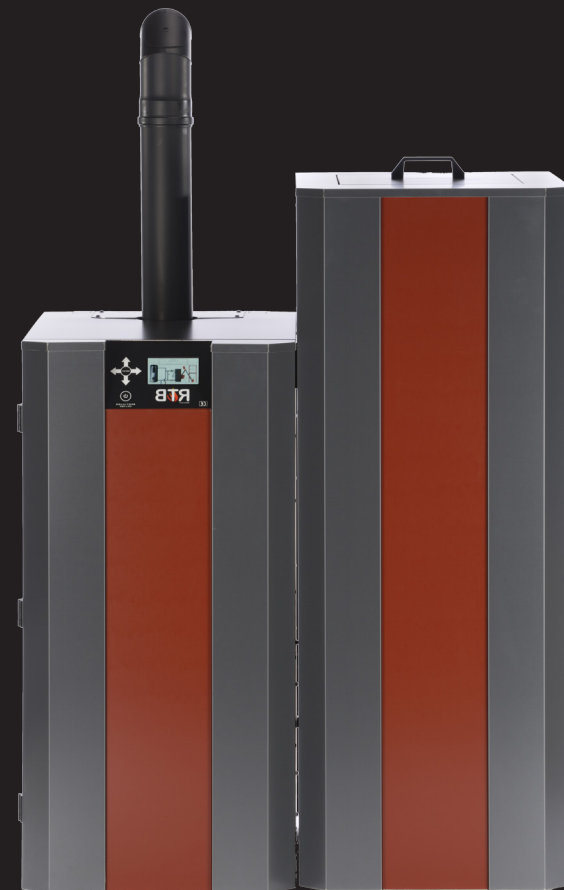
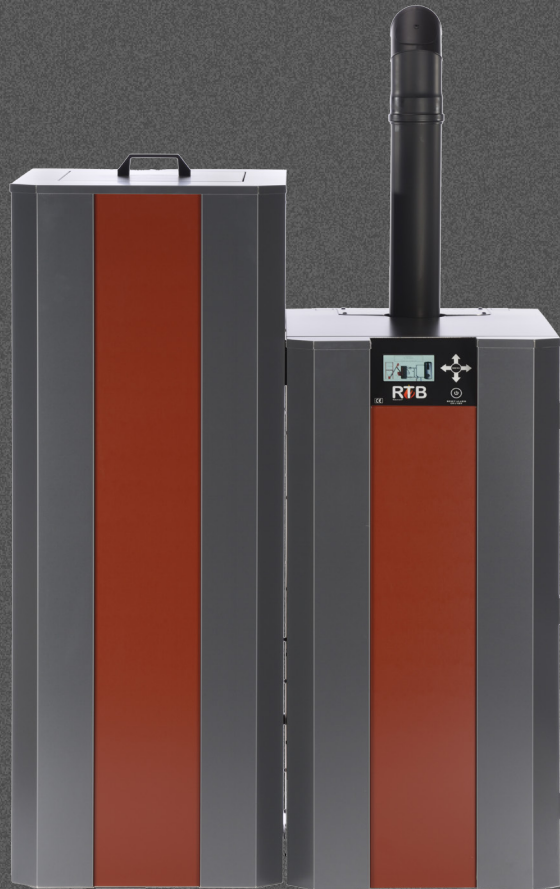


RTB  
Ready to burn®





# Ready To Burn®

The new pellet boiler from NBE has arrived!

The RTB - Ready To Burn® boiler is 100% produced in Denmark and 100% Danish Design. The RTB boiler is produced to make your life as a pellet boiler owner much easier.

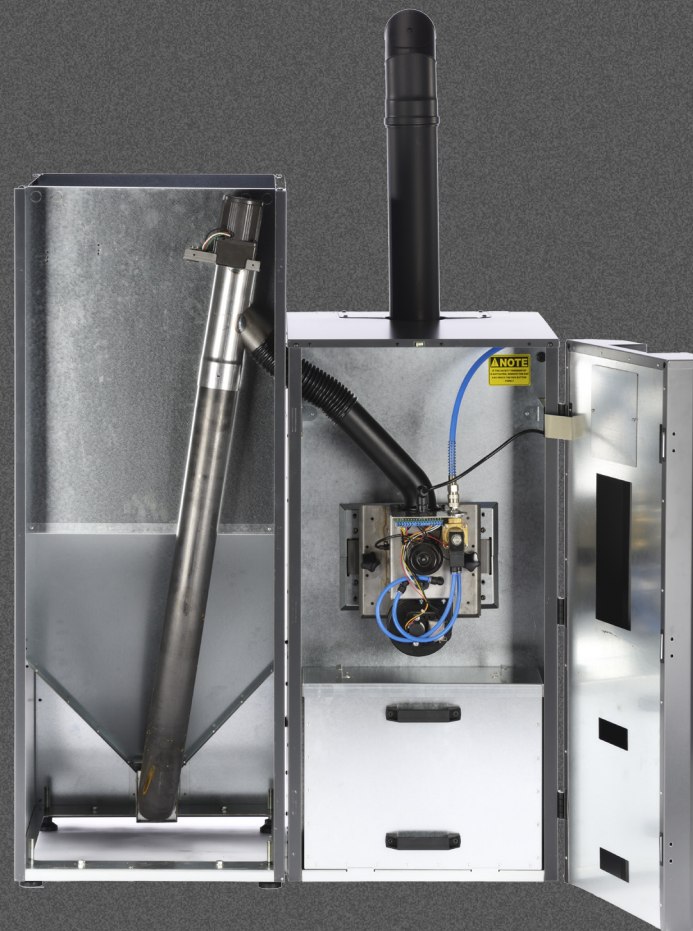
With standard features such as Automatic Deashing, Compressor Cleaning of the Burner, and Compressor Cleaning of the Boiler you will only need to make maintenance cleaning once or twice a year!

