

Commercial boiler



maxi^{mus} 150 - 300



Wood chips

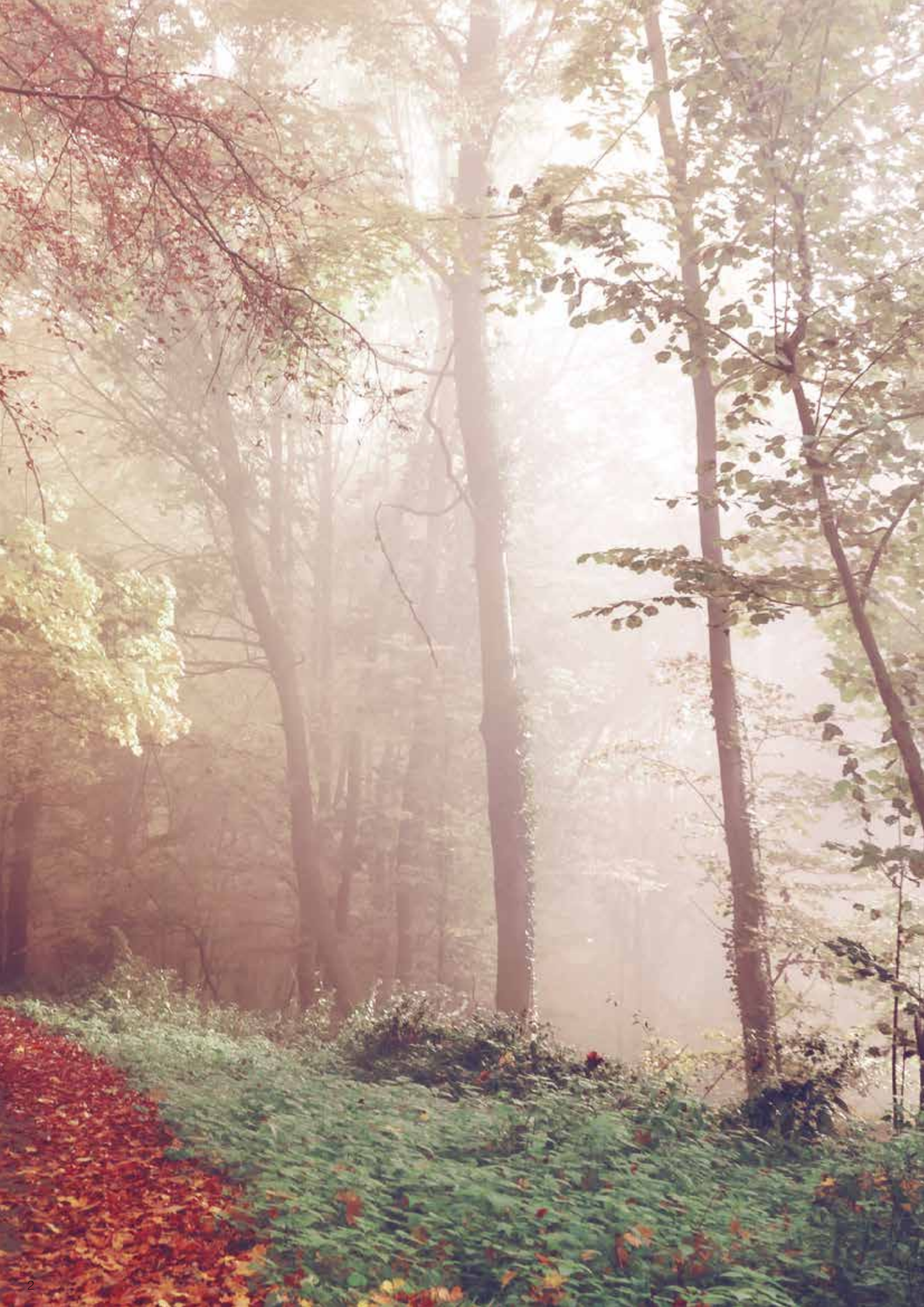
or



Pellets

- + Electrostatic dust filter
- + Flue gas recirculation
- + Stepping grate

SOLARFOCUS





Maximum output

Selecting the right heating boiler is an important decision that will have an impact for many years. The pellet and wood chip boiler **maxi**^{MUS} generates heat for applications requiring a medium to high output. The maximus is an optimum solution for commercial sites, for the construction of apartment buildings and for applications requiring an elevated level of operational reliability. When installed in a cascade configuration (consisting of a number of boilers), the maximus can deliver a maximum output of up to 1.8 MW.

