

# Heating with pellets



**pelletstar**  
10 - 60



# Our success is our expertise...



## HERZ-Armaturen Ges.m.b.H

### The company

Founded in 1896, Herz has been continuously active in the market for more than 110 years. HERZ Armaturen Ges.m.b.H. has five sites in Austria and three other locations in Europe with more than 1.400 employees. Today, HERZ is the leading Austrian manufacturer playing a significant role in the global heating industry.

### Feuerungstechnik (boiler) division

HERZ Feuerungstechnik in Sebersdorf/Styria was founded in 1983. Today more than 120 people work in production and sales. At the company's location in Pinkafeld / Burgenland is a modern manufacturing and a laboratory for new and innovative products available. Over the years HERZ Feuerungstechnik has established itself as a specialist for biomass

heating. The main focus for this is placed upon modern, cost efficient and environmentally friendly heating systems with highest levels of comfort and convenience as well as being userfriendly.



### A heart for the environment

All HERZ boiler exceed the strictest emission regulations. This is proven by various environmental seals of approval.

### HERZ quality

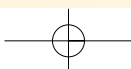
Herz design engineers are in regular contact with acknowledged research institutions in order to further improve the very high standards.



## Decades of experience

- In-house development and test centre
- Austrian quality with Europe-wide sales
- Comprehensive service
- ISO 9001 certification
- FMEA approved boiler production

Innovative technology using  
natural fuel pellets



# Convenient heating...



## Economical and convenient heating using pellets.

The HERZ-pelletstar BioControl, established in the market since many years and in operation around whole Europe impresses with its high efficiency, easy operation and modern design.

The system "Plug and Play" - just assemble and heat - stands for the ideal environment and fully automatic Heating system.



## The great advantages of HERZ pelletstar:

- Highest efficiency
- Simple and automatic operation
- Automatic heat exchanger cleaning
- Automatic combustion grate cleaning
- High operation safety
- Efficient insulation
- Automatic pellet discharge with different systems available
- Compact design
- Constructed from high quality materials

### Control unit for:

- Heating circuits
- Hot water preparation
- Return flow temperature
- Buffer management
- Solar circuit control

# Benefits and details...



Control using  
**HERZ  
BioControl 3000**

**Central control unit:**

- up to 6 controlled heating circuits (pump and mixer valve)
- domestic hot water
- Buffer management
- Return flow temperature bypass (pump and mixer valve)
- Simple screen design and convenient menu guidance.
- Modular extension option for solar circuit control as well as other heating circuits (total maximum 6 heating circuits, for solar maximum 5 circuits).



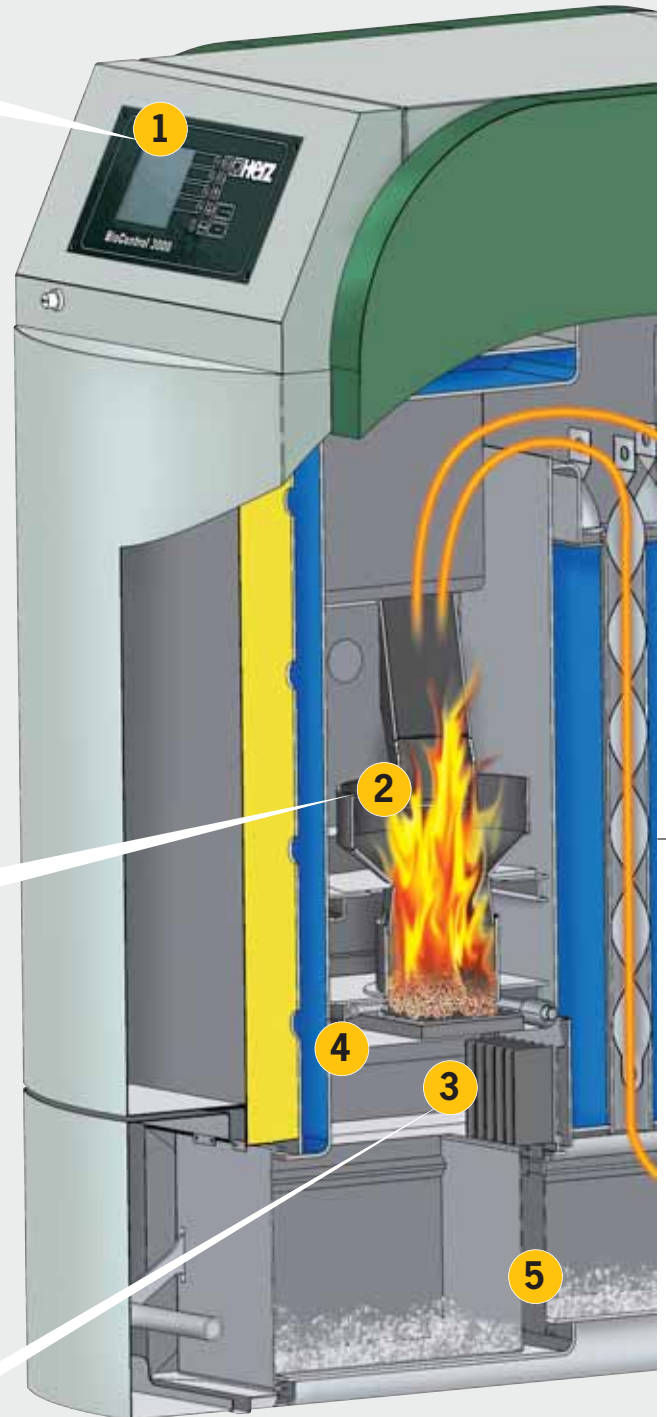
High temperature-  
resistant stainless  
steel burning chamber

