

Benekov Biomass Boilers

For Bio-Fuels, Wood Pellets, Wood Chips & Grain/Corn



HEAT MERCHANTS



**RENEWABLE
ENERGY**



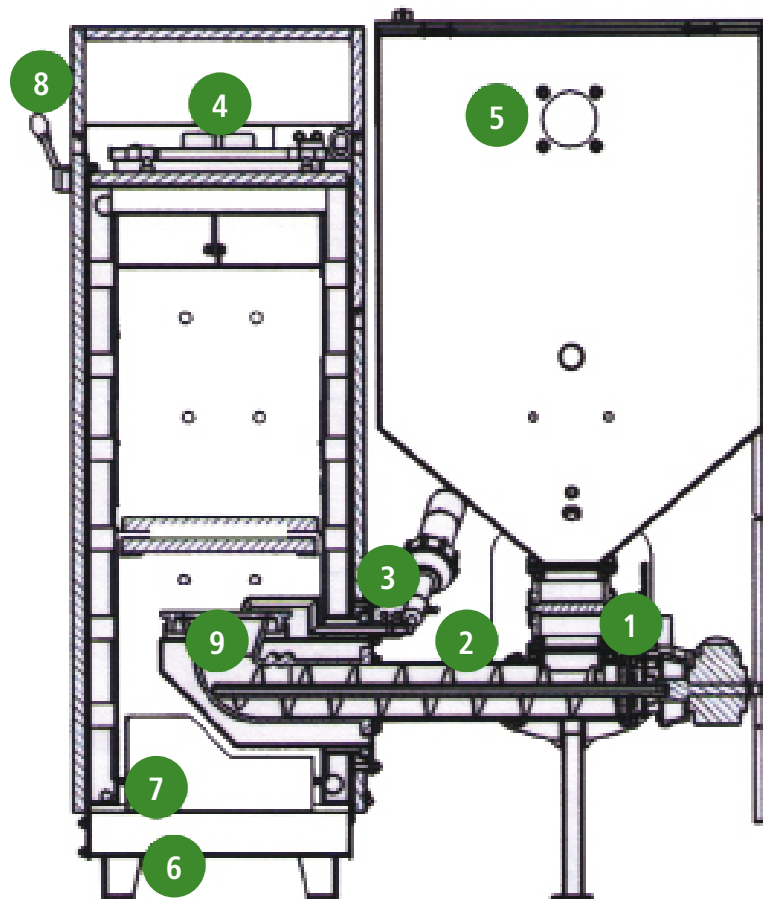
Think Renewable Think Heat Merchants

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 × Breath × 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 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 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		
$\Delta T = 10 K$	mbar	4.3
$\Delta T = 20 K$	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.



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

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
- 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?

See info from Prime 27.

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

Some other data regarding the vacuum system:

- Each pack 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 clip connectors. All you require is the required flexible hose pipe to suit your bulk storage
- Tested by TEAGASC Oak Park Carlow as Irelands Top Grain Boiler

