



RTB

NBE

Powered by nature



NBE

- POWERED BY NATURE

NBE is a prominent leader within the production of residential and 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. Initially operating out of a garage in North Jutland Denmark, the two began installing and exploring with various types of alternative fuels and burner technologies. 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 are **inexpensive** and 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 **80,000 systems out on the field**. This success can be attributed to our founding vision of delivering to customers the absolute best value on their investment. This requires rapid integration of new technologies, thoughtful and elegant product designing, and state of the art production methods that utilize robot welding and bending technologies. Combined this contributes to the high product reliability and affordability.

RTB Phoenix

Ready to burn



- Flip up 7" capacitive touch screen
- Web enabled controls with built-in WIFI
- 16 output printboard
- Automatic burner cleaning
- Automatic boiler cleaning
- Automatic ash extraction system
- Self compressing ash can
- Ash drawer system with ash level sensor
- Low Noise Compressor
- Boiler circulation pump (only on 10-30 kW models)
- Inbuilt exhaust fan with underpressure sensor
- O2 control with lambda sensor
- Chimney temperature sensor
- Up to 4 weather compensation zone controls
- Hot Water priority controls
- Boiler and hot water timer
- Return water priority
- 10-100% step-less modulating burner with combustion air flow control
- E-mail & SMS notifications*

*SMS rates apply

The boiler

V16 print board w/ wifi module

7" Capacitive Touch Screen

10-100% step-less modulating burner

The 10-100% step-less modulating burner includes air flow combustion control, burner temp/drop shaft sensor, and air compressor cleaning.

Self compressing ash drawer w/ ash can level sensor.

Modulating exhaust fan w/ underpressure control

Automatic air compressor boiler cleaning

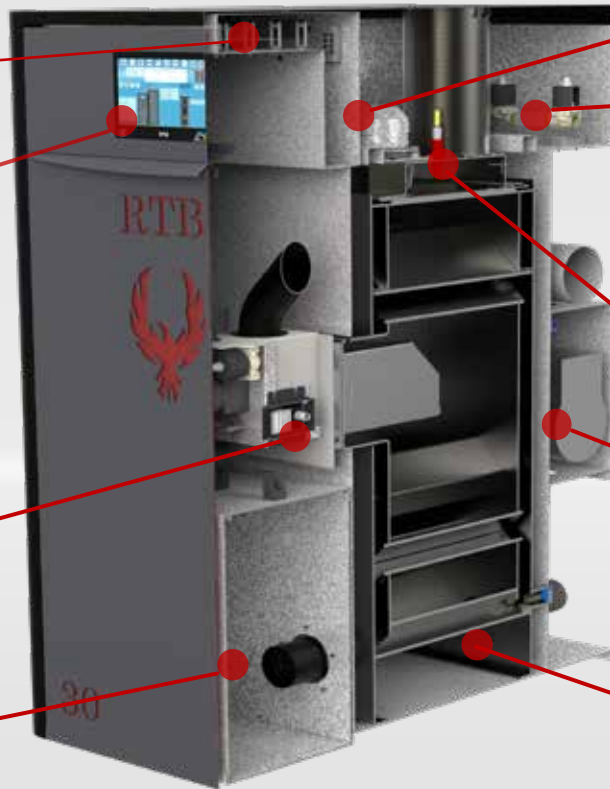
O2 sensor

The O2 sensor allows for the oxygen control system to maintain the desired O2% during the combustion process at all power% levels of the burner.

Inbuilt air compressor

Automatic ash extraction

Large self compressing ash can allows up to 3 tons of pellets to be consumed before emptying



Customization

Modularly designed to fit any need and structure



NBE - POWERED BY NATURE

Choose kW Size



RTB 10
90131000



RTB 16
90131600



RTB 30
90133000



RTB 50
90135000



RTB 80**
80138000

| | |
|------------|--------------------------|
| Output | 2-11 kW |
| Efficiency | 93,9% (Class 5) |
| Heats | 150-200 m ² * |
| Replaces | 3500 litres of oil/y |
| Width | 504 mm |
| Depth | 920 mm |
| Height | 1236 mm |

| | |
|------------|--------------------------|
| Output | 2-17 kW |
| Efficiency | 91,1% (Class 5) |
| Heats | 200-300 m ² * |
| Replaces | 5000 litres of oil/y |
| Width | 504 mm |
| Depth | 920 mm |
| Height | 1236 mm |

