




MAINE ENERGY SYSTEMS



 **AutoPellet**
Wood Pellet Central Heating Systems

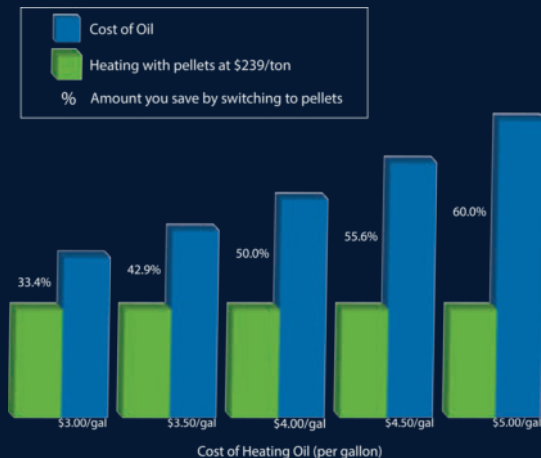




AFFORDABLE HEAT

Save 50% on Fuel Costs

With our Northeast Affordable Heat Program, we guarantee pellets for \$239 per ton until June 2014. That's the equivalent of \$1.99 per gallon of heating oil. With heating oil prices constantly changing here in the Northeast, the guaranteed price of \$1.99 per gallon equivalent keeps both your mind and wallet at ease.



Savings Example



This New England home burns on average 1,300 gallons of oil for heating and domestic hot water every year. At \$3.85 per gallon of #2 heating oil, the total cost to heat this home is \$5,005 each year.

If this house were to install a MESys **AutoPellet** Boiler, the cost to heat this home with wood pellets would be \$2,740. That's a savings of \$2,272 every year.

**Assuming oil prices stay the same,
this homeowner will save
\$56,875
during the first 25 years of service.**

Maine Energy Systems (MESys)

Headquartered in Bethel, Maine, our primary mission is to support a transition to the use of renewable wood pellet fuel for heating of homes, businesses, and municipalities. By offering a stably priced carbon neutral source of heat, MESys keeps home and business owners comfortable with their heat and comfortable in the knowledge that they are being good stewards of our environment. This fuel transition not only lowers costs for users, it also helps retain and create jobs in the region while significantly reducing the region's carbon footprint.



MESys *AutoPellet* Boilers

We manufacture and distribute MESys *AutoPellet* Boilers in Bethel, Maine. The licensed design was acquired from ÖkoFEN, the world's leader in automatic wood pellet boiler design and technology since 1989.



WOOD PELLETS

Energy Now

Wood pellets are made from the by-products of other wood manufacturing processes or from whole round wood. The wood is dried, pulverized, and forced under high pressure through the holes in a die, much like making spaghetti. The natural components melt to bind the fibers into wood pellets that range from $\frac{3}{16}$ to $\frac{1}{4}$ inches in diameter to $\frac{3}{8}$ to $1\frac{1}{2}$ inches long.

Sustainable Supply

There are several wood pellet mills in the region producing premium quality pellets from a supply of sustainable harvested wood. Wood pellets are a long-term solution to our fossil fuel dependency.

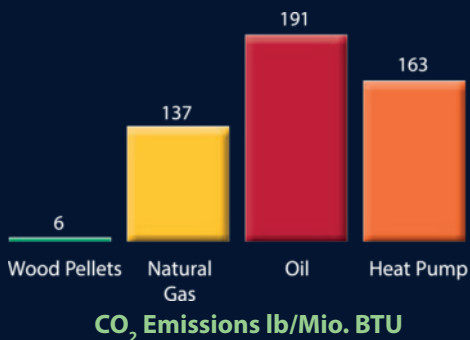


Local Responsibility

The Northeast burns 85% of the #2 heating oil consumed in the US every year. Less than 25% of every dollar spent on #2 heating oil stays in the region. Nearly 100% of every dollar spent on wood pellets stays right here in the regional economy creating jobs and fueling the local economy.

Clean, Easy, Convenient Delivery

Pellets are delivered bagless in bulk by our specialized pneumatic pellet delivery truck. Our delivery method protects pellets from damage as several tons of pellets are transferred from the truck to the storage bin during a single delivery. We only use wood premium pellets and pre-screen every shipment of pellets from mills prior to delivery.



CO₂ Balance

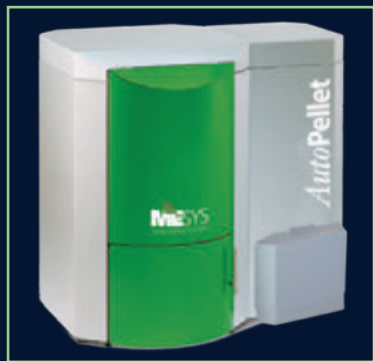
Trees absorb carbon dioxide from their environment as they grow. The equivalent amount of CO₂ absorbed over a tree's lifetime is released back into the carbon cycle whether the timber decomposes or burns. By heating with wood pellets, you immensely reduce your carbon footprint.