Also with the web-enabled Version 7 control box you can connect your RTB system to our online community of boilers on [StokerCloud.dk](http://StokerCloud.dk). That means that even though you are not at home, you can still monitor your boiler and control it from anywhere in the world!

## So what distinguish the RTB boiler from other boilers?

- Fewer installations cost since it's already assembled from the factory (Ready To Burn).
- It has a nicer appearance with the built-in cable management.
- You can burn up to 3 tons of pellets before emptying the ashbin due to the ash compression ashtray.
- With the compressor cleaning of both the burner and boiler, there are longer intervals between cleanings.
- With an optimized smoke-flow it reduces the risk of condensation in the chimney.
- Its higher efficiency allows a minimal heat loss from the boiler.
- With the possibility of low-temperature operation (down to 40 degrees) it reduces heat loss in the piping.
- Less chance of smoke odor due to the EPDM rubber sealing in the boiler (tighter boiler)

Also with NBE's customization option, you can build your RTB system to fit all your exact needs. So let's get Ready To Burn!





## About Us

NBE (Nordjysk Bioenergi), is a prominent leader within the production of residential and small commercial wood pellet boiler systems.

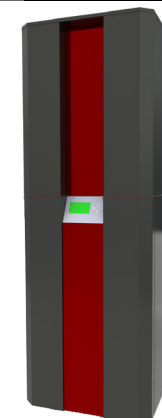
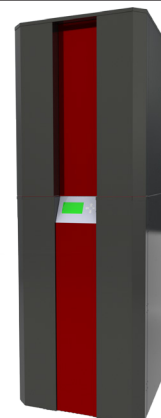
NBE was founded by Kim Gregersen and Jannich Hansen, two forward thinking entrepreneurs who were fed up with the rising cost of heating oil and the damaging effects it has had on the environment. In 1999, the two friends decided to do their part to turn it around. Operating out of a garage in North Jutland Denmark, the two began installing and exploring with various types of alternative fuels and burner technologies -even experimenting with fish oil as a fuel source. However, after much consideration and experimentation they concluded that a wood pellet burner was the most viable alternative to compete with oil. This was due to the fact that wood pellets have a very low relative cost to heating oil-often 50% less expensive.

In addition, wood pellets are both CO2 neutral and are a renewable fuel source. While wood pellet boiler systems existed in the early 2000 they were often far too expensive. In contrast, Kim & Jannich envisioned a high quality product that could be affordable to everyone. It was this realization that marked the true beginning of NBE.

Today, NBE has over 50,000 systems out on the field and has garnered 60-70% market share in Denmark as well as about 10 % of global unit sales. This success can be attributed to our founding vision of delivering customer's the absolute best value on their investment. This requires thoughtful and elegant product designing, rapid integration of new technologies and web capabilities, state of the art production methods that utilize robot welding and bending technologies; all of which contribute to both our high product reliability and affordability.



# Choose your Stand-Alone RTB system



### 10 kW Vac\*

### 16 kW Vac\*

### 30 kW Vac\*

### 50 kW Vac\*

(Coming soon)

Range: 2 - 10 kW  
 Efficiency: >90% (Class 5)  
 Heats: 150-200 m<sup>2</sup>\*\*  
 Replaces: 3500 l.of oil/y  
 Width: 506 mm  
 Depth: 843 mm  
 Height: 1825 mm  
 Refill every: 2 - 3 days

Range: 1,6 - 16 kW  
 Efficiency: >90% (Class 5)  
 Heats: 200-300 m<sup>2</sup>\*\*  
 Replaces: 5000 l.of oil/y  
 Width: 506 mm  
 Depth: 843 mm  
 Height: 1825 mm  
 Refill every: 2 - 3 days

Range: 3 - 30 kW  
 Efficiency: >90% (Class 5)  
 Heats: 300-500 m<sup>2</sup>\*\*  
 Replaces: 7500 l.of oil/y  
 Width: 623 mm  
 Depth: 843 mm  
 Height: 1825 mm  
 Refill every: 3 - 4 days

Range: 5 - 50 kW  
 Efficiency: >90% (Class 5)  
 Heats: 500-750 m<sup>2</sup>\*\*  
 Replaces: 10000 l.of oil/y  
 Width: n/a mm  
 Depth: n/a mm  
 Height: n/a mm  
 Refill every: 3 - 4 days

\*Hopper and vac-system included

\*\*Based on well insulated home

\*Hopper and vac-system included

\*\*Based on well insulated home

\*Hopper and vac-system included

\*\*Based on well insulated home

\*Hopper and vac-system included

\*\*Based on well insulated home

**Or customize your RTB system  
in 4 easy steps!**



1

Choose  
kW Size

2

Choose  
Hopper

3

Choose  
Feed Type

4

Choose  
Accessories



# Step 1: Choose System Size



## 10 kW

## 16 kW

## 30 kW

## 50 kW (Coming soon)

Range: 2 - 10 kW

Range: 1,6 - 16 kW

Range: 3 - 30 kW

Range: 5 - 50 kW

Efficiency: >90% (Class 5)

Efficiency: >90% (Class 5)

Efficiency: >90% (Class 5)

Efficiency: >90% (Class 5)

