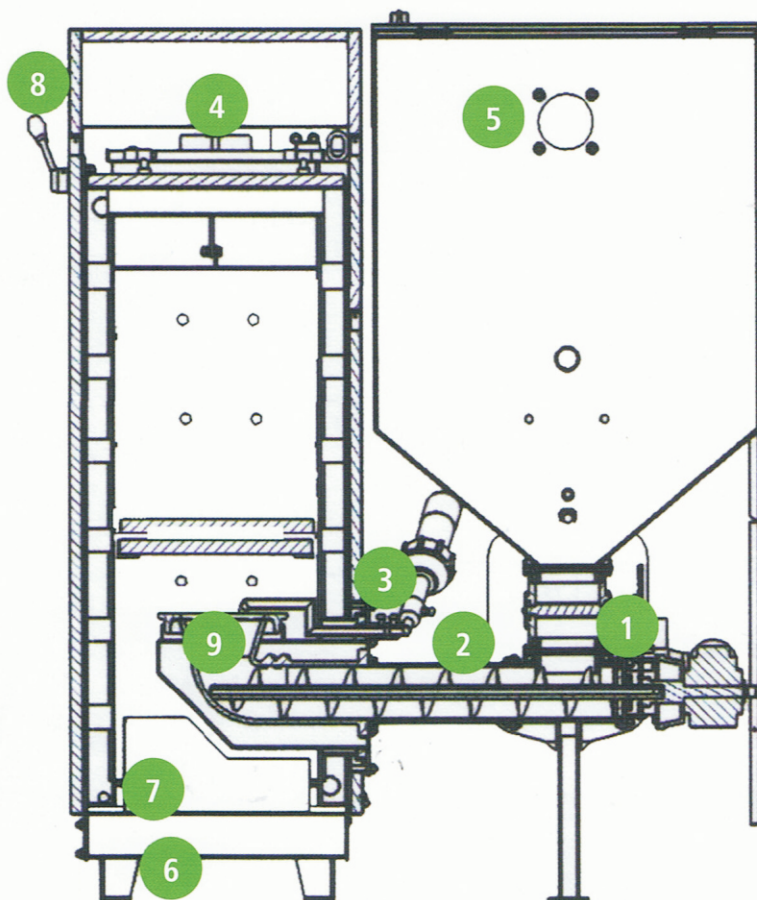


BENEKOV Multi Fuel Boiler

The latest addition to the Irish Benekov Range of Boilers blends Irish design with Scandinavian technology and Czech manufacturing

Some advantages in short

- 10-50 k/W Output
- Unparalleled safety features includes water cut out System to prevent "burn back" to the fuel source
- Lambda Controlled combustion. This is the monitoring of the flue gases to ensure maximum combustion efficiency by controlling the air and fuels
- Automatic ignition available
- In house timer or thermostatic control
- Integrated Hopper System (320 Litres)
- It is possible to place wood logs in the top door of the boiler while the it's running on wood pellets
- Unique combustion control for grains such as Oats/Barley
- Designed with fuel flexibility in mind you do not have to change the burner to burn the range of fuels.
- Vacuum System and Automatic Ash Removal optional on all models



Prime energy Solutions

1. Fly Wheel and Fire Protection
2. Auger under feed
3. Igniter (Leister) Electronic
4. Baffles and Damper
5. Pre fitted outlet for Vacuum system
6. Automatic Ash Removal (Optional)
7. Ash Box
8. Handle for cleaning baffles
9. Fire Grate for pellets, grain and logs

PRIME 20

Code: U44103, SEI Product ID: SEI-WB-300

Technical data for Prime 20

Max Output Grain/Pellets	kW	22/24
Output Range	kW	4-24
Efficiency (EU303-5) Grain	%	90
Efficiency (EU303-5) Pellets	%	93
Danish Institute of Technology		
Weight	kg	360
Length × Breadth × Height	mm	1210 x 930 x 1490
Chimney, diameter	mm	145
Max Pressure	bar	2.5
Electrical	-	Single Phase - 50 Hz 220 V
Electrical Consumption Max	W	90
Fuel Size	-	Biomass < 25 mm
Fuel Bin Capacity	dm ³	328
Ash Box Capacity	dm ³	15
Fuels	-	Pellets, Grains & Logs



Some other data:

- Lambda controlled combustion
- Wood Logs and Wood Pellets or Grain can be used as fuel

Options:

U44207 Automatic Ash Removal

U44211 Chimney Booster Fan

U44210 Vacuum System for automatic feeding from bulk storage

U42347 Appliance Connector to 6" Heat Merchants PRO FI

Some advantages in short:

- 4- 25 kW Output
- Unparalleled safety features includes water cut out System to prevent "burn back" to the fuel source
- Lambda Controlled combustion. This is the monitoring of the flue gases to ensure maximum combustion efficiency by controlling the air and fuels
- Automatic ignition available
- In house timer or thermostatic control
- Integrated Hopper System (320 Litres)
- It is possible to place wood logs in the top door of the boiler while the it's running on wood pellets
- Unique combustion control for grains such as Oats/Barley
- Designed with fuel flexibility in mind you do not have to change the burner to burn the range of fuels.
- Vacuum System and Automatic Ash Removal optional on all models

PRIME EVO 15

Code: U44105, SEI Product ID: SEI-WB-309

Technical Data for Prime Evo 15

Weight	kg	320
Volume of Water	dm ³	62
Chimney Diameter	mm	145
Spigot Outlet Height (centre)	mm	785
Area of Firebox	m ²	1.90
Fuel Bin capacity	dm ³	138
Breath x Width x Height	mm	995 x 910 x 1200
Diameter of Vacuum Opening	mm	350 x 220
Classification.DS EN 303-5	-	Class 3
Min. Doorway clearance for removing the hopper	mm	550
Water Pressure	bar	2
Maximum Pressure	bar	4.0
Operating Temperatures, Pause temperature	°C	65 - 80
Min Operating Temp	°C	60
Chimney Height max.	m	20
Ventilator (for max. Draft)	bar	3
Chimney Operations tab		
ΔT = 10 K	mbar	4.3
ΔT = 20 K	mbar	2.0
- Flow diameter	Js	G 1"
- Return Js G 1	Js	G 1"
Electrical Requirements	-	50 Hz 230 V
Machine usage	W	69
Electrical Class	-	IP 20
Fuels	-	Wood Pellets/Grain



Options:

U44207 Automatic Ash Removal System

U44211 Chimney Booster Fan

U44209 Vacuum System for Auto Feeding from Bulk Storage

U42347 Appliance Connector to 6" Heat Merchants PRO Flue

U44282 Appliance Connector to 5" Heat Merchants PRO Flue

Some advantages in short:

The latest Product in the Heat Merchants range the Prime EVO compact is set to change the concept of Pellet boilers in Ireland by reducing the size of Biomass boilers and incorporating a vacuum system as an option for convenience of use. Automatic ignition of pellets as standard.

Some other data:

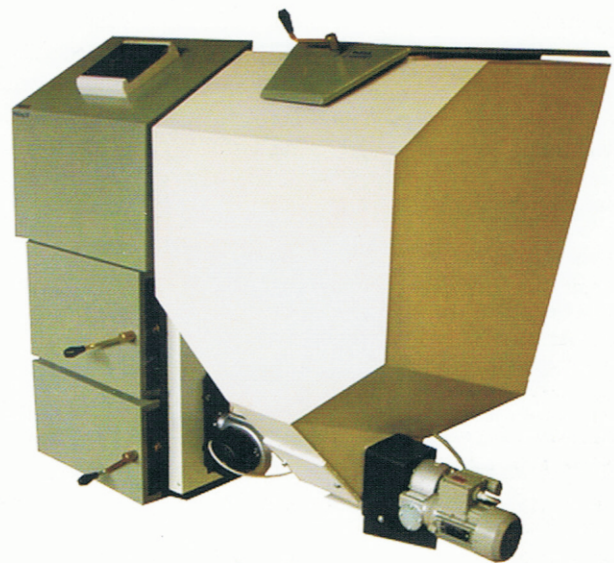
- Vacuum System is integrated into the hopper of the boiler
- Ash Removal is a possibility
- If you wish to fire the boiler on grain we can supply a multifuel kit

PRIME 27

Code: U43185, SEI Product ID: SEI-WB-99

Technical Data for Prime 27

Weight	kg	340
Efficiency	%	89
Diameter of connector studs	mm	50
Power Usage	watt	175
Capacity of hopper	kg	200
Fuels	-	Wood Pellets, Grain, Energy Crops & Logs
Length x Breath x Height	mm	1520 x 80 x 1200
Flue Diameter	mm	150
Power Requirements	-	1 PEN ~ 50 Hz 220 V
Fuels	-	Pellets & Grains



Options:

U44206 Automatic Ash Removal

U44211 Chimney Booster Fan

U44210 Vacuum System for automatic feeding from bulk storage

U42347 Appliance Connector to 6" Heat Merchants Pro Flue

Some advantages in short:

- 20-27 k/W Output
- Unparalleled safety features includes water cut out System to prevent "burn back" to the fuel source
- Lambda Controlled combustion. This is the monitoring of the flue gases to ensure maximum combustion efficiency by controlling the air and fuels
- Automatic ignition available
- In house timer or thermostatic control
- Integrated Hopper System (320 Litres)
- It is possible to place wood logs in the top door of the boiler while the it's running on wood pellets
- Unique combustion control for grains such as Oats/Barley
- Designed with fuel flexibility in mind you do not have to change the burner to burn the range of fuels.
- Vacuum System and Automatic Ash Removal optional on all models