| | |
|------------|--------------------------|
| Output | 3-28 kW |
| Efficiency | 91,4% (Class 5) |
| Heats | 300-500 m ² * |
| Replaces | 7500 litres of oil/y |
| Width | 655 mm |
| Depth | 926 mm |
| Height | 1240 mm |

| | |
|------------|--------------------------|
| Output | 5-47 kW |
| Efficiency | 93,6% (Class 5) |
| Heats | 500-750 m ² * |
| Replaces | 10000 litres of oil/y |
| Width | 796 mm |
| Depth | 1192 mm |
| Height | 1443 mm |

| | |
|------------|---------------------------|
| Output | 8-78 kW |
| Efficiency | 93,6% (Class 5) |
| Heats | 800-1300 m ² * |
| Replaces | 16500 litres of oil/y |
| Width | 937 mm |
| Depth | 1396 mm |
| Height | 1643 mm |

*Based on well insulated home ** Currently no sales in Switzerland

Choose Hopper Size



300
901120

| | |
|---------------|-----------|
| Compatible w/ | RTB 10-30 |
| Width | 300mm |
| Depth | 1000 mm |
| Hight | 1448 mm |



500
901220

| | |
|---------------|-----------|
| Compatible w/ | RTB 10-30 |
| Width | 500 mm |
| Depth | 1000 mm |
| Hight | 1448 mm |



700
901320

| | |
|---------------|-----------|
| Compatible w/ | RTB 10-30 |
| Width | 700 mm |
| Depth | 1000 mm |
| Hight | 1448 mm |



NBE hopper 80x80 extension
300085



80x80 kg silo
300087

| | |
|---------------|-----------|
| Compatible w/ | RTB 10-80 |
| Width | 800mm |
| Depth | 800 mm |
| Hight | 122 |

Technical Data



**RTB 10/16
Phoenix**

SKU:90131000
SKU:90131600

**RTB 30
Phoenix**

SKU:90133000

**RTB 50
Phoenix**

SKU:90135000

**RTB 80*
Phoenix**

SKU:90138000



300

(for RTB 10-30 Phoenix)
SKU:901120



500

(for RTB 10-30 Phoenix)
SKU:901220



700

(for RTB 10-30 Phoenix)
SKU:901320

| | RTB 10 Phoenix | RTB 16 Phoenix | RTB 30 Phoenix | RTB 50 Phoenix | RTB 80* Phoenix |
|-----------------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| Output | 11kW | 17kW | 25kW | 48kW | 78kW |
| Output low | 3kW | 5,5kW | 7,5kW | 14kW | 23kW |
| Efficiency | 93,9% | 91,1% | 91,4% | 93,6% | 93,6% |
| Efficiency low | 90,5% | 92,4% | 92,7% | 94,6% | 93,9% |
| Power consumption | 37W | 40W | 90W | 168W | 126W |
| Power consumption low | 24W | 20W | 34W | 39kW | 69kW |
| EN303- 5:2012 Klasse | 5 | 5 | 5 | 5 | 5 |
| Controller | V16 | V16 | V16 | V16 | V16 |
| Width (mm) boiler | 504 | 504 | 655 | 816 | 978 |
| Width incl. 300 hopper | 804 | 804 | 955 | N/A | N/A |
| Width incl. 500 hopper | 1004 | 1004 | 1155 | N/A | N/A |
| Width incl. 700 hopper | 1204 | 1204 | 1355 | N/A | N/A |
| Depth (mm) | 920 | 920 | 926 | 1115 | 1390 |
| Height (mm) | 1236 | 1236 | 1240 | 1318 | 1519 |
| Chimney diameter (mm) | 100 | 100 | 130 | 150 | 180 |
| Weight (kg) | 222 | 222 | 280 | 470 | 580 |
| Water content (liter) | 36 | 36 | 48 | 78 | 105 |
| Ash tray size (liter) | 31 | 31 | 38 | 60 | 60 |
| Forward/Return/Filling size | ¾" | ¾" | ¾" | 1" | 5/4" |
| Test report 300-ELAB- | 2042 | 2045 | 2064 | 2109 | 2216 |
| Energy class | A+ | A+ | A+ | A+ | A+ |

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 begin to see your savings. However, if you ever get tired of manually filling your hopper we have plenty of automatic solutions that you can add-on at any time.