The technology

- Combustion chamber temperature monitoring with 'recirculation control
- Electrostatic dust filter
- Touch screen controls that can be monitored by your smartphone, PC and Laptops.

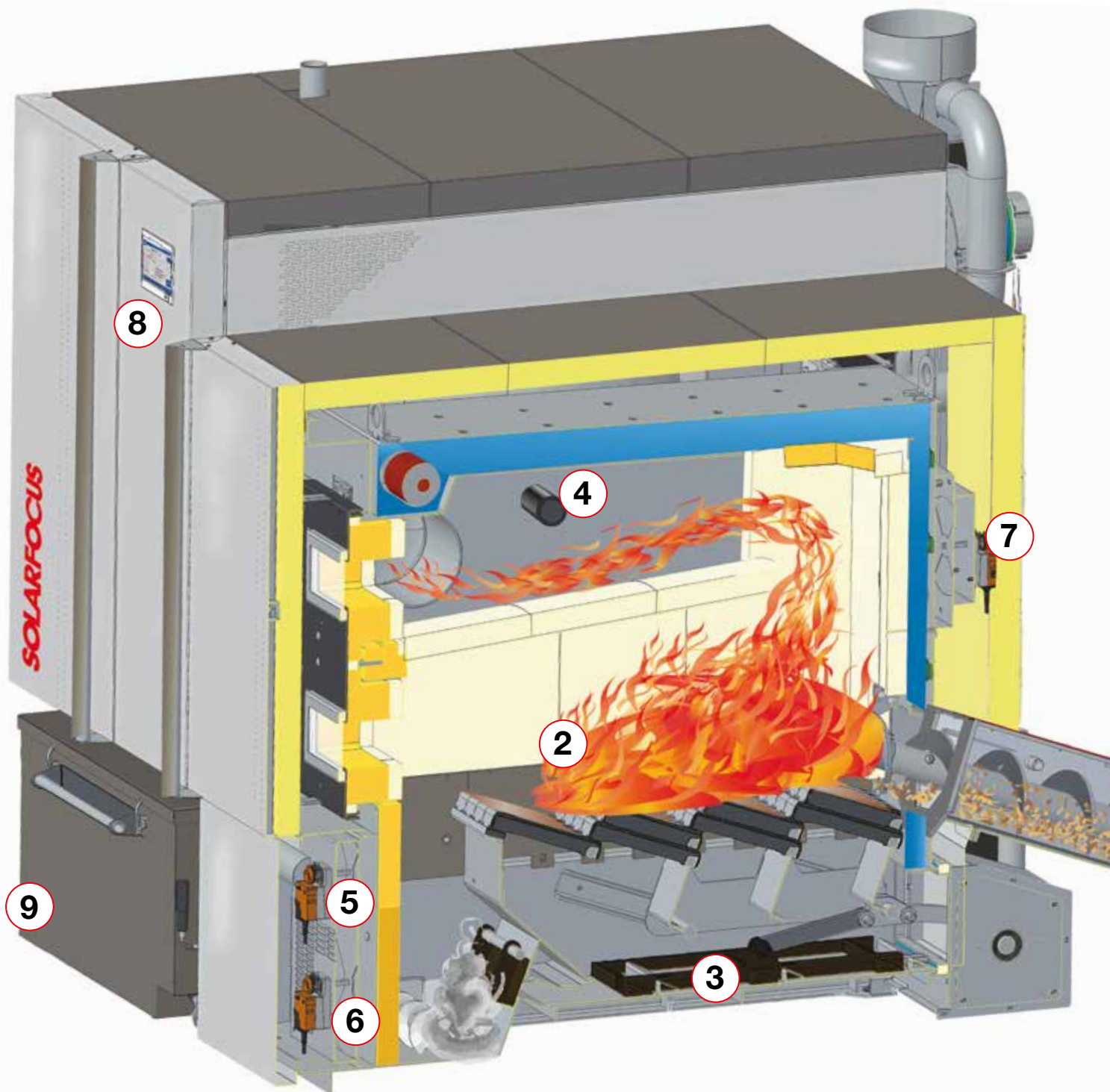
Your benefits

- Featuring our latest user friendly technology available.
- Expertly designed to help you save on fuel costs without compromising convenience.
- Independence from fossil fuels like oil and gas

