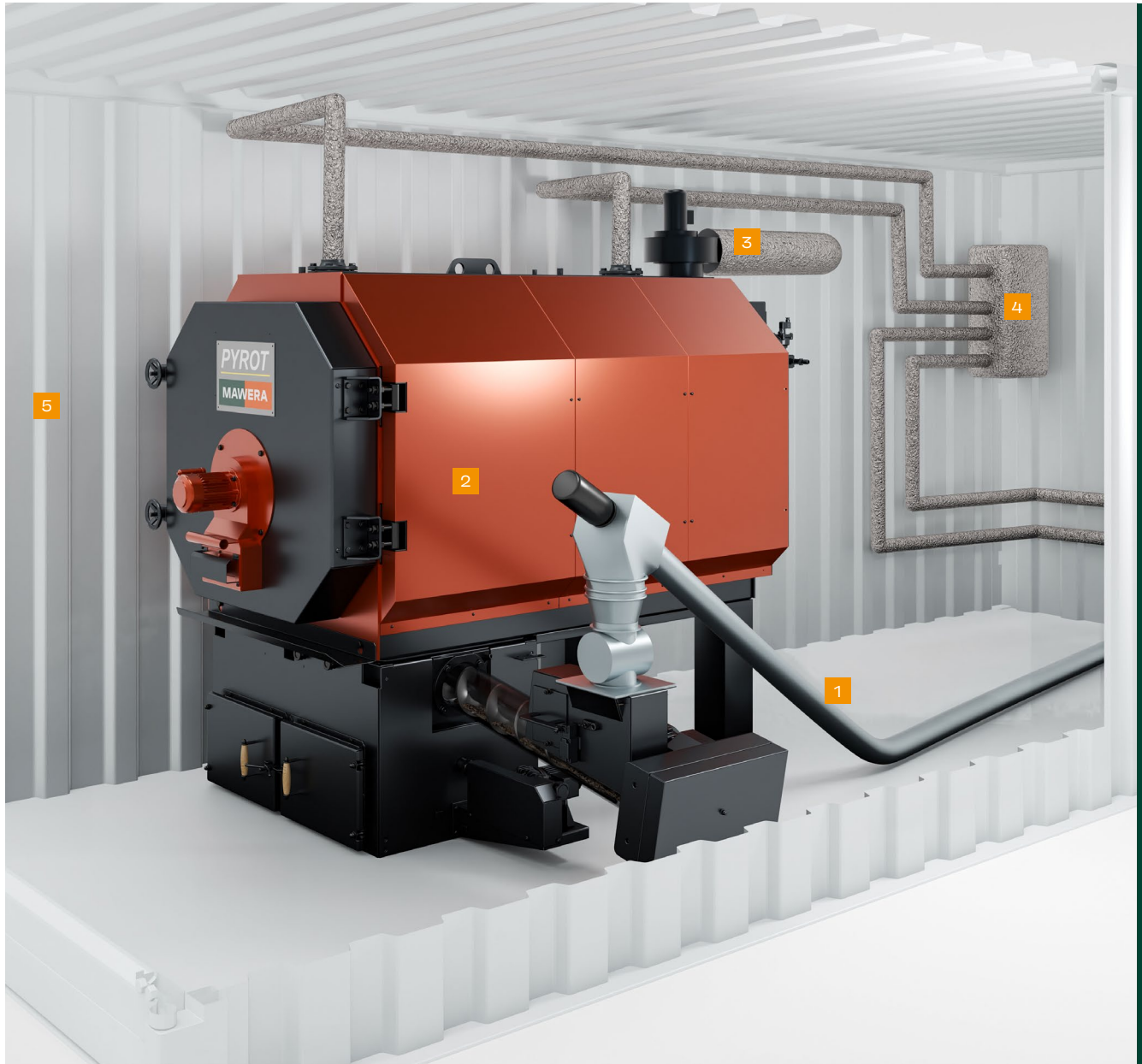
MODEL		150	220	300	400	540
Rated heating output	kW	150	220	300	400	540
Dimensions SE						
Length	mm	2,830	3,075	3,430	3,470	3,700
Width	mm	1,050	1,330	1,330	1,570	1,570
Height	mm	1,825	2,084	2,082	2,260	2,340
Max. operating pressure	bar (ü)	3	3	3	3	3

SE = Screw feed

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System example



- 1 Fuel discharge using coreless screw and shut-off slide valve
- 2 Combustion: PYROT
- 3 Flue gas duct
- 4 Hydraulic installation
- 5 40-foot shipping container as a turnkey application

OPTIONAL ACCESSORIES:

- Automatic ignition device
- Automatic combustion chamber ash removal
- Compressor for pneumatic boiler cleaning

Example: Heat supply for a school

- Combustion: PYROT
- Output: 400 kW
- Fuel: Pellets

Application areas PYROT:



Woodworking industry



Local and district heating



Municipal and public property



Hotels and hospitality industry



Plant nurseries

Fired up for energy from biomass.

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