AVAILABLE WITH BROAD-BAND LAMBDA PROBE AND SERVO-MOTORS

BETTER HEATING
INNOVATIVE AND COMFORTABLE
Wood is a domestic and environmentally friendly fuel that grows in large quantities, burns CO₂-neutral and makes it independent of international trouble spots. In addition, numerous jobs are secured through the use of local wood. Therefore, wood is the optimal fuel from both an economic and an ecological point of view. There are different quality classes depending on the wood used.
For almost sixty years Froling has specialised in the efficient use of wood as a source of energy. Today the name Froling stands for modern biomass heating technology. Froling firewood, wood chip and pellet boilers are successfully in operation all over Europe. All of our products are manufactured in our factories in Austria and Germany. Froling’s extensive service network ensures that we can handle all enquiries quickly.

Top-quality boiler technology at a mid-range price

The S3 Turbo firewood boiler focuses on the basics. It includes many features that you would normally only find in high-end firewood boilers.

• Patented, cylindrical high-temperature turbulence combustion chamber for excellent combustion values

• Separate pre-heating chamber door for easy pre-heating

• Carbonisation gas extraction system for smoke-free reloading

• Speed-regulated induced draught fan for output control and full operating safety.

GUARANTEED QUALITY AND RELIABILITY FROM AUSTRIA

International pioneer in technology and design
Sophisticated fully automatic operation
Excellent environmental compatibility
Environmentally responsible energy efficiency
Renewable and CO₂-neutral fuel
Ideal for all types of house
Up to 5 year warranty (subject to warranty conditions)
FIREWOOD BOILER
S3 TURBO

- Speed-regulated induced draught fan
- Large fuel loading chamber for logs up to 56 cm in length
- WOS system Efficiency Optimisation System
- Top quality insulation to minimise radiant heat loss
- Manual adjusters for primary and secondary air (or actuators with Lambdatronic)
- Large maintenance openings for easy cleaning

S3 TURBO FIREWOOD BOILER
Cladding to protect the inner wall of the boiler and for a longer service life

S-Tronic PLUS controller or Lambdatronic controller

Carbonisation gas extraction system prevents smoke escaping during reloading

Separate pre-heating chamber door for easy pre-heating

Patented high-temperature turbulence combustion chamber ensures low emissions

THE LATEST TECHNOLOGY
A SUCCESSFUL DESIGN

Special carbonisation gas extraction system

The special carbonisation gas extraction system also prevents any gas from escaping when refilling. This is applicable at every stage of combustion. Enjoy modern heating with wood!

Advantages:
- No flue gas escapes during reloading
- The boiler room stays clean

Speed-regulated induced draught fan

The primary and secondary air settings are adjusted by the technician during commissioning. The function-monitored induced draught fan enables the system to adjust to different operating conditions. This offers excellent output adjustment with full operating safety. In the S3 Turbo with broadband lambda probe the primary and secondary air settings are adjusted by means of servo-motors, ensuring that output is adapted to given requirements at every stage of combustion.

Advantages:
- Easy to operate
- Adapts to all operating conditions
- Full operating safety

WOS system

The WOS (efficiency optimisation system) consists of special turbulators, which are placed in the heat exchanger pipes. The lever arm mechanism ensures easy cleaning of the heating surfaces from outside. An additional benefit: clean heating surfaces lower energy consumption.

Advantages:
- Even greater efficiency
- Easy cleaning from outside
- Fuel savings

6 | froling
High-temperature turbulence combustion chamber

Froling uses the patented, cylindrical high-temperature turbulence combustion chamber in the S3 Turbo. This means the boiler delivers excellent combustion values. The generous dimensions of the combustion zone guarantee low emissions. So by using a Froling S3 Turbo you are helping to keep our air clean.

Advantages:
- Excellent combustion values
- Low emissions
- Much more environmentally friendly

Large fuel loading chamber for half-metre logs

The S3 Turbo can be loaded with half-metre firewood easily from the front. The loading chamber is 55 cm deep and has a generous reserve of space. Often it is only necessary to fill the boiler once a day. Strong steel guards protect the loading chamber and keep it clean.

Advantages:
- Easy front-loading
- Long combustion time
- Long reloading intervals
Firewood reload calculation

Too much firewood can result in fuel that is not completely burnt despite the storage tank being loaded. The integrated reload calculation can be used through simple parameterization of the storage tank type and the storage tank volume. Taking into account the current storage tank charge, the boiler control calculates the missing energy. When the boiler door is opened, the required amount of fuel for loading the storage tank is displayed in kilogrammes.
RBG 3200 Touch room console

The RBG 3200 Touch has an impressive touchpad interface. The menu structure means it is intuitive and easy to use. The 17x10 cm console with colour screen shows the most important functions at a glance and automatically adjusts the background lighting to the conditions. The room consoles are connected to the boiler controller using a bus cable.