HEATING SYSTEM

Centralized Heat with Wood Pellets

The MESys **AutoPellet** Boiler is ideal for central heating and domestic hot water. The fully-automated, highly efficient wood pellet boilers are designed to meet the demands of households, businesses, and institutions without backup.



MESys **AutoPellet** Boiler, see page 8



Examples of Installations



FlexILO Pellet Storage, see page 10



Single boiler system in New England home.



Tandem sequence in Maine business (see page 15).



Cascade sequence in a town facility in Maine (see page 15).

PELLET HEATING

AutoPellet Boiler Features

Much of what is standard practice in wood pellet boiler manufacturing was defined by the research and development put into the design of our boilers.

1 Recycling burner system

Efficient combustion

2 Programmable logic control

Developed for AutoPellet Boilers

3 No internal maintenance

Annual technician cleaning only

4 Compact heating circuit controller

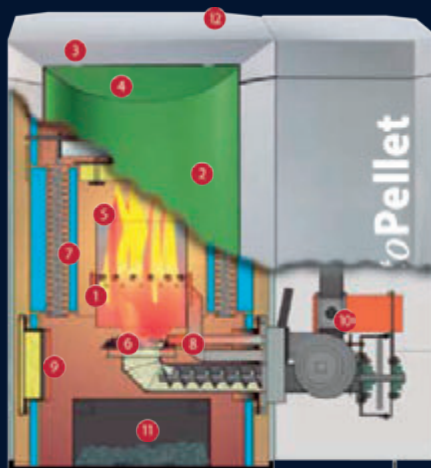
Integrated accumulator system control & text indicator

5 Steel combustion chamber

Round section boiler & automatic ash removal

6 Burner plate

No mechanical ash removal needed



7 Automatic cleaning system

Maintains high efficiency automatically

8 Low energy electronic ignition

Pinpoints preheated air igniting only small area of fuel (853 BTU/hr)

9 Left or right burner options

Optimum use of boiler room

10 Tested flame return protection

High level of safety; two gas tight seals

11 Integrated ashbox & compression

Ash removal made easy and simple

12 Integrated return flow increase

Easy Ash Removal

The MESys *AutoPellet* Boiler was designed to make your life easier. The ashes are automatically cleaned from the boiler and compressed into the integrated ashbox. Emptying the ashbox requires two or three minutes of your time only three to four times a year in the average home. There is no need to shut the system down for ash removal or wear heat-protecting mitts. Ash removal is worry-free and mess-free.

With a simple twist of the lever, the ashbox is removed from the boiler like picking up a briefcase. The ashbox is then placed on top of the storage container, emptied, and returned back to the boiler. The ash can be used as a lime supplement on lawns and gardens.



Detach ashbox & lift



Empty into storage box



Return to boiler





STORAGE SOLUTIONS

FleXILO

The FleXILO offers wood pellet storage options to fit your space and needs. Many available sizes and configurations ensure safe, automatic, and reliable movement of the wood pellets from bulk storage to the burner. The innovative design provides an ideal solution for pellet storage limitations such as damp rooms or space availability. Two different fuel delivery systems, auger and vacuum, allow bulk pellet storage to be located next to or up to 66 feet from the boiler.

Characteristics

- Made with strong antistatic textile material
- 12 different sizes ranging from 1,000 to 15,500 lbs. capacity
- Simple & quick installation
- Outdoor installation available if protected from rain & sun
- Economical
- Flexible
- Dustproof
- Supports two different fuel delivery systems (*see page 12*)

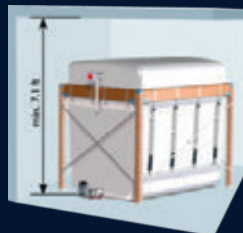


FleXILO Sizing

FleXILO storage systems come in a variety of sizes and configurations. Sizing the FleXILO is based on the heat load of the building and the available space.