Heats: 150-200 m<sup>2</sup>\*\*

Heats: 200-300 m<sup>2</sup>\*\*

Heats: 300-500 m<sup>2</sup>\*\*

Heats: 500-750 m<sup>2</sup>\*\*

Replaces: 3500 l.of oil/y

Replaces: 5000 l.of oil/y

Replaces: 7500 l.of oil/y

Replaces: 10000 l.of oil/y

Width: 506 mm

Width: 506 mm

Width: 623 mm

Width: n/a mm

Depth: 843 mm

Depth: 843 mm

Depth: 843 mm

Depth: n/a mm

Height: 1022 mm

Height: 1022 mm

Height: 1022 mm

Height: n/a mm

\*Based on well insulated home

\*Based on well insulated home

\*Based on well insulated home

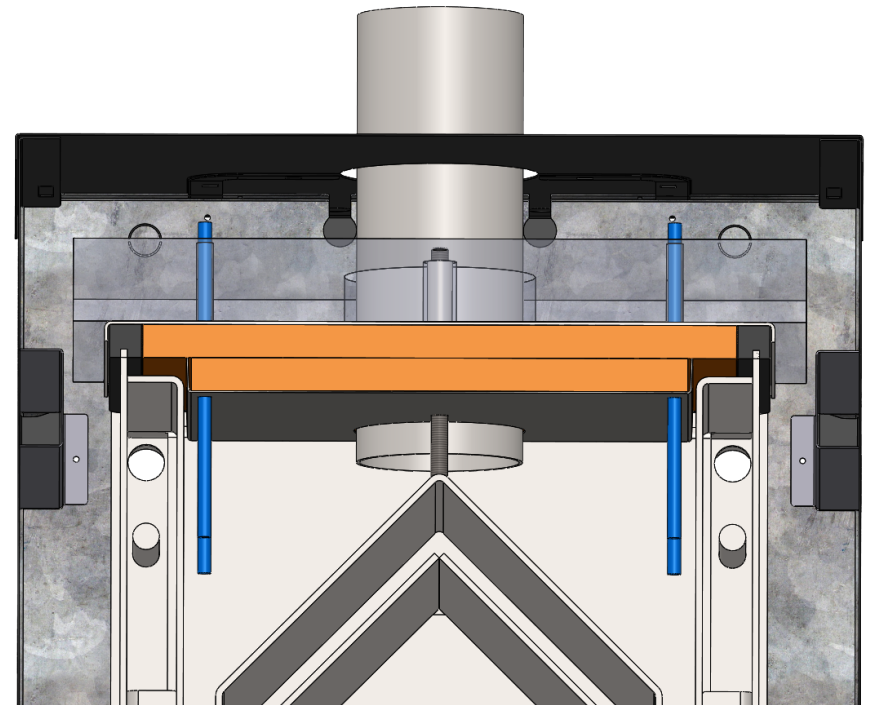
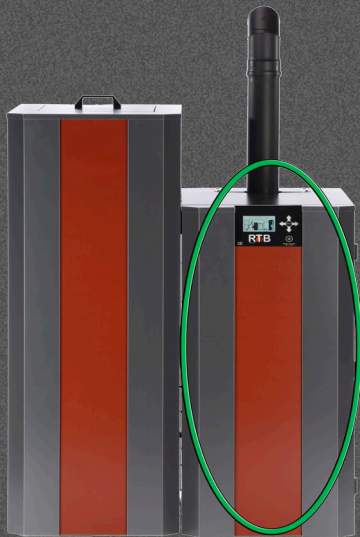
\*Based on well insulated home

# Standard Features

## Air Compressor Boiler Cleaning

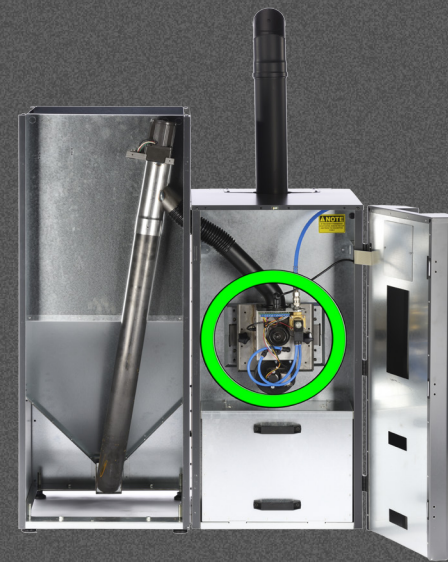
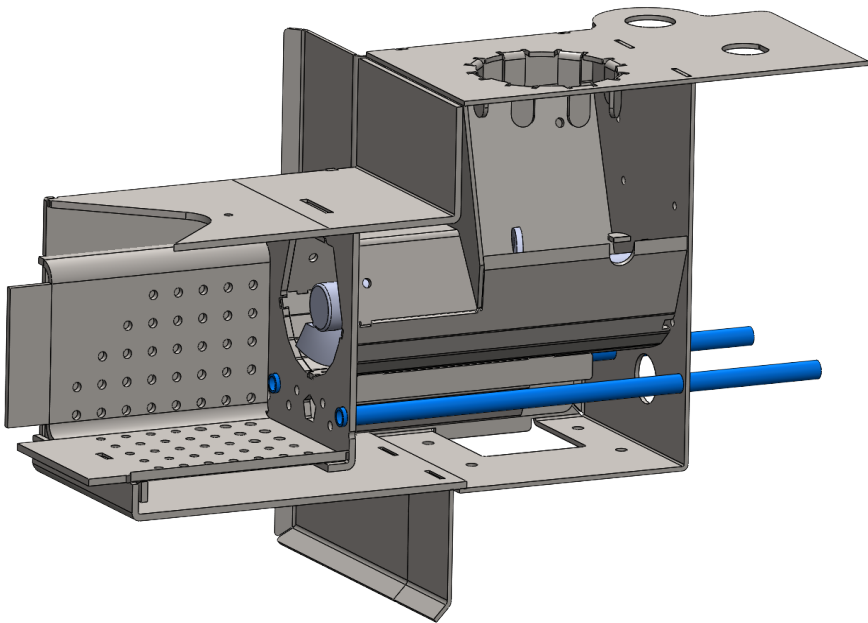
**KEEP THE GLOVES OFF!**

With the RTB's Automatic Air Compressor Boiler Cleaner, cleaning your boiler can be reduced to as little as 2 times a year.