RBG 3200 room console

For even more convenience you can use the RBG 3200 room console and the new RBG 3200 Touch. You can control the heating system easily from your living room. Important system data is clearly displayed and settings can be changed at the push of a button.

FRA room temperature sensor

By using the FRA room temperature sensor, sized just 8x8 cm, the main modes of the corresponding heating circuit can be easily selected and adjusted. The FRA can be connected both with and without affecting the store. The adjusting wheel allows you to change the room temperature by up to ± 3°C.

Heating circuit module

With wall casing and one contact sensor as heating circuit control for up to two mixer heating circuits.

Hydraulic module

With wall casing and two immersion sensors to control one or two pumps and one isolating valve with up to six sensors.

WMZ solar package kit

Set for measuring heat quantity, consisting of a volume pulse transmitter ETW-S 2.5, a collector sensor and two contact sensors for recording flow and return temperatures.
The Lambdatronic controllers allow for efficient energy management. Up to 4 storage tanks, up to 8 hot water tanks and up to 18 heating circuits can be integrated into the heating management system. You also benefit from the ability to integrate other means of energy production, such as solar panels.

**S3 Turbo with S-Tronic and H2 hygienic layered tank**

![Diagram of S3 Turbo with S-Tronic and H2 hygienic layered tank]

**NOTICE**

National and regional regulations requiring the use of weathercompensated controls should be observed.

**S3 Turbo with Lambdatronic, layered tank and Unicell**

![Diagram of S3 Turbo with Lambdatronic, layered tank and Unicell]

**OPERATING AND MAINTENANCE AREAS**

<table>
<thead>
<tr>
<th>Minimum distances - S3 Turbo [mm]</th>
<th>20-45</th>
</tr>
</thead>
<tbody>
<tr>
<td>A  Distance - front of boiler to wall</td>
<td>800</td>
</tr>
<tr>
<td>B  Distance – side of boiler to wall</td>
<td>800 (200)$^1$</td>
</tr>
<tr>
<td>C  Distance – back to wall</td>
<td>500</td>
</tr>
<tr>
<td>D  Distance – side of boiler to wall</td>
<td>200 (800)$^1$</td>
</tr>
</tbody>
</table>

$^1$ The side of the boiler where the WOS lever is located (B or D) should be at least 800 mm from the wall to allow easy access for connecting the appliance and for maintenance work (e.g. induced draught).
### Dimensions - S3 Turbo [mm]

<table>
<thead>
<tr>
<th></th>
<th>20</th>
<th>30</th>
<th>40</th>
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<td>L</td>
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<td>B</td>
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<td>H2</td>
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<td>H5</td>
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<tr>
<td>Flue pipe diameter</td>
<td>149</td>
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</table>

### Technical specifications - S3 Turbo

<table>
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<th>20</th>
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<tbody>
<tr>
<td>Nominal output</td>
<td>20</td>
<td>30</td>
<td>40</td>
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<tr>
<td>Energy (ErP) label*</td>
<td>A’</td>
<td>A’</td>
<td>A’</td>
<td>A’</td>
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<tr>
<td>Fuel loading chamber capacity</td>
<td>140</td>
<td>140</td>
<td>210</td>
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<tr>
<td>Fuel loading door (width/height)</td>
<td>330 / 370</td>
<td>330 / 370</td>
<td>330 / 370</td>
<td>330 / 370</td>
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<tr>
<td>Water capacity</td>
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<td>120</td>
<td>190</td>
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<tr>
<td>Boiler weight</td>
<td>525</td>
<td>535</td>
<td>610</td>
<td>620</td>
</tr>
</tbody>
</table>

Composite label (boiler + controls)

The ecodesign requirements according to VO (EU) 2015/1189, Annex II, point 1, are met.
<table>
<thead>
<tr>
<th>Pellet boiler</th>
<th>Firewood boiler</th>
<th>Dual fuel boiler</th>
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</thead>
<tbody>
<tr>
<td>PE1 Pellet 7 - 35 kW</td>
<td>S1 Turbo 15 - 20 kW</td>
<td>SP Dual compact 15 - 20 kW</td>
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<tr>
<td>PE1c Pellet 16 - 22 kW</td>
<td>S3 Turbo 20 - 45 kW</td>
<td>SP Dual 22 - 40 kW</td>
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<tr>
<td>P4 Pellet 48 - 105 kW</td>
<td>S4 Turbo 22 - 60 kW</td>
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<tr>
<td>Wood chip / Large boilers</td>
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<tr>
<td>T4e 20 - 350 kW</td>
<td>TI 350 kW</td>
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<tr>
<td>Turbomat 150 - 500 kW</td>
<td>Lambdamat 700 - 1500 kW</td>
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<tr>
<td>Wood combined heat and power</td>
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<tr>
<td>Fixed-bed gasifier CHP 45 - 500 kWel</td>
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</tbody>
</table>

Your Froling partner

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P0310920 - All illustrations intended as a guide only! We reserve the right to make technical changes without prior notice. Errors and omissions excepted.