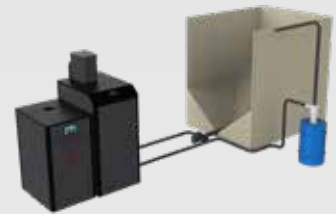
Cloth Silo w/ Auger Transport

Do you have plenty of space in your boiler room? If so, our Cloth Silo option with 3 meter auger transport is the easiest and most cost effective way to achieve automatic bulk feeding to your system. The Cloth Silo assembles in 15 minutes and comes "pellet truck friendly" with inlets for blowing in pellets by your pellet delivery provider. At the bottom of the silo, pellets are transported via a 3 meter long auger to either a hopper or directly into a burner.



Cloth Silo w/ Vac Transport

Do you need to transport pellets some distance to your boiler? If so, then consider the Cloth Silo with Vacuum Transport. The vacuum transport system allows for either a 15 or 20 meter vacuum distance—depending on the vacuum motor size. The Cloth Silo assembles in 15 minutes and comes 'pellet truck ready' with inlets for pumping in pellets by your pellet delivery provider. Pellets are extracted via a vac auger and then vacuum transported to your boiler's hopper.



Vacuum Transport w/ self made pellet storage

Prefer to build your own pellet storage? Then consider adding the vacuum transport system to your self made pellet storage. The vacuum transport system includes a vacuum auger to extract the pellets from your storage unit and vacuums the pellets to your boiler's hopper. Please note that during construction of your pellet storage the side walls must be angled as to allow for the pellets to easily fall to the extraction area.

Vacuum



*Height depends on the amount of pellets filled in the silo
Capacity: 3,3- 4,8 tons **BxDxH:** 250cm x 250cm x 180- 230cm
Capacity: 4,0- 5,5 tons **BxDxH:** 250cm x 250cm x 200- 250cm
Capacity: 4,2- 6,6 tons **BxDxH:** 300cm x 300cm x 180- 230cm
Capacity: 5,2- 7,6 tons **BxDxH:** 300cm x 300cm x 200- 250cm

Cascade system





NEED MORE POWER?

Cascade upto 8 boilers and produce upto 640 kW of output (8 x RTB 80kW).



Choose Accessories



Hot Water priority Kit

Never be stuck without hot water! With the hot water priority kit your system will be able to monitor the temperature of your hot water tank and prioritize the distribution of hot water when the tank temperature gets below a certain specified threshold. This feature will also work during the summer time when heating demands are low.



Extension Module

Need more outlets? The new BlackStar + with V13 wireless screen is delivered as standard with extra outputs to connect to accessories, for instance hot water priority and a weather compensation zone valve. However, if you find that you would like to add more accessories to your system the extension module with 7 extra outlets is an ideal choice to get the extra functionality.



Weather Compensation Kit with Flowbox

Get stable indoor temperatures regardless of the weather! With the weather compensation kit you 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, not too cold



StokerCloud

Control from everywhere





- ***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.