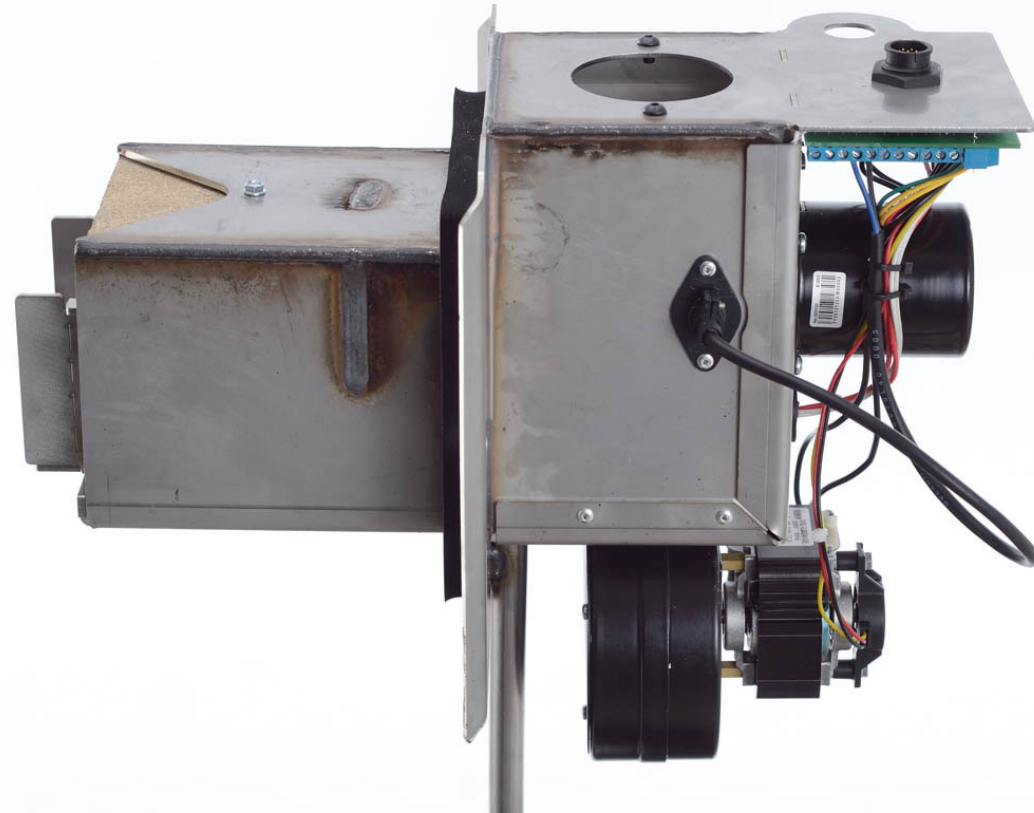
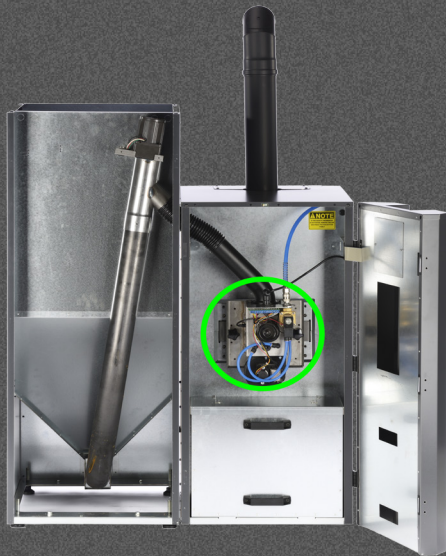
## Air Compressor Burner Cleaning

Prevents the build up of ash on the burner head by periodically blowing compressed air over the burning grate. This allows for greater efficient burning and extends the length between maintenance cleaning



## Step-less Modulating Burner

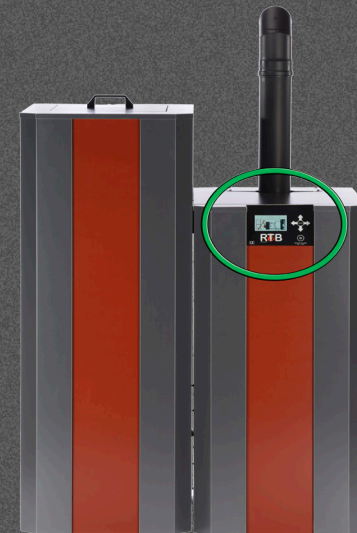
Most modern pellet burners today are able to modulate between 10-20 steps over a heat range from 30%-100% of power. The greater the number of steps the more accurate your system is at producing the heat demanded by the home. Due to our sophisticated controls and our highly accurate dosing of pellets via an internal auger, our burner can produce heat at an amazing **90 steps** and over an impressively wide heating range from **10-100% power**.



## Version 7 Web Enabled Controller

The controller supports:

- Hot water priority\*
- Flow measurement\*
- Smoke temperature\*
- Weather compensation\*
- Boiler Timer Settings
- Hot Water Timer
- Function\*
- Circulation pump control\* \*Requires additional equipment
- Compressor Cleaning
- Oxygen control\*
- Connectivity to the Internet via easy LAN connection
- Weather Compensation\* SMS & E-mail alerts. (Via interface)





