# WOOD CHIP BOILERS

ECO-HK 70-120 KW







# Hargassner boiler design

### Full refractory-lined combustion chamber

with flame concentration jets for optimum post-combustion

The refractory combustion chamber guarantees high combustion temperatures by optimum heat storage (even at part-load), minimises the ignition procedure and reduces emissions.



### **Firebed monitoring**

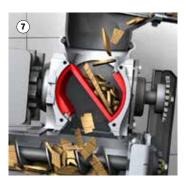
Through the precise and contactless firebedheight monitoring system, the most effective combustion conditions are detected depending on fuel quality. Your heating system is always working at optimum combustion values for the required heat output.



### **Energy-saving ignition**

Due to the new design of the ignition element, electrical power consumption has been reduced to just 300W (up to 1000 W less) and, at the same time, the efficiency of the ignition process has been increased.

- Electricity savings of over 88%
- Intelligent ignition monitoring
- Completely silent



# Z-shaped bicameral rotary valve

A z-shaped rotary valve designed especially for wood chip.

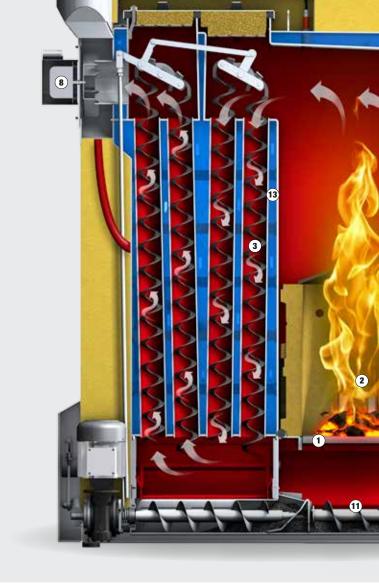
- Depth of chamber: 18 cm
- for extra long wood pieces
- 100% burn-back safety
- smooth operation
- easy to use
- with hardened cutting edges



### Integrated Touch Control

The all new Lambda-Touchtronic is the ultimate control system which is exceptionally well designed and easy to use.

You instantly see the current status of the boiler, the accumulator and the HWS, as well as all heating circuits. The new remote controls with LCD or Touch displays make it even easier to use.





# Ash suction offers maintenance intervals of up to one year

An optional ash suction system is available which sucks ash into a 300 litre bin.

The suction system transports the ash through a steel pipe system from the boiler room into the ash bin, which is located in a roofed outdoor area.

The ash bin can be emptied once a year using a tractor or front loader. Hargassner's

superior and intelligent cleaning technology is easy and efficient to use.

## ECO-HK 70-120 kW



#### **EXPLANATION**

- **01** New grate system "Double rotary step grate".
- 02 Firebed levelling
- 03 Heat exchanger cleaning (also in 1. draught)
- **04** Ash suction system for longer maintenance intervals
- 05 New ignition: 300 W, without fan
- **06** Innovative integrated Touch control
- 07 Bicameral rotary valve in Z-design
- **08** Exhaust fan (EC-motor) with negative pressure monitoring
- **09** Recirculation
- 10 Optional: Integrated back end protection
- 11 Patented ash extraction for fly and grate ash
- **12** No thermal discharge safety device necessary
- 13 Combustion chamber fully integrated in heat exchanger
- 14 Flame concentration jets out of high-quality steel cast

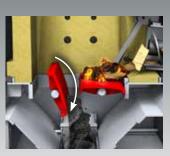
### Unique double rotary step grate

The grate consists of two adjacent stepped grates which can be moved independently.

As a result, wood chips and pellets, as well as other agricultural fuels, may be burned efficiently.



Furthermore, the grates are able to level the firebed to ensure a homogeneous combustion process.



If regular wood chips are used, only the rear de-ash grate opens. The ash falls down and the embers remain.



If the boiler is completely cold, a full cleaning process is executed. Both grates rotate and all foreign objects like stones, nails, etc. are removed in addition to the cold ash



For miscanthus, corn cobs, etc the "Breaker Function" of the grate forces clinker down into the ash auger.

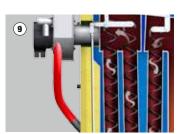


### **ACCESSORIES**

# Integrated back end protection

An integrated back end protection with energy-efficient pump and motor mixer is available.

- fast and easy to assemble
- compact and inexpensive



## Recirculation for agricultural fuels

To reduce clinker in the ash, Hargassner offers flue gas recirculation, especially for agricultural fuels.

Due to the cooling of the firebed during combustion, the relatively low ash melting point of miscanthus or corn cobs can be reduced. The ash can be easily removed into the ash extraction auger.

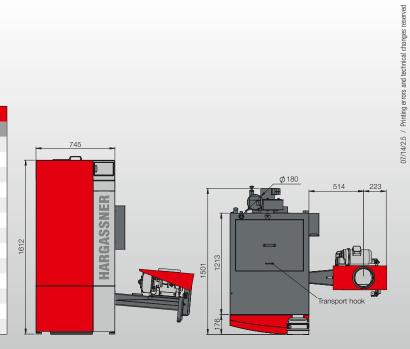
# Optimised cleaning increases efficiency

The new cleaning method cleans ALL heat exchanger tubes at regular intervals - **NOW the down draught is also cleaned (Stainless steel turbulators). The heat exchanger is cleaned with turbulators made out of heat-resistant material.** 

The turbulators remove the fly ash from the pipes, which falls down into the ash extraction auger. The result is easier cleaning and increased overall efficiency.

For more information visit: www.hargassner.com

Technical details	ECO-HK		
	Unit	HK 70 - 120	
Power range	kW	70/90	100/110/120
Flue pipe diameter	mm	180	180
Water content	Litre	182	188
Max. operating temperature	°C	95	95
Max. operating pressure	bar	3	3
Flow/Return	Inches	6/4"	6/4"
Weight	kg	885	890
Boiler height:	H mm	1612	1612
Boiler width:	W mm	745	745
Boiler depth:	T mm	1501	1501
Transport dimensions - Width	mm	745	745
Transport dimensions - Depth	mm	1335	1335
Electrical supply		400V AC, 50HZ, 13A	





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Hargassner Products: Pellet Boilers, Wood Chip Boilers, Wood Log Boilers, Accumulators, Industrial Boilers 150-200 kW, Multi-fuel Boilers, Containers, Wood Chip Transportation Systems.

More information www.hargassner.com