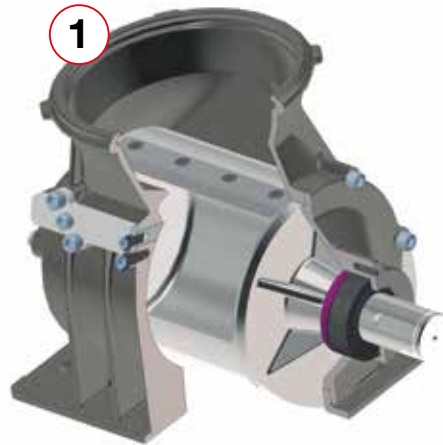
The high-performance biomass system

The **maxi**^{mus} boiler is a result of distinguished innovation. A stepping grate ensures the seamless firing of the fuel conveyed into the combustion chamber. This enables the boiler to process a wide range of fuels, such as pellets or wood chips, with outstanding efficiency and low emissions. Combustion chamber temperature monitoring and integrated flue gas recirculation ensure a steady combustion of fuel materials of varying qualities while preserving the boiler's service life. An electrostatic dust filter is used to clean the exhaust gases. The filter is automatically

cleaned in regular intervals. Both technologies come as standard equipment. The ID fan with EC motor and a lambda sensor ensure an efficient and clean combustion at both full and partial load operations. The large 7" **ecomanager**^{touch} control unit combines all boiler control functions in one convenient user interface. The controls can also be mirrored on a smartphone, PC and tablet computer using a VNC server or a smartphone app.



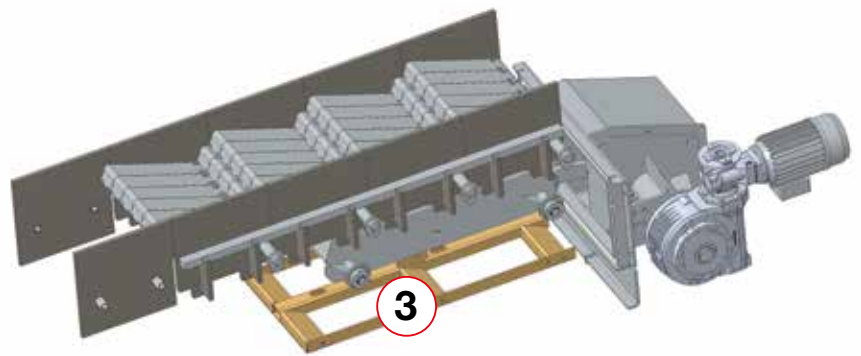
Sophisticated technology in detail



Rotary valve with plug-in unit (1)

The rotary valve offers maximum protection against burn-back for all kinds of fuels. The generous single chamber design means that only fuel pieces material of excess lengths will have to be cut. This results in exceptionally low wear and tear and an extended service life. The hardened blades can also be exchanged if necessary.

Depending on the size of the fuel pieces, different conveyance augers are used for fuel transportation. This results in exceptional efficiency at the lowest possible physical strain.

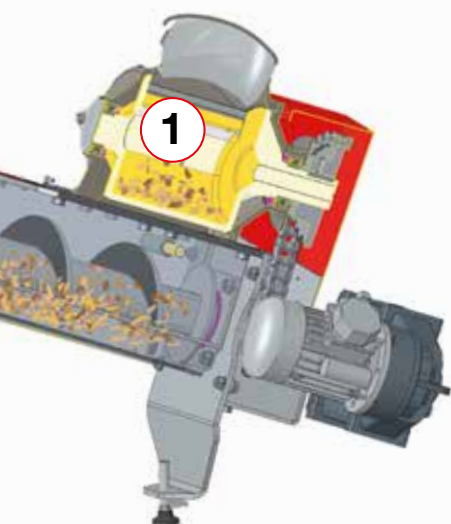


Combustion chamber with stepping grate (2) and ash scraper (3)

High temperature-resistant combustion chamber with stepping grate. The stepping grate moves at variable speeds depending on the required force and ensures the clean combustion of more difficult materials, which in turn prevents the formation of slag and ensures operational reliability.

Combustion chamber temperature monitoring (4) recirculation control (5)

The combustion chamber temperature is monitored continuously. In the event particularly dry materials (pellets) cause the temperature to rise too far, the standard recirculation function is activated and cools down the combustion chamber. This greatly extends the service life of the parts exposed to flames.



Caption:

- 1 Feeder with rotary valve
- 2 High temperature-resistant combustion chamber with push grate.
- 3 Ash scraper
- 4 Combustion chamber temperature monitoring
- 5 Recirculation control
- 6 Primary air control
- 7 Secondary air control
- 8 Controller **eco**manager-touch
- 9 Ash box

Sophisticated technology in detail

Primary air control (6) secondary air control (7)

The “stepped combustion” of biomass has the objective of achieving the lowest possible emissions when firing with fuel materials of varying qualities. Primary and secondary air is added as required for an optimised combustion process. The integrated sensors respond to any change in the combustion chamber and thereby ensure an optimised gas composition.