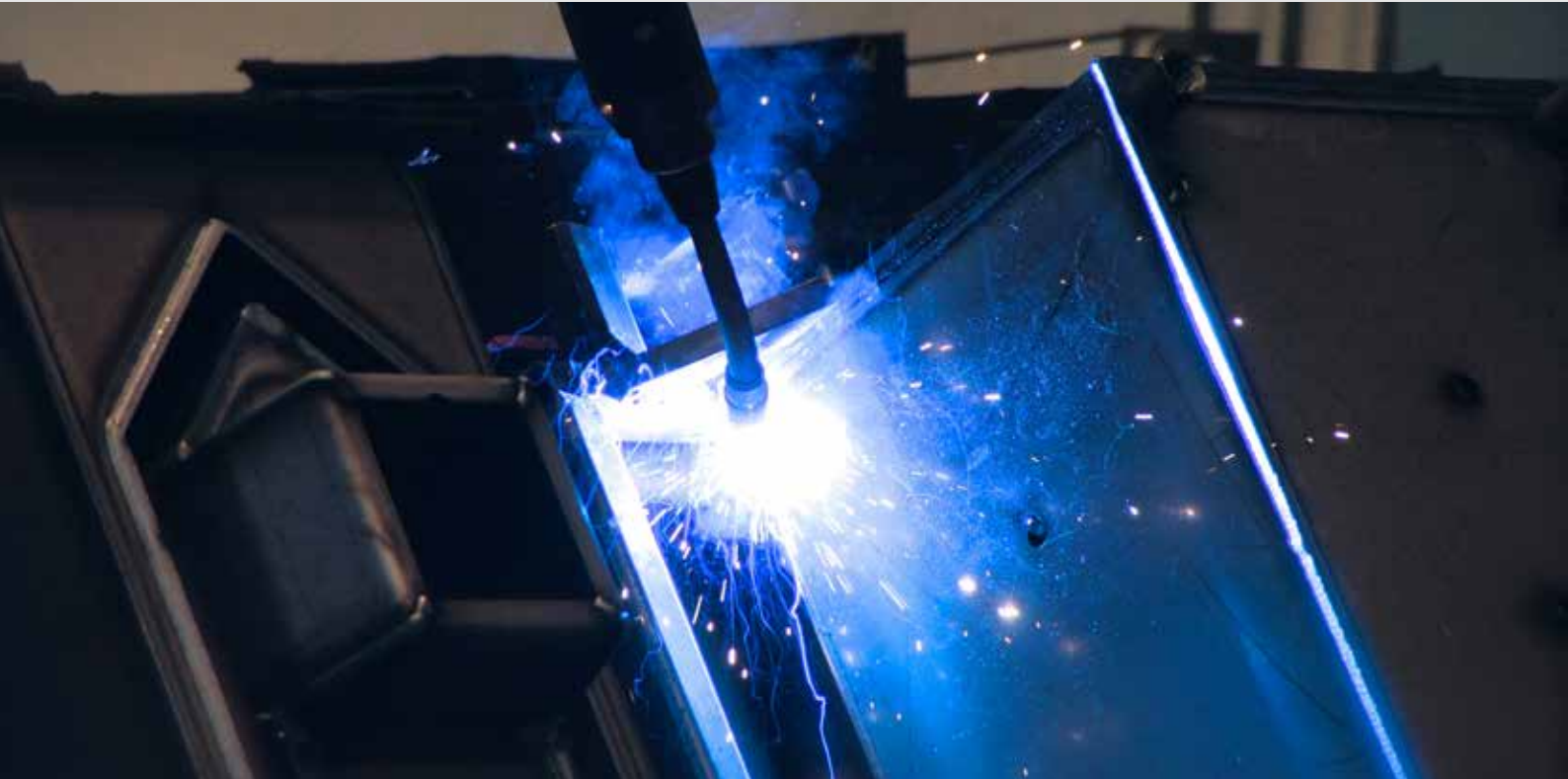
For our Dealers and Service Providers, StokerCloud is a way to provide exceptional service in an efficient way. Dealers can establish 24/7 maintenance/service contracts with their clients and be notified immediately via e-mail or SMS if any attention is required on their clients system. Moreover, dealers 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?***

Simply connect the controller to your internet network. Then go to www.v16.stokercloud.dk and login using your controller's serial number and password to register your system with stokercloud.

Products

The RTB Phoenix lineup



| Product Name | Product # |
|--|-----------------|
| RTB 10 Phoenix | 90131000 |
| RTB 16 Phoenix | 90131600 |
| RTB 30 Phoenix | 90133000 |
| RTB 50 Phoenix | 90135000 |
| RTB 80 Phoenix* | 90138000 |
| RTB Phoenix hopper 300 | 901120 |
| RTB Phoenix hopper 500 | 901220 |
| RTB Phoenix hopper 700 | 901320 |
| NBE hopper 80x80 | 300087 |
| Large hopper 3,3- 4,8 ton. Single extraction (A) | 300037 |
| Large hopper 3,3- 4,8 ton. Double extraction (B) | 300039 |
| Large hopper 4,0- 5,5 ton. Double extraction (B) | 300109 |
| Large hopper 4,0- 5,5 ton. Single extraction (A) | 300108 |
| Large hopper 4,2- 6,6 ton. Single extraction (A) | 300110 |
| Large hopper 4,2- 6,6 ton. Double extraction (B) | 300111 |
| Large hopper 5,2- 7,6 ton. Single extraction (A) | 300112 |
| Large hopper 5,2- 7,6 ton. Double extraction (B) | 300113 |
| Auger for pellets burner 200cm 10-80 kW, Steel | 300520 |
| Auger for pellets burner 250cm 10-80 kW, Steel | 300525 |
| Auger for pellets burner 300cm 10-80 kW, Steel | 300530 |