- Made of high heat-resistant steel - for longest lifetime



Automatic cleaning  
of the combustion  
grate

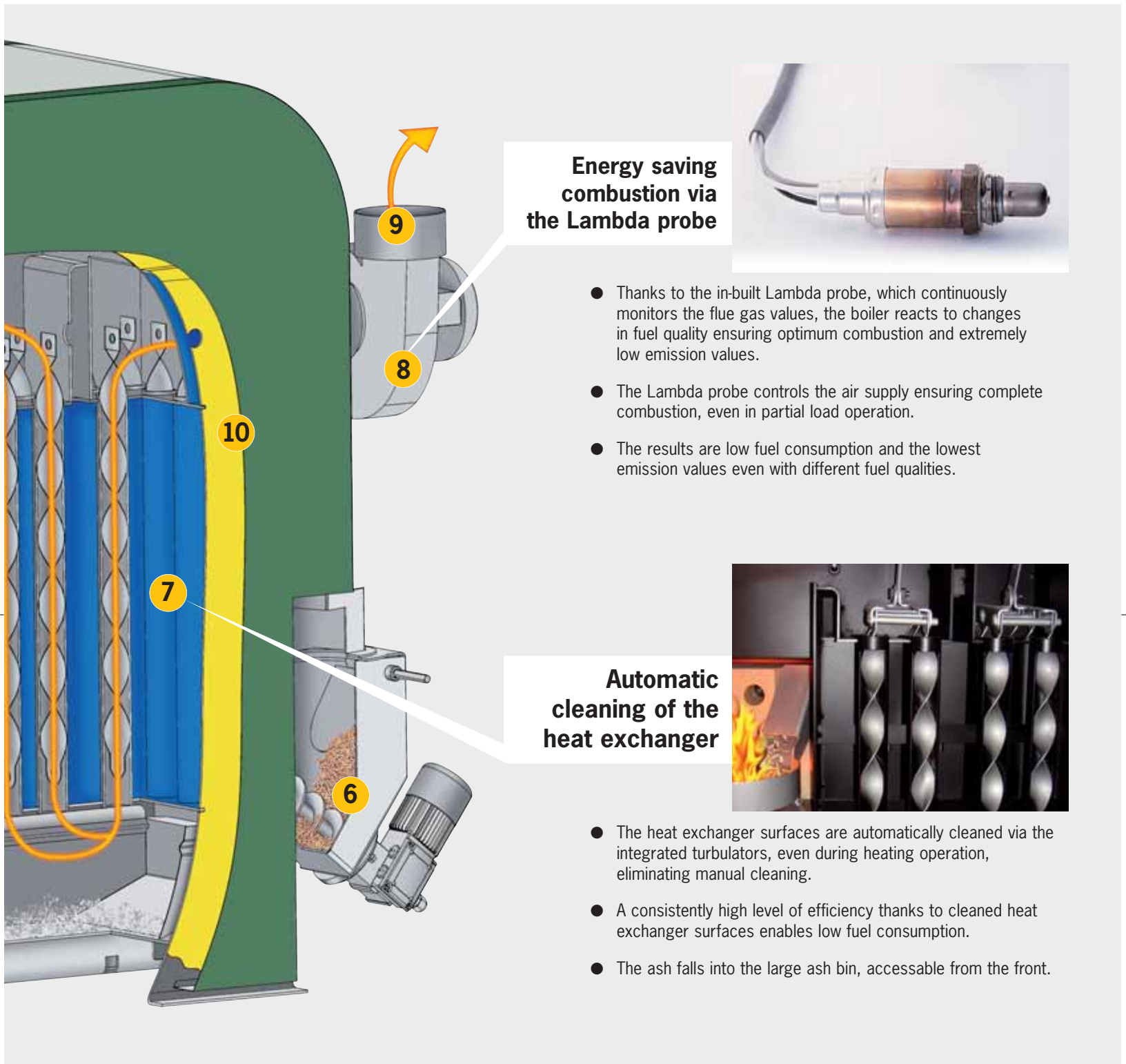
- Complete cleaning of combustion grate which automatically tips ash to extraction point.
- A clean combustion grate guarantees an optimum air supply.
- Minimises the manual cleaning requirement.