Controller (8)

With **its intuitive ecomanager-touch** boiler control, the SOLARFOCUS offers outstanding user-friendliness. The state-of-the-art control concept offers maximum user-friendliness via a touch screen terminal when controlling the heating boiler and the entire heating system. This allows all SOLARFOCUS products within a heat network to be linked and synchronised in the best possible way.

Ash box (9)

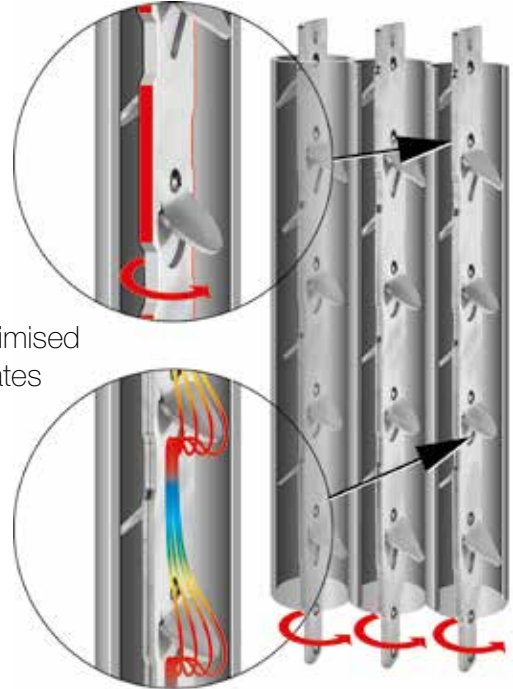
One single ash box is used to collect all ashes from the push grate, the heat exchanger cleaning and the dust collector.

It is also possible to have the ashes transported into larger external containers and thereby achieve extended discharge intervals.

Heat exchanger cleaning system (10)

Turbulators with flow-optimised guide plates clean the heat exchangers automatically and ensure low flue gas temperatures.

Rotating scraping edge



Flow-optimised
guide plates

Lambda sensor (11)

Lambda technology experts since 1981. Guarantees optimised combustion by adjusting the combustion process to the respectively used fuel type.



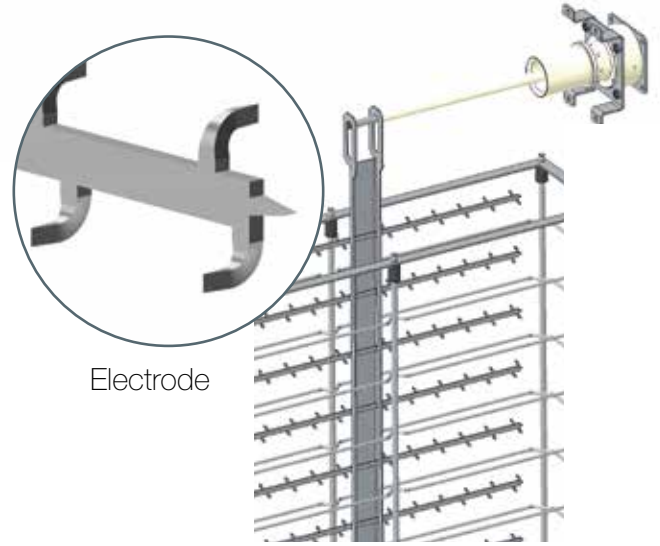
Legend:

- 9 Ash box
- 10 Heat exchanger cleaning
- 11 Lambda sensor
- 12 Electrostatic dust collector
- 13 ID fan with EC motor technology



Electrostatic dust collector (12)

To filter even the last remaining dust particles from the flue gas stream, SOLARFOCUS has developed an integrated electrostatic dust collector that comes as standard equipment. An electrode ionises the tiny dust particles, which then form a layer of dust deposits around the electrode. The electrode is cleaned automatically during the course of the heat exchanger cleaning process. External cleaning facilities that frequently incur additional costs are no longer required. Even the most stringent dust emission standards can be met effortlessly.