For technical enquiries please contact commercialinfo@heatmerchants.ie

Heat Merchants Branches

Contact Details

Location	Address		Tel	Fax
Arklow	Lar Lacey	Unit 4 Portview, Knockenrahan Ind Est, Arklow, Co. Wicklow	040-229020	0402-29014
Athlone	Donal Mannion/Michael Carty	Unit 2, Moydrum Road, Athlone, Co. Westmeath	090-6491056	090-6487055
Ballina	Michael McManamon	c/o Brooks, Crossmolina Road, Ballina, Co. Mayo	096-71919	096 71505
Bray	Matt Lincoln	Unit 34, Beechwood Close, Boghall Road, Bray, Co. Wicklow	01-2116180	01-2864769
Carlow	Pat Galvin	Unit 1A, O'Brien Road, Carlow	059-9137374	059-9137560
Cavan	Richard O'Rawe	Unit 2, Pullamore Business Park, Dublin Road, Cavan	049-4375002	049-4375000
Clonmel	Brian Power	Carrigeen, Powerstown, Clonmel, Co. Tipperary	052-82102	052-82188
Cork	Steven McCarthy	Unit 5, Link Road Business Park, Ballincollig, Co. Cork	021-4875530	021-4876291
Cork	Liam O'Connell	Unit 4 Northpoint Business Park, Blackpool, Cork	021-4211120	021-4211170
Cork	Tom Golden	Unit 18D Euro Business Park, Courtown, Little Island, Cork	021-4355607	021-4355603
Cork	Don O'Shea	Majestic Business Park, Gouldshill, Mallow, Co. Cork	022-51105	022-51000
Cork	Sean O'Sullivan	Unit 5 Curragh Road, Turners Cross, Cork	021-4968134	021-4317760
Cork	Paul McCarthy	Curragh Commercial Park, Skibbereen, Co. Cork	028-51859	028-51858
Cork	TBC	c/o Brooks, Pouladuff Industrial Est, Togher, Cork	021-4971192	021-4964288
Dublin	Paul Mooney	c/o Brooks, Bluebell, Naas Road, Dublin 12	01-4190099	01-4190050
Dublin	Aidan McDermott	c/o Brooks, Unit BC5, M1 Business Park, Courtlough, Balbriggan, Co. Dublin	01-6905151	01-8410445
Dublin	Denis Bray	Unit 131 Baldoyle Industrial Estate, Baldoyle, Dublin 13	01-8399001	01-8399020
Dublin	Shay Keely	Unit 33-34 Finglas Business Park, Tolka Valley Road, Dublin 11	01-8110081	01-8110091
Dublin	Dermot Kinnear	Ground Floor Block 2, Cullens Cottage's, Deansgrange Road, Dublin 18	01-2070060	01-2070055
Dublin	Michael Maher	Unit B, Fonthill Industrial Estate, Fonthill Road, Dublin 22	01-6304306	01-6304307
Dublin	Barry McTernan	Unit 4, Hibernian Industrial Estate, Greenhills Road, Tallaght, Dublin 24	01-4585060	01-4585066
Dublin	Brian Hennessy	Unit 8 Glenview Industrial Estate, Rialto, Dublin 12	01-4541900/09	01-4541974
Dublin	David Verschoyle	c/o Brooks, 60 Heather Road, Sandyford Road, Dublin 18	01-2136481	01-2940177
Dublin	William McGee	Turvey Business Park, Donabate, Swords, Co. Dublin	01-8950000	01-8956283
Drogheda	David Calt	Unit 17, Donore Industrial Estate, Donore Road, Drogheda, Co. Louth	041-9836403	041-9837414
Dundalk	Paul Kane	The Coe's Road, Dundalk, Co. Louth	042-9334845	042-9334797
Dungarvan	Nicky Cloke	Unit 3A, Dungarvan Business Park, Dungarvan, Co. Waterford	058-48244	058-48225
Ennis	Derek Barry	Unit 2 Block F Quin Road Business Park, Quin Road, Ennis, Co. Clare	065-6844922	065-6845701
Galway	John Scarry	Unit 50 Briarhill Business Park, Ballybrit, Galway	091-705150	091-757569
Kilkenny	Justin Ryan	Dublin Road, Kilkenny	056-7762244	056-7721209
Longford	Eugene Mahady	c/o Brooks, Farneyhoogan, Athlone Road, Co. Longford	043-34200	043-45725
Letterkenny	Andrew Moore	Unit 5-6 Rossview Business Park, Port Road, Letterkenny, Co. Donegal	074-9188377	074-9188390
Roxboro	Joe Power	Roxboro, Limerick	061-311206	061-413708
Ballysimon	John Tuohy	c/o Brooks, Tipperary Road, Ballysimon, Co. Limerick	061 410011	061 410 007
Mullingar	William Connell	Unit 16, Clonmore Road Business Park, Clonmore Road, Mullingar, Co. Westmeath	044-9339098	044-9339099
Naas	Rob Stelling	Toughers Business Park, Newhall, Naas, Co. Kildare	045-486843	045-486840
Navan	Tommy Kavanagh	Old Dublin Road, Navan, Co. Meath	046-9072900	046-9072901
Nenagh	Kevin Ryan	Unit 22, Stereame Centre, Limerick Road, Nenagh, Co. Tipperary	067 50660	067 32779
Portlaoise	Nicky Maddock	Unit 4 Clonminan Industrial Estate, Portlaoise, Co. Laois	057-8665511	057-8665520
Sligo	Stephen Devaney	Duck Park, Sligo	071-9162133	071-9169730
Tralee	Brendan O'Sullivan	Clash Industrial Estate, Tralee, Co. Kerry	066-7180600	066-7180566
Killarney	Liam Galvin	Unit 4A, Tiernaboul Industrial Estate, Killarney, Co. Kerry	064-25034	064-25018
Tullamore	Niall O'Rourke	Units 12-13, Cloncollig Industrial Est, Tullamore, Co. Offaly	057-9349722	057-9324784
Waterford	Eddie Wall	Unit 2 Carriganard, Six Crossroads, Waterford	051-334606	051-872984
Wexford	Ian Stafford	Kerlogue Business Park, Rosslare Road, Wexford	053-9142136	053-9142116
Head Office & Central Warehouse		Moydrum Road, Athlone, Co. Westmeath.	090-6424000	090-6424050/75