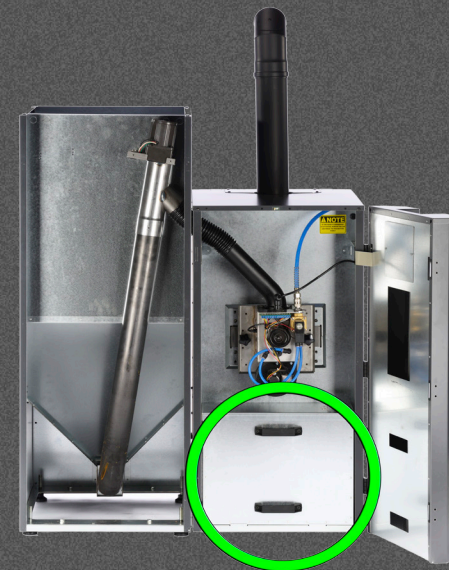
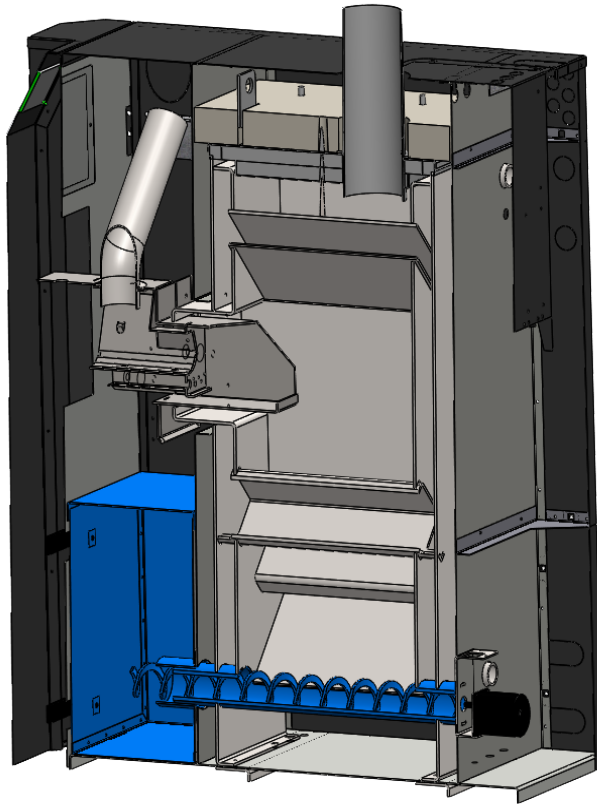
## Boiler Timer Activation

With Boiler Timer Activation it is even easier to reduce your heating cost. This is great feature to save you money especially during the late Spring, Summer, and early Fall when all day production of heat is not required. Simply set your boiler to activate during periods of the day or night when heating is required and it will automatically deactivate when the heating period is complete.



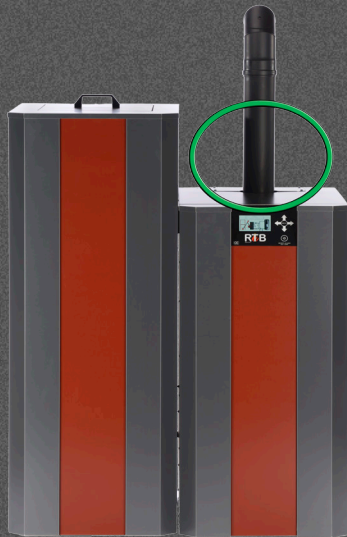
## Automatic Deashing

With the fully Automatic Deashing system, the ash will be transported to the Self Compressing Ashtray that allows you to burn 2-3 tons pellets before emptying.



## Chimney Temp. Sensor

- Helps prevent efficiency loss
- Provides cleaning indicator
- Troubleshoots combustion problems
- Saves money through maintained efficiency



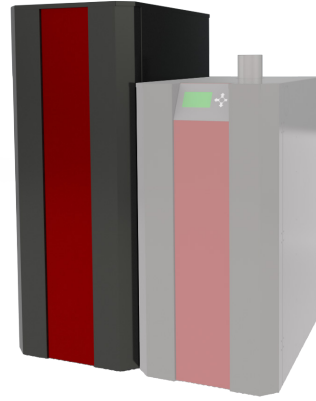
# Step 2: Choose Hopper



120 kg (S)

Refill every: 3 – 5 days  
Width (mm): 300  
Depth (mm): 845  
Height (mm): 1300

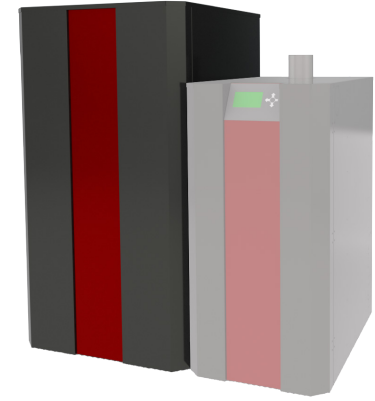
Includes inbuilt hopper auger



220 kg (M)

Refill every: 3 – 5 days  
Width (mm): 500  
Depth (mm): 845  
Height (mm): 1300

Includes inbuilt hopper auger



320 kg (L)

Refill every: 3 – 5 days  
Width (mm): 700  
Depth (mm): 845  
Height (mm): 1300

Includes inbuilt hopper auger

# Step 3: Choose Feed Type

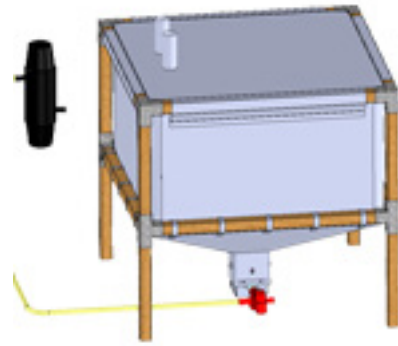


Manual

**Got the muscles and don't mind the work?**

Then loading your hopper by hand may be right for you. Remember the little extra effort could be well worth it as you see the savings come in.

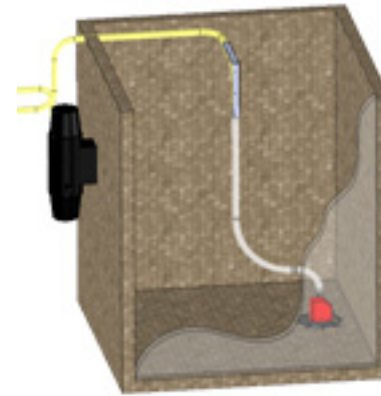
Also, if you decide that you are tired of manually filling your hopper we have plenty of automatic solutions that you can add-on at any time.



Cloth Silo

**(Coming Soon!)**  
Our Cloth Silo option is an excellent addition when seeking a convenient solution. It comes 'pellet truck ready' with inlets for pumping in pellets by your pellet delivery provider. At the bottom of the silo, pellets are transported via a Vacuum/Auger system to your boiler's hopper. The easy construction allows for quick and less expensive installation.