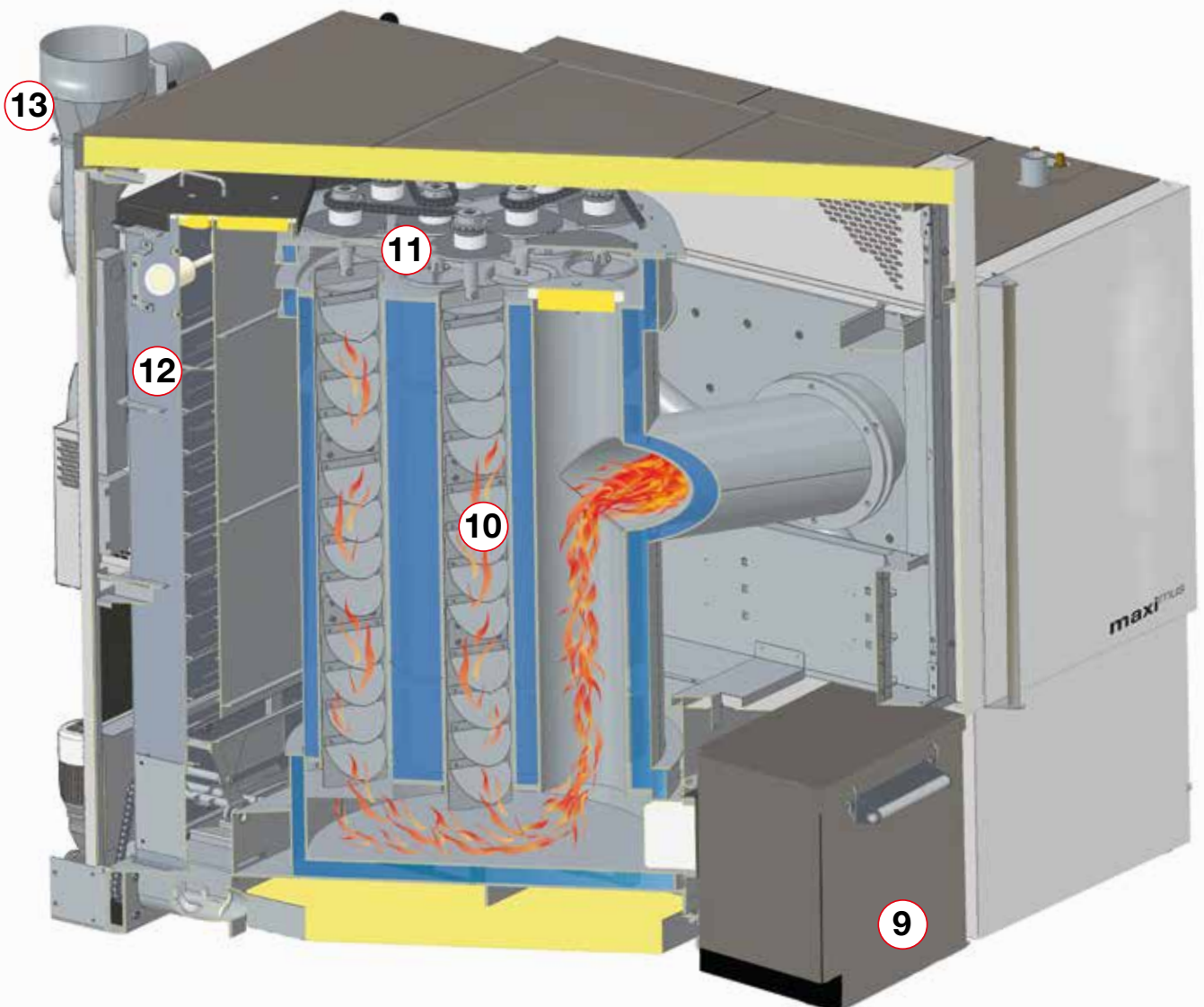
Electrode

ID fan with EC motor technology (13)

The speed-controlled ID fan with stainless steel impellers allows for the modulated operation of the heating boiler. The EC motor (electronically commutated motor) guarantees the highest degree of efficiency.



