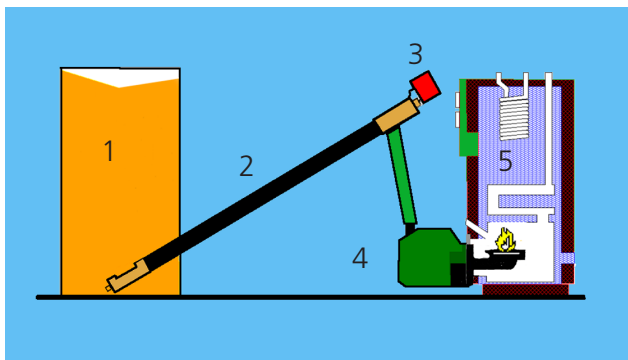![EcoTec värmesystem logo]

BioLine 50
30-50 kW

For property owners who need a bit more output than the average house owner

Welcome to the world of underfeeding

Our household burners are well-known in the market. Now we want you to take a look at what we can offer if you have a slightly larger building that you wish to convert from oil or electric heating. This burner is the one for you if you want to use environmentally friendly pellets as the energy source for your heating.

1. Fuel store, approx. 15 m³ for bulk loading or smaller for sacks.
2. Feed screw
3. Drive motor for feed screw
4. BioLine 50 pellet burner
5. Boiler, waterborne heat

Extra equipment:
• Extra long feed screws
• EcoVacMini ash vacuum
• Damper, depending on chimney draught
• Pellet store

Why buy a BioLine 50?

Quite simply because it is equipped with technology for underfeed combustion!
All the fuel, even the smallest of particles, is forced upwards and into the combustion zone, where it is fully combusted before the ash particles leave the burner dish.

As a result, the burner is not as sensitive to chips in the pellets, an unavoidable occurrence when the pellets are blown into the silo from a bulk tanker. The design also means that EcoTec can cope with other ash-rich pellets such as bark pellets.

We can also provide total solutions with customised boilers and equipment to suit your needs. The burner control system is included in the delivery.

Ash and combustion

All systems which burn solid fuel, even automatic systems like the BioLine 50 burner, require maintenance and servicing.
The size of the liner depends on the product chosen. By choosing a burner and boiler combination with our accessories, the work is made much easier.

The majority of the maintenance involves ash handling. After pellets are burnt in a BioLine 50, the waste product does not contain more than 0.4-0.5% ash* by weight.

You return the ash to nature by spreading it on lawns, thereby reducing the need for fertiliser. Biofuel combustion does not add to the carbon dioxide content in the atmosphere.

* Depending on power output and type of fuel

Advice on biofuel – raw materials

The most popular pellets are made from chips or bark, which work well in the BioLine 50.
The important factors are energy value, ash content, the volatile matter content, the environmental impact and, last but not least, the price.
You should choose a fuel which has the lowest cost per unit of energy, taking into account the fuel's function in the burner, its ash content and environmental impact.
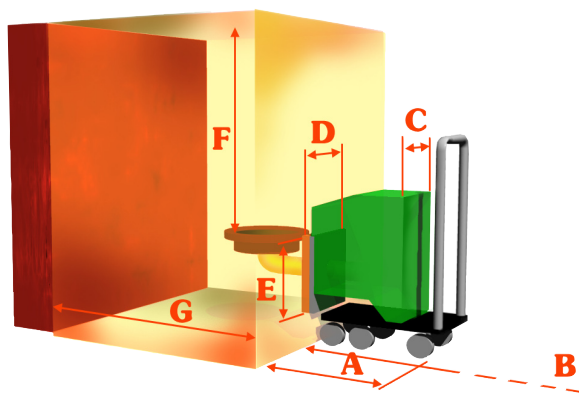
Approved specification for pellet fuel

Weight	600-750 kg/m^3
Energy content	4.7-5.4 kWh/kg
Size / Diameter	6-8 mm
Size / Length	Note: max. 35 mm
Moisture content	max. 12%
Ash content / Weight	<0.5% (sawdust pellets)
Fines content / Weight	max. 3%
Ash melting temp.	min. 1100°C

Fuel fact (Example)

In order to replace the heating in a building that uses say 15 m^3 oil per year, for heating and hot water, you'll need approx. 31.5 tonnes of pellets. Check current prices and compare!*

*The efficiency of your current system is not taken into account.

Technical data for BioLine 50

Heat output	30-50 kW
(State output when ordering)	
Combustion efficiency approx.	90%
(Depending on condition of boiler)	
Weight	50 kg
Voltage	230 VAC
Length from the boiler	A= 360 mm
Min. distance in front of the boiler	B= 1000 mm
Width outside the boiler	C= 430 mm
Min. boiler opening width	D= 250 mm
Min. boiler opening height	E= 250 mm
Clearance above burner dish in the boiler	F= 300 mm
Minimum boiler depth	G= 500 mm
Max. electrical power required	300 W

Control, regulation and monitoring

The BioLine 50 is controlled by the operation thermostat supplied, normal operating range 75-85°C.
The control device supplied then regulates the burner operation and monitors its functions.

The burner's functions comply with the requirements for P-marking.

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