- 1 **BioControl 3000 control**  
central control unit
- 2 **High temperature-resistant**  
burning chamber
- 3 **Tipping grate**  
for complete cleaning

5

# ...of HERZ pelletstar



## Energy saving combustion via the Lambda probe



- Thanks to the in-built Lambda probe, which continuously monitors the flue gas values, the boiler reacts to changes in fuel quality ensuring optimum combustion and extremely low emission values.
- The Lambda probe controls the air supply ensuring complete combustion, even in partial load operation.
- The results are low fuel consumption and the lowest emission values even with different fuel qualities.

## Automatic cleaning of the heat exchanger



- The heat exchanger surfaces are automatically cleaned via the integrated turbulators, even during heating operation, eliminating manual cleaning.
- A consistently high level of efficiency thanks to cleaned heat exchanger surfaces enables low fuel consumption.
- The ash falls into the large ash bin, accessible from the front.

**4. Automatic ignition**  
using hot air fans

**5. ash-box for combustion and fly ash**  
easy access from the front,  
easy to handle

**6. BBP** (back burn protection device; flap)

**7. Pipe heat exchanger**  
with turbulators and  
automatic cleaning

**8. Lambda probe control**  
Automatic flue and  
combustion monitoring

**9. Draught fan**  
speed controlled and monitored  
for the highest operating safety

**10. Efficient heat insulation**  
for the lowest radiated heat loss



# Discharge systems...

## Flexible screw and suction discharge system from HERZ:

for woodpellets ( $\varnothing$  6mm) according to ÖNORM M 7135, DINplus or Swiss Pellets



Fuel transport with flexible auger system and transfer hopper.



Fuel transport with flexible auger system.



Fuel transport with flexible auger system out of a bag silo.



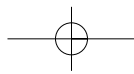
Fuel transport with a screw in the storage room and suction system to the boiler.



Fuel transport with suction system out of a bag silo.



Fuel transport with suction system out of an underground bunker.



# Measurements & technical data...

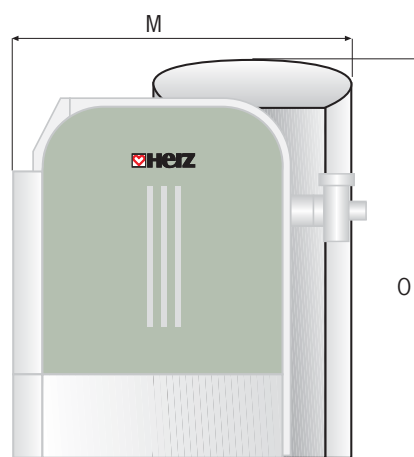