Note: timber frame is not included

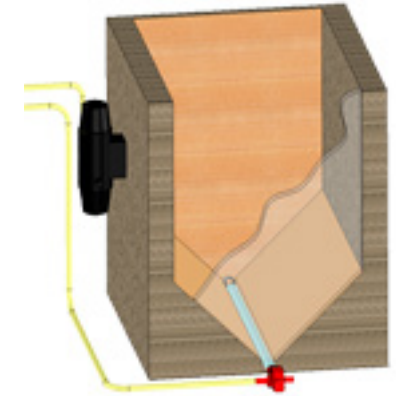


Flat-Bottom Room

**Do you require bulk storage but have minimal space?**

Consider the Flat Bottom Pellet Room design. This design makes use of our vacuum transport system with 'mole head' attachment. The 'mole' attachment allows for **easy top-feeding** of pellets and reduces space requirements in comparison to a V-bottom construction.

Note: requires self construction of pellet room



V-Bottom Room

The V-bottom pellet room is the most traditional and well tested design for a bulk pellet room. **How it works.** At the bottom of the room lies an auger with openings for pellet entry. When there is a call for more pellets from your boiler system, the vac/auger system will activate transporting pellets up to 30 meters to your boiler's day hopper.

Note: requires self construction of pellet room

# Step 4: Choose Accessories





### Lambda (Oxygen) Sensor

- Highly accurate Lambda Sensor controlled combustion
- Maintains the ideal oxygen% for optimal combustion
- Compensates for small differences in pellet quality



### Consumption Meter

Easily track your household KW/BTU consumption. This is made possible by internal sensors that monitor the boiler's temperature, the water return temperature, and the inflow of water channeled into the system.



## Hot Water Priority

Never be stuck without hot water. With Hot Water Priority your system will automatically produce the heat demanded by your hot water tank even during the summer when heating demands are low.

## Wireless Thermostat

- Potential free contactor NC/ NO
- Turn on / off your pellet boiler, circulating pump, etc..
- 5 – 30C degrees

## Ultrasonic Distance Sensor

Don't be stuck without pellets! By adding our ultrasonic distance sensor you have the possibility to monitor your pellet level at all times. This will allow you to better plan your pellet delivery schedule and ensure a steady supply of pellets.



### Draft Regulator

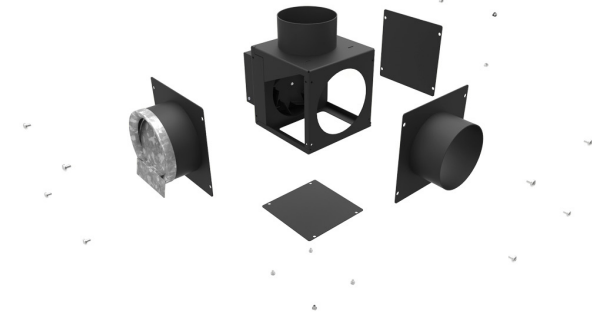
- Prevents overdraft situations
- Promotes cleaner more effective burning
- Allows for easier adjustment to the boiler system



### Weather Compensation Kit

Stable indoor temperatures- regardless of the weather

With the weather compensation kit your are able to operate your pellet boiler in a more energy efficient manner with less cycling; while ensuring that indoor temperatures are never too hot, nor too cold.