13



13

11

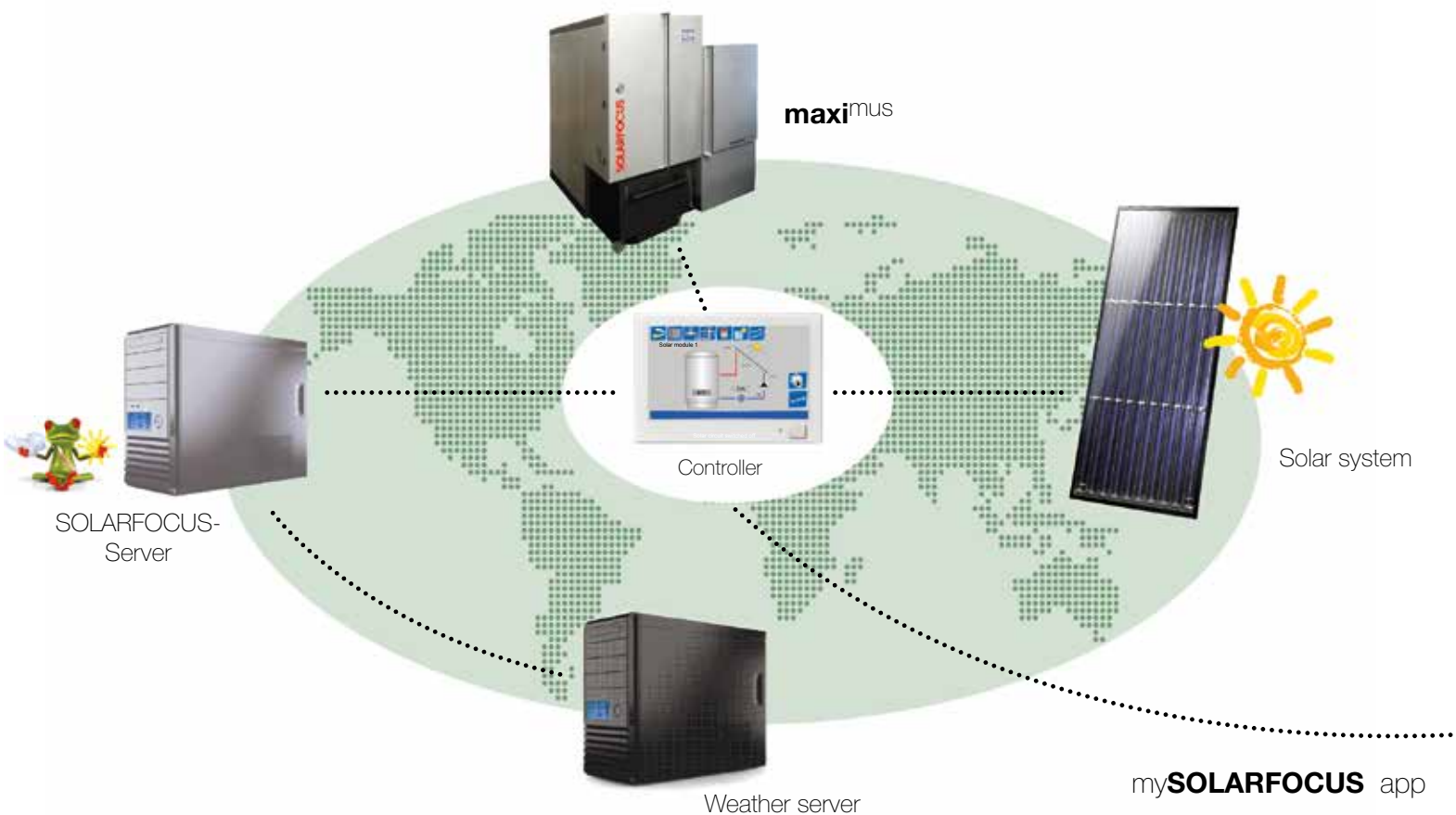
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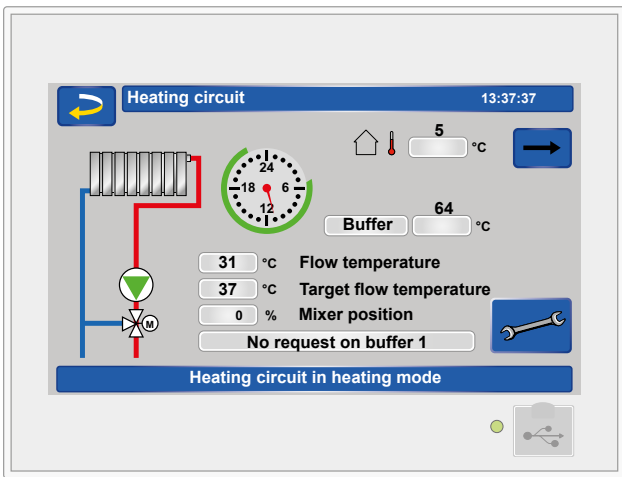
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9

Intelligent controller

- + Intuitive control unit with 7" touch display
- + Takes the weather forecast into consideration
- + my**SOLARFOCUS** app





Both changing outside temperatures and the own personal living habits are taken into consideration. If the boiler is used in combination with a solar system, the burner will only start up if the required heating energy cannot be provided in full by the solar system. This prevents any uneconomical boiler start-ups.

