

# MINI POWERHOUSE The New Generation **Eco-Mini Series**

































#### **Features**



**Backburn Safety** 

Fire backburn is prevented by keeping the Burner feed way always empty and within constant negative pressure. A high temprature limit switch ensures safety.



efficient Combustion

With 2 photocells and a flue gas temperature sensor following the combustion at all times, the efficiency of the product is maximized.



Advanced Controller system

An advanced central control system regulates the system constantly with the data provided by sensors.



Digital Control Panel

A reliable software is driven by an adavanced command interface provides strict control of the system. An optional touch screen panel with an internet module is also available.



Compact Burner Unit

A lightweight and easily dismount-able burner unit provides service friendly maintenance as well as accessibility when needed.



**Tube Cleaning System** 

Manual handle allows turbulators to move Up and down and cleaning of smoke tubes.

An automated version is also available as an option.



Adaptive Air Feed

A High capacity induced draft fan al-lows precise regulation of boiler ca-pacity.

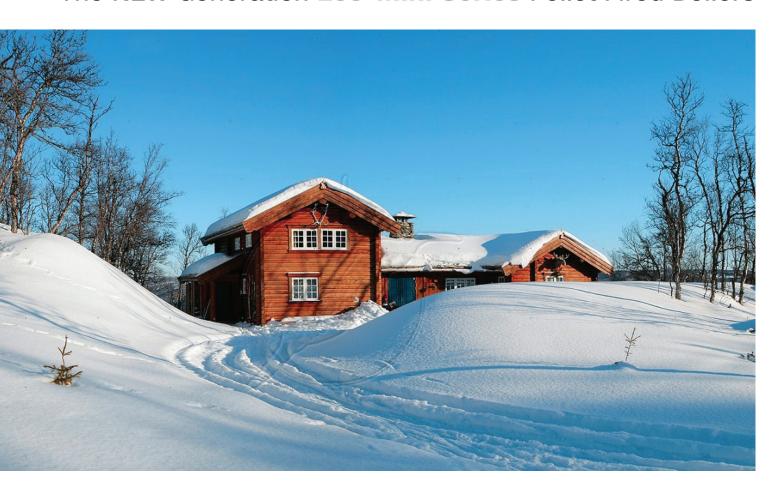


#### Automated Burner Cleaning System

A simple yet effective cleaning system clears the burner grate periodically.



## RETURN of INVESTMENT accelerated. The NEW Generation **Eco-Mini Series** Pellet Fired Boilers



#### An affordable Pellet Boiler

Eco series boilers features vertical tubes and an externally driven manual cleaning equipment. Reliable structure of Eco series are consolidated by endurant "boiler quality steel" and guarantess you a service life of many years.

All functions can be easily accessed by a digital display on the front of the cabinet through an easy and intuitive software interface.

The compact structure of Eco series systems are extremely flexible and makes it particulary suitable for any type of installation. Eco boilers can be equipped with an external sanitary hot water, heat exchanger and also with buffer

Tanks to increase efficiency.

#### What is Special about it?

The size. The new generation Eco systems are about the 2/3 of a regular boiler. Since the size is smaller, the cost is smaller too.

#### How it is possible?

Everythig is about the combustion gas routes. The flames are reversed after they are generated and forced to pass through newly generated flames leading to a re-burn. This process not only increases efficiency but also decreases the size of the chamber all together.

#### Designed for Class 5.

- \* Efficiency > 92 %
- \* Emissions  $< 500 \text{ mg/m}^3 \text{ C}_0$
- \* Dust < 40 mg/m³.

#### Highlights on the Features of Eco Pellet System

- Full Automatic ignition,
- Manually driven tube cleaning system,
- Full Automatic cleaning of burner grates,
- Auto pellet dosage.
- External fuel hopper can be placed either sides.
- User friendly control system with digital display
- Unique Software for regulation of combustion
- Unique Software for regulation of air supply
- Service friendly design
- Flexible installation
- Optional: Touch Panel Control
- Optional: Pipe Cleaning System
- Optional: Ask extraction System



### **Technical Specifications**

	TECHNICAL SPECIFICATION OF ECO-MINI PELLET BOILERS		Unit	BOILER TYPE			
				Eco-Mini -12	Eco-Mini -23	Eco-Mini -40	Eco-Mini-60
CAPACITY	Nominal Heat Output		kW	12	23	40	60
			kcal/h	10.320	19.780	34.400	51.600
	Minimum Heat Output		kW	3,6	6,9	12	18
J			kcal/h	3.096	5.934	10.320	15.480
	Efficiency		%	> 92%			
OPERATING CONDITIONS	Safety Limit Temperature		°C	95			
	Max. Operating Temperature		°C	80			
	Min. Water Return Temperature		°C	55			
	Operating Pressure		bar	3			
	Boiler Test Pressure		bar	4,5			
	Electrical Connection		-	230 V <sub>ac</sub> , 50 Hz			
	Recommended Fuel Types		-	Ø6-8 mm high quality pellet			
MAIN DIMENSIONS	W₁ Cabin Width		mm	515	595	595	700
	H <sub>1</sub> Height		mm	1160	1160	1360	1360
	L <sub>1</sub> Cabin Depth		mm	655	790	845	990
	Total Boiler Depth ( $\pm$ 2, L <sub>t</sub> )		mm	1070	1200	1280	1460
	Stack Size, (Outer, ØD <sub>1</sub> - Inner Diameter)		mm	130-125	130-125	150-146	150-146
	H <sub>2</sub> Height of Stack Connection		mm	745	700	860	860
	Water Content		lt	25	50	75	110
	Empty Weight		kg	150	190	240	290
	Wooden Case Freight Dimensions (WxHxD)		mm	615x1250x1100	715x1250x1240	715x1450x1320	820x1450x1500
	Gross Weight		kg	170	215	270	330
	Filling & Drain Connections	ØD <sub>2</sub> Diameter	inch		1/.	1/2"	
	Hot Water Outlet Connections	ØD₃ Diameter	inch	1", Male 1 <sup>1/2</sup> ", Male			
		L <sub>3</sub> Position	mm	210	250 303		303
		H <sub>3</sub> Position	mm	1028	1020	1225	1228
	Water Inlet Connections	ØD <sub>4</sub> Diameter	inch	1", Male 11'/4", Male		Male	
		H <sub>4</sub> Position	mm	152	3:	50	355
SILO	Stand Fuel Storage Volume		lt	300		500	
	W <sub>2</sub> Width		mm	650		800	
	L <sub>2</sub> Depth		mm	850		900	
	Empty Weight		kg	35 45		45	