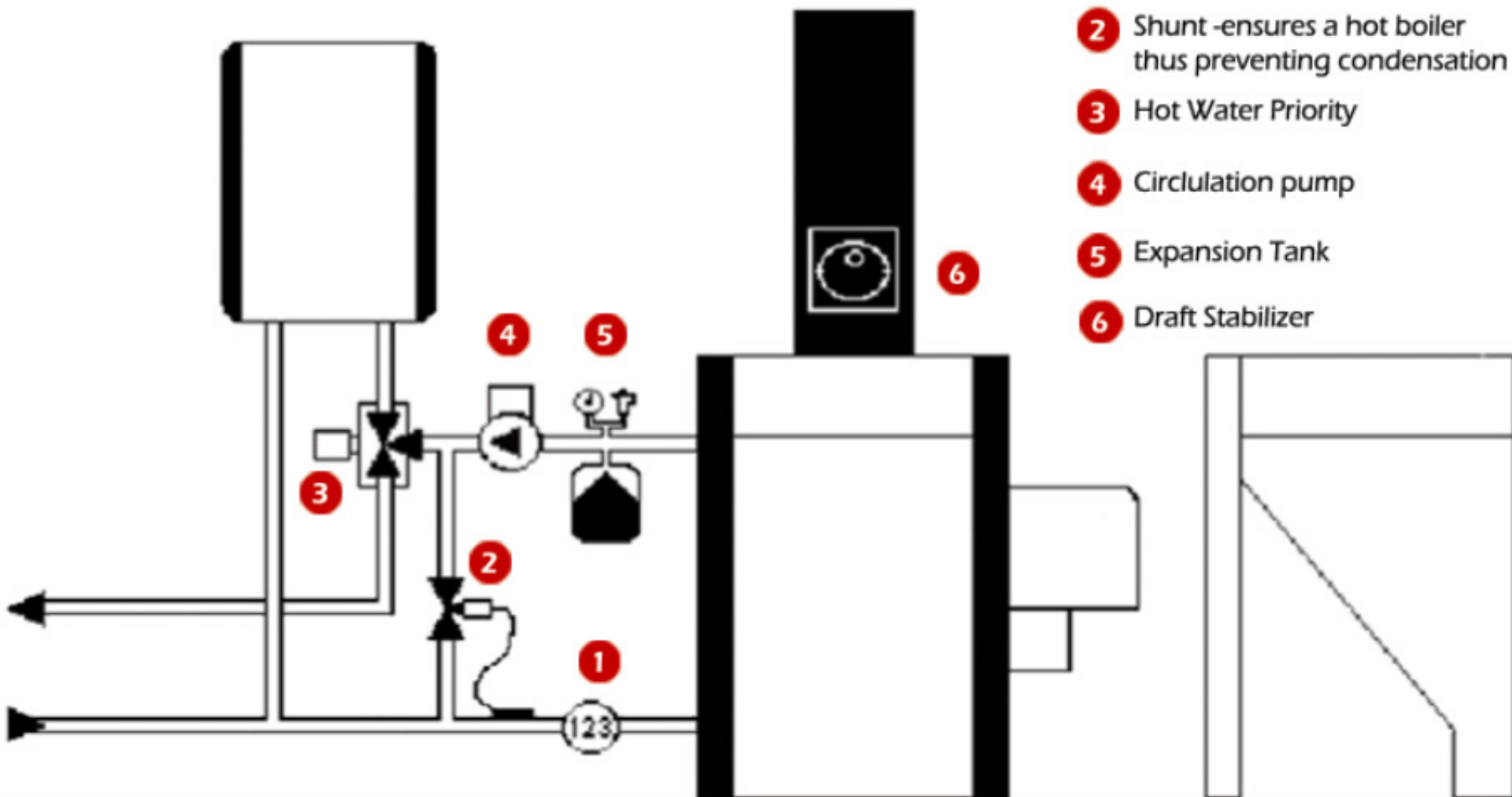


### ExFan Exhaust Fan

With the exFan Exhaust Fan you can ensure optimal chimney draft; which will promote rapid ignition, prevent smoke and soot from leaking into the boiler room, and optimize fuel combustion.

# System Installation Diagram

# System Diagram





# StokerCloud

Cloud services above the rest

# StokerCloud

**What is StokerCloud?** StokerCloud is a web-based tool that allows you to monitor and operate your pellet boiler online.

**Why StokerCloud?** With StokerCloud you can receive new updates on your control box and easily operate your system from anywhere, anytime.

For our Dealers and Service Providers, StokerCloud is a way to provide exceptional service in an efficient way. Dealers can establish 24/7 maintenance/service contracts with their clients and be notified immediately via e-mail or SMS if any attention is required on their clients system. Moreover, dealers are able to troubleshoot or make improvement changes to the system online either prior to or in replacement to a site visit.

**How does it work?** When using the Version 7 Control Box, connecting to StokerCloud is easy. All that is required is an internet connection and LAN cable to connect the control box to the internet. Each control box has a unique serial/username that is used to log on.

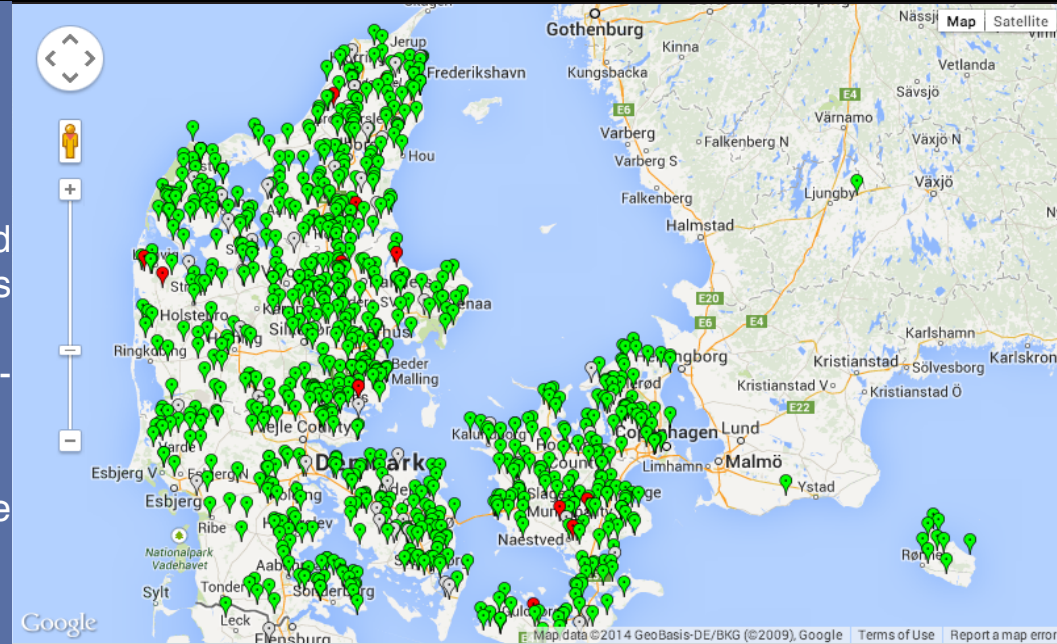
Monitor and operate your  
pellet boiler  
anywhere, any time.



# Our Community

When you connect to StokerCloud you have the opportunity to be apart of our online community of proud RTB owners. On the right is an online map of the systems active in Denmark. The green drop-pins represent systems that are currently active. The red drop-pins represent systems requiring attention.

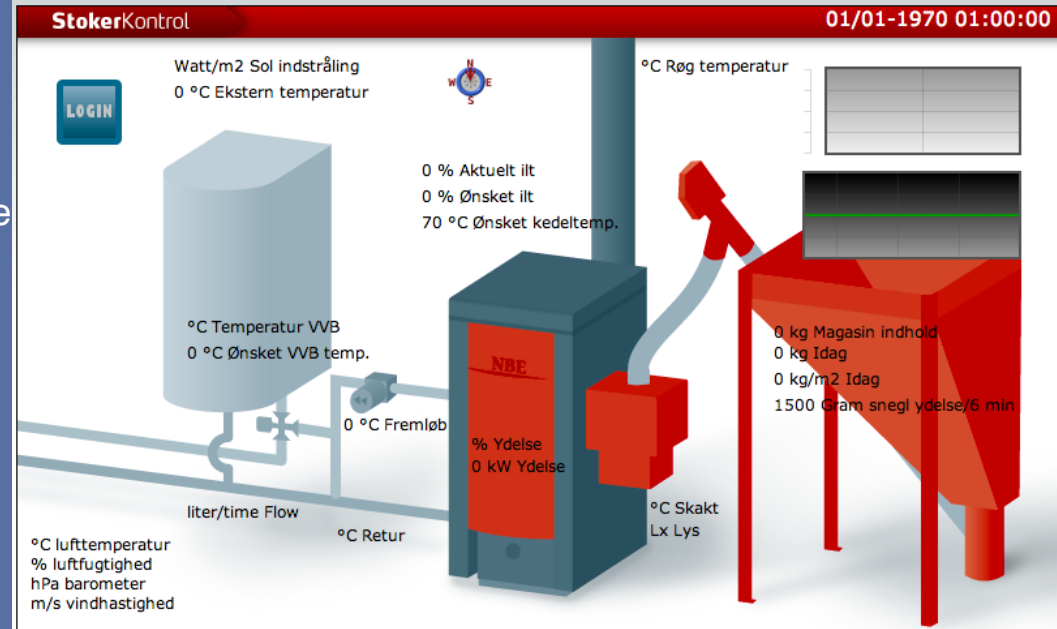
If you do not wish to have your data openly shared online you also have the option to restrict viewing priveleges.