PRIME 50

Code: U44104

Technical Data for Prime 50

Max Output Grain/Pellets	kW	45/50
Output Range	kW	25/50
Efficiency (EU303-5) Grain	%	91
Efficiency (EU303-5) Pellets	%	94
Weight	kg	510
Length × Breath × Height	mm	1490 x 1180 x 1590
Chimney, diameter	mm	160
Max Pressure	bar	2.5
Pipe Diameter flow and return	Js	G1"
Electrical Requirements	-	Single Phase - 50 Hz 230V IT
Electrical Consumption	W	110
Fuel Size	-	Biomass < 25 mm
Fuel Bin Capacity	dm ³	490
Ash Box Capacity	dm ³	30
Fuels	-	Pellets & Grains

Some other data:

Benekov Prime 50 comes with attached hopper, automatic auger feed and Lambda control system to ensure easy operation. Thanks to its modern construction Prime 50 combines low running costs, ecological running and comfortable service comparable with oil and gas heating systems of a greater output.

Some advantages in short:

- 25-50 k/W Output
- Unparalleled safety features includes water cut out System to prevent "burn back" to the fuel source
- Lambda Controlled combustion. This is the monitoring of the flue gases to ensure maximum combustion efficiency by controlling the air and fuels
- Automatic ignition available
- In house timer or thermostatic control



Options:

U44208 Automatic Ash Removal

U44211 Chimney Booster Fan

U44210 Vacuum System for Auto Feeding from Bulk Storage

U42347 Appliance Connector to 6" Heat Merchants PRO Flue

- Integrated Hopper System (320 Litres)
- It is possible to place wood logs in the top door of the boiler while the it's running on wood pellets
- Unique combustion control for grains such as Oats/Barley
- Designed with fuel flexibility in mind you do not have to change the burner to burn the range of fuels.
- Vacuum System and Automatic Ash Removal optional on all models

Frequently Asked Questions

What are Wood Pellets?

Wood pellets are made from dry saw dust compressed into approximate lengths of 25mm and either 6mm, 8mm or 10mm in diameter. The saw dust is bound by the woods natural 'glue' called lignin. The fuel is extremely clean with minimal ash and little or no NO₂, SO₂, or CO. 1 tonne of pellets has a volume of 1.8 cubic metre. The Benekov Boiler can use any diameter wood pellet.

What size house will my Benekov boiler heat?

Models ranging from 15 kW to 25 kW means the Benekov Prime are suited to nearly all domestic houses particularly as modern houses are very well insulated. To get an accurate assessment of your heating requirements, we can arrange a survey of your house. One will find that in many cases the heat loss is not that high and even though their house is of large size the average heat output required from their boiler can be as low as 10kW which equates to the average heat loss from their home.

Can I burn other fuels in a Benekov Wood Pellet Boiler?

Yes you can. Depending on the model you choose, you can also have the option of using cereal grains such as oats or triticale, wood logs, miscanthus, rape cake, hemp or any biomass fuel in pellet form.

What about Ash Removal, Cleaning and Servicing?

Ash from wood pellets is minimal with as little as 0.5%. For this reason one needs to remove ash from the bottom of the boiler once every 3- 4 weeks. Cereal grains produce more ash than wood pellets. Servicing is recommended once a year just as is the case with an oil boiler. We can arrange this service for you.

What does a Vacuum System contain?

Eash Vacuum System has

- 1 vacuum motor
- 1 collector point to be placed in a bulk hopper
- 1 Control Panel
- 1 Collector to mount on boiler and associated connectors

What is the warranty on the boiler?

Does it work with Under-floor Heating systems?

The boiler comes with a 5 year warranty and two years parts and labour on the electronic parts. The boilers are compatible with under floor heating systems as they are self modulating and once the room reaches the required temperature the boiler modulates to maintain the room at an even temperature.

Is it much cheaper than oil?

Based on current oil prices wood pellet heating offers a saving of up to 30-50% when wood pellets are purchased in bulk. For those able to grow their own fuel for use in our boiler, the savings are greater.

Are there any special plumbing considerations house?

The plumbing requirements are similar to those of an installation of an oil boiler. A comprehensive Installation Manual is supplied with each boiler to facilitate the installation by local plumber. For SEI Grant purposes, the installer must be registered with SEI.

So how do we compare?

Over the past number of years we have been:

- Tested by Teagasc, Oak Park
- Featured in the Farmers Journal ,Irish Independent, RTE's "About the House"
- Have been used by a large number of Private Households
- Have designed boilers unique to the Irish Market
- And have patented Grain burning Technology in the boilers

For technical enquiries please contact renewableenergy@heatmerchants.ie