| Product Name | Product # |
|---|-----------|
| Auger for pellets burner 400cm 10-80 kW, Steel | 300540 |
| 600Watt Pelvac Vacuum Transport System with rotary valves and inbuilt controller | 707000 |
| 1000Watt Pelvac Vacuum Transport System with rotary valves and inbuilt controller | 708000 |
| 600Watt Pelvac Vacuum Transport System with rotary valves (to be connected to V16 conroller) | 707100 |
| 1000Watt Pelvac Vacuum Transport System with rotary valves (to be connected to V16 conroller) | 708100 |
| Vacuum Dust Seperator | 701001 |
| Wall mount for Pelvac | 706026 |
| 3/4" KIT for weather compensation including a flowbox new model | 510036 |
| 1" KIT for weather compensation including a flowbox new model | 510041 |
| NBE 3 ways motorized valve for weather compensation 3/4" KIT | 570024 |
| NBE 3 ways motorized valve for weather compensation 1" KIT | 570026 |
| Extension module for V16 Controler | 300211 |
| | |

* Currently no sales in Switzerland

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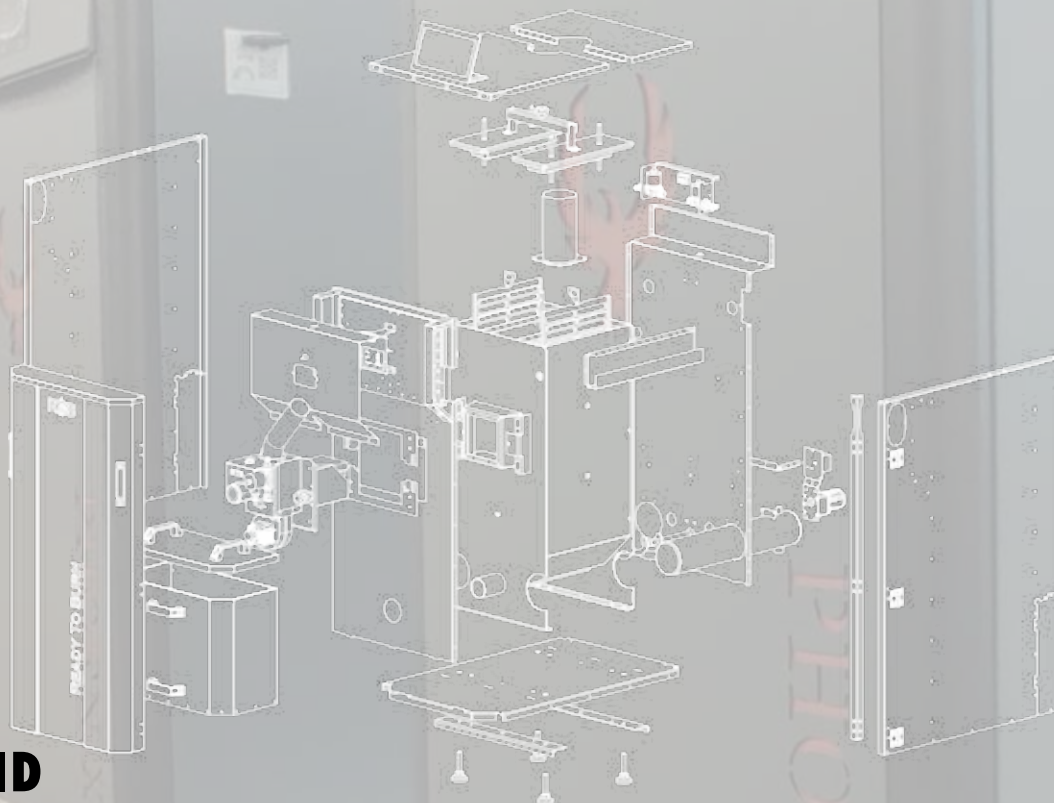
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