FleXILO Square	S190H	S220H	S280H	S2819H	2822H
Filling capacity (tons)	3.0-3.5	3.4-4.0	5.1-6.0	3.9-4.1	4.6-5.3
Dimensions (width x depth x height)	6.46'x6.46'x5.0'	7.45'x7.45'x6.5'	9.42'x9.42'x6.4'	9.42'x9.42'x6.4'	9.42'x9.42'x6.4'



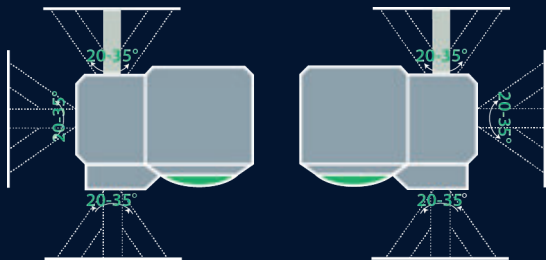
FleXILO Compact	KGT1814	KGT2618	KGT2620	KGT2626
Filling capacity (tons)	3.0-3.6	5.5-6.8	6.0-7.7	8.3-9.9
Dimensions (width x depth x height)	5.9'x4.6'x6.4'	8.5'x5.9'x6.4'	8.5'x6.5'x6.4'	8.5'x6.5'x6.4'



STORAGE SOLUTIONS

FleXILO with Auger Delivery System

The auger delivery system is used where the FleXILO is adjacent to the boiler. The auger system is the most economical system.

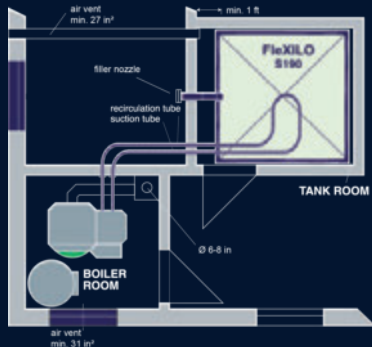


With an auger system, the FleXILO can be installed with a 20° to 35° pivot on three different sides. The boiler can be fitted to the right or the left.



FleXILO with Vacuum Suction System

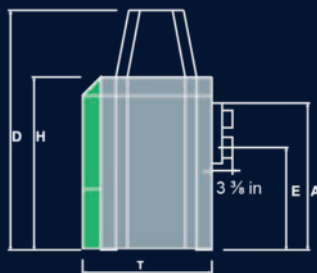
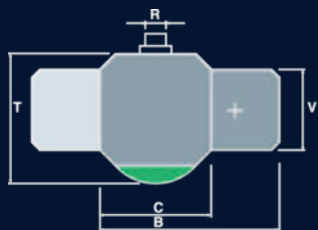
Pellets can be delivered from the FleXILO to the boiler using a vacuum suction system. The vacuum suction system is used where the auger delivery system is unsuitable due to room layout restrictions such as long distances or difficult routes. The vacuum suction system allows the FleXilo to be separated from the boiler by up to 66 feet.





TECHNICAL INFORMATION

Boiler Outputs, Dimensions & Capacities



	PE(S)12	PE(S)15	PE(S)20	PE(S)25	PE(S)32	PES36	PES48	PES56
Boiler-rated BTU/hr	41,000	51,000	68,300	85,300	109,500	123,000	164,000	191,000
C Boiler width	27.5"	27.5"	27.5"	29.75"	29.75"	34"	34"	34"
B Total width	44.5"	44.5"	44.5"	46.75"	46.75"	51"	51"	51"
H Boiler (auger) height	43"	43"	43"	51"	51"	61"	61"	61"
D Boiler (vacuum) height	55"	55"	55"	63"	63"	73"	73"	73"
T Boiler depth	32"	32"	32"	34.25"	34.25"	39"	39"	39"
V Burner casing depth	20"	20"	20"	20"	20"	20"	20"	20"
Water supply/return dimension	1"	1"	1"	1.25"	1.25"	2"	2"	2"
A Water supply/return height (connection)	35.75"	35.75"	35.75"	43.75"	43.75"	52"	52"	52"
R Flue diameter	5"	5"	5"	6"	6"	7"	7"	7"
E Flue height (connection)	25.5"	25.5"	25.5"	33.25"	33.25"	41"	41"	41"
Water capacity (gal)	15 gal	15 gal	15 gal	23.6 gal	23.6 gal	30.6 gal	30.6 gal	30.6 gal
Overall weight (lbs)	631	631	631	756	756	1,120	1,120	1,120

Wood Pellet Boiler Sizes

The MESys *AutoPellet* Boiler comes in a wide range of sizes. From small residential homes to large institutional buildings, our wood pellet boilers provide several options for you.



Performance Ranges by Type	BTU/hr
PE(S)12	11,500 to 41,000
PE(S)15	17,000 to 51,000
PE(S)20	20,500 to 68,3000
PE(S)25	27,300 to 85,300
PE(S)32	34,000 to 109,500
PES36	37,500 to 123,000
PES48	51,000 to 164,000
PES56	58,000 to 191,000
TANDEM (2 boilers in sequenced operation)	37,000 to 382,000
CASCADE (3 or 4 boilers in sequenced operation)	51,000 to 764,000



MAINE ENERGY SYSTEMS

207-824-NRGY (6749)

MaineEnergySystems.com