The **eco**manager-touch is very user-friendly. It allows for the individual configuration of the heating system right from the beginning.

eco manager-touch control with Weatherman function

The weatherman function is a standard feature. This remarkable innovation not only gives the user added convenience, but also helps saving money.

The control unit retrieves live data from a weather server and uses the data to instruct the **maxi**mus when to heat – or when to remain inactive, i.e. when sunshine is expected.



mySOLARFOCUS app

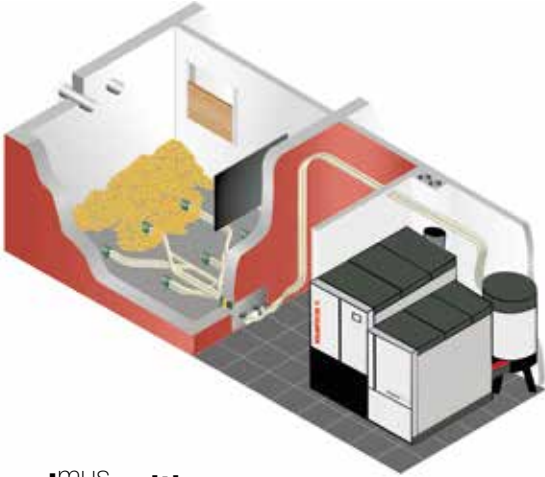
You can control your heating system even more conveniently with the **mySOLARFOCUS** app. In combination with the Weatherman function, it only takes a few seconds to configure your heating system on your smartphone. It does not matter where you are, in the office, on the couch or on vacation. Smartphone app (Android and Apple) with attractive design for intuitive operation of the main heating parameters. There is also a function to visualise the solar energy yield (heat meter required).



Storage and extraction options

Pellets

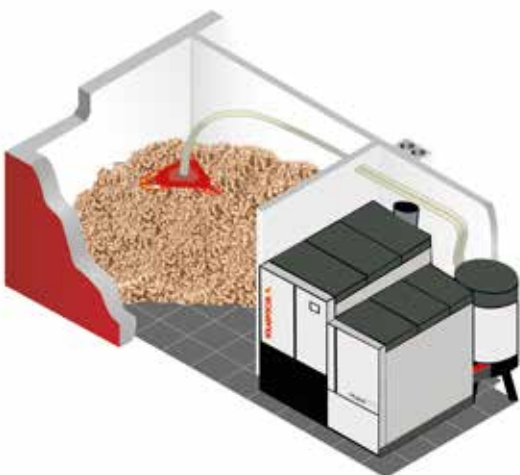
maxi^{mus} with suction heads and automatic suction head diverters



maxi^{mus} with extraction auger



maxi^{mus} suction system with mole



Wood chips

Direct extraction with agitator up to Ø 5 m



Direct extraction with agitator up to Ø 6 m with loading auger



Downpipe direct extraction system



Thinking outside the box

is at the forefront of every product we develop. The Research, Development, Production, Quality Assurance and Administration departments are located in the Austrian town of St. Ulrich. SOLARFOCUS employs people who care for our natural environment and are committed to the use of renewable energies.



St. Ulrich/Steyr (Austria)



Lorsch (Germany)

INNOVATION – ECONOMY – QUALITY

SOLARFOCUS is shaping the future with products that serve mankind and protect the environment! We at SOLARFOCUS develop, manufacture, and supply cutting edge green technology products and systems for thermal applications with our main products for the following key segments:

Biomass heating
Solar energy systems
Heat pumps and
Fresh water technology

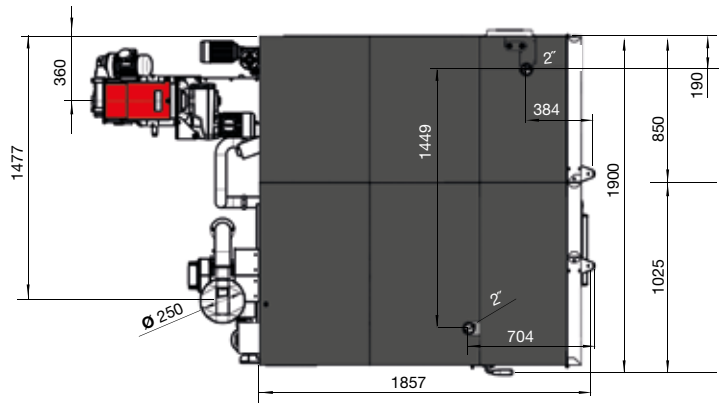
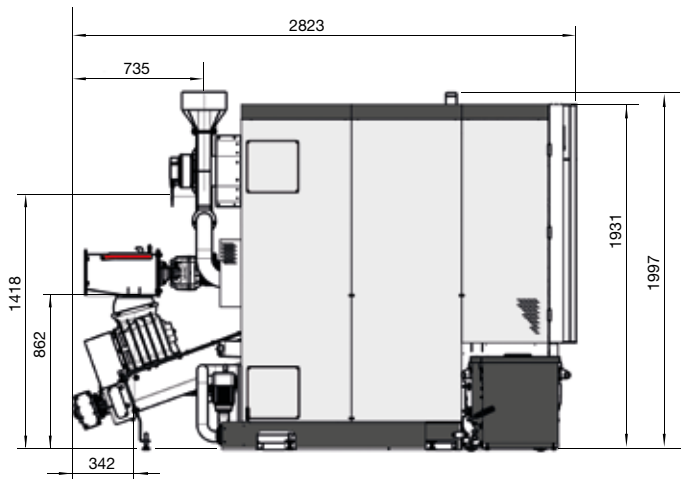
SOLARFOCUS is one step ahead: Thanks to ongoing research, development and cooperation with renowned research institutes and partners, our company has accomplished a dynamic corporate development. Our products are only available from specialist dealers across Europe. Ongoing training and seminars with our partners ensure that plant operators receive project-oriented advice and systems are installed in a professional way.









Our AWARDS include:

- The Business Award “Golden Pegasus”
- Young Entrepreneur’s Award
- Award for innovation “Energy Genius” 2016, 2011, 2003, 1995
- UK Built It Award 2015
- Best Business Award 2014
- Slovenian Innovation Award 2014
- Polish Innovation Award “Zloty Medal” in 2012 and 2013
- Italian innovation prize for energy-efficient technologies 2012
- Nomination for the National Award for Innovation
- Environmental Protection Award of Upper Austria
- “Building Technology Award” in 2004

and many more confirm our corporate philosophy.





maxi ^{mus}		150	200	250	300
Max. output with pellets	[kW]	149	201	249	299
Max. output with wood chips	[kW]	140	201	240	-
Product label energy efficiency class		A+ 	A+ 	A+ 	A+ 
Composite label energy efficiency class		A+ 	A+ 	A+ 	A+ 
Max. permissible operating pressure	[bar]	3	3	3	3
Flow temperature adjustable range	[°C]	70 - 93	70 - 93	70 - 93	70 - 93
Max. permissible operating temperature	[°C]	95	95	95	95
Min. return flow temperature	[°C]	60	60	60	60
Height incl. adjustable feet (without connections)*	[cm]	195	195	195	195
Flue gas pipe DM	[cm]	25	25	25	25
Height at centre of flue gas pipe****	[cm]	203	203	203	203
Weight	[kg]	2900	2900	2900	2900
Water content	[l]	565	565	565	565
Pellet storage tank	[l]	300	300	300	300
Ash box	[l]	160	160	160	160
Infeed dimensions	[cm]	99	99	99	99
Minimum room height	[cm]	275	275	275	275
Thermal overload protection		G 1/2" ET	G 1/2" ET	G 1/2" ET	G 1/2" ET

* adjustable feet at min. height, boiler class 5 to EN 303-5:2012
 Suitable types of fuel wood chips ISO 17225-4, P16S-P31S (G30-G50), max.40 % water content;
 Pellets ISO 17225-2-A1, ENplus A1
 Electrical connection 400 V AC / 50 Hz / 16 A (fuse)

Quality made in Austria

- Biomass heating
- Solar energy systems
- Heat pumps
- Fresh water technology



Products for



Pellets

Pellets + log wood

Log wood

Wood chips

Solar energy

Fresh water

Heat Pump

Your customer advisor

Austria

SOLARFOCUS GmbH, Werkstrasse 1, A-4451 St. Ulrich/Steyr

e-mail: office@solarfocus.at

Tel.: +43 (0) 7252 / 50 002 - 0

web: www.solarfocus.at

Fax: +43 (0) 7252 / 50 002 - 10

Germany

SOLARFOCUS GmbH, Marie-Curie-Str. 14-16, D-64653 Lorsch

e-mail: office@solarfocus.at

Tel.: +49 (0) 6251 / 13 665 - 00

web: www.solarfocus.at

Fax: +49 (0) 6251 / 13 665 - 50