# Intuitive Dashboard

With StokerCloud you have the possibility of monitoring and adjusting over 40 parameters whereby the most relevant parameters are intuitively displayed on your opening dashboard in real time. This includes:

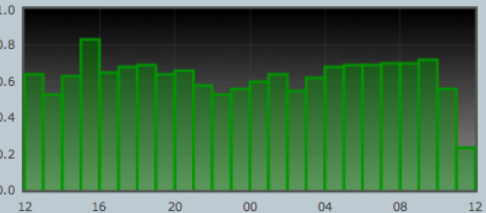
- Boiler Temp.
- Domestic hot water temp.
- Wood pellet level
- Chimney temp.
- Output (btu or kW)
- Target O2%
- Actual O2%
- Flow l/hr
- Pump temp.
- Drop shaft temp.



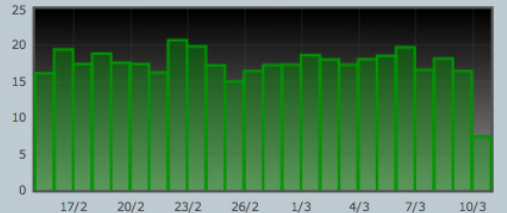


**StokerKontrol Grafer**

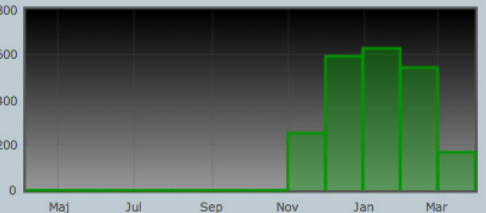
Pilleforbrug sidste 24 timer



Pilleforbrug sidste 24 dage



Pilleforbrug sidste 24 måneder

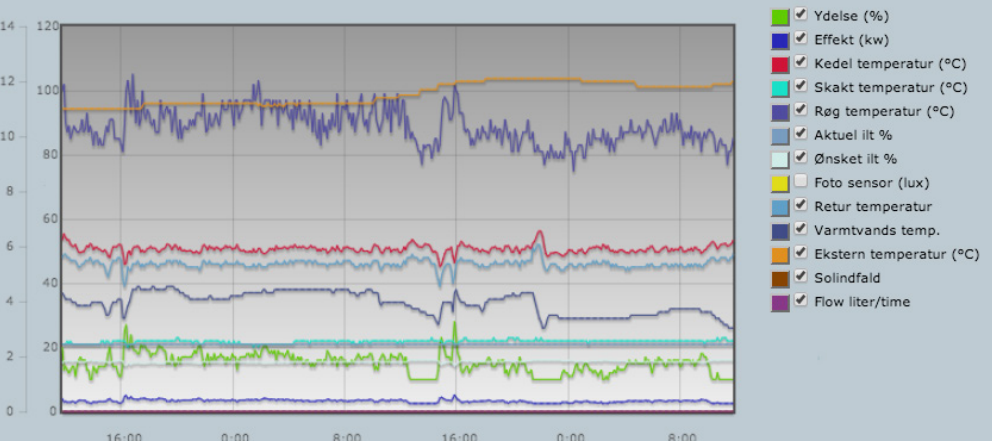


Pilleforbrug sidste 12 år



**StokerKontrol**

Sidste 48 timer



- Ydelse (%)
- Effekt (kw)
- Kedel temperatur (°C)
- Skakt temperatur (°C)
- Røg temperatur (°C)
- Aktualt ilt %
- Ønsket ilt %
- Foto sensor (lux)
- Retur temperatur
- Varmtvands temp.
- Ekstern temperatur (°C)
- Solindfald
- Flow liter/time

# Track Pellet Consumption

StokerCloud can capture data related to your pellet consumption on a hourly, daily, monthly, and annual basis. So keep track of your pellet consumption and consider how much you have saved with this cost effective and CO2 neutral fuel.

# Optimize & Save

The RTB pellet boiler comes with easy setup controls for the average customer that require little knowledge of the internal workings of the system. However, if you are interested in really optimizing your system or are an authorized full service dealer that optimizes for your client base; our graphical display allows you to analyze some of the most important parameters overtime allowing you to exploit opportunities for greater efficiency and cost savings.

# For more information contact:

NBE PRODUCTION A/S  
Kjeldgårdsvej 2  
DK9300 Sæby  
CVR-nr. 34 89 03 23  
[www.nbe.dk](http://www.nbe.dk)  
[www.nbe-global.com](http://www.nbe-global.com)

Attn: Alvin Hernandez

Global Marketing Manager  
[alvin@nbe.dk](mailto:alvin@nbe.dk)  
skype: [alvin.nordjysk.bioenergi](https://www.skype.com/people/alvin.nordjysk.bioenergi)  
+45 31 62 67 30

Main number:	+45 88 20 92 30
Mon-Thurs.	08:00 - 15:00
Friday	08:00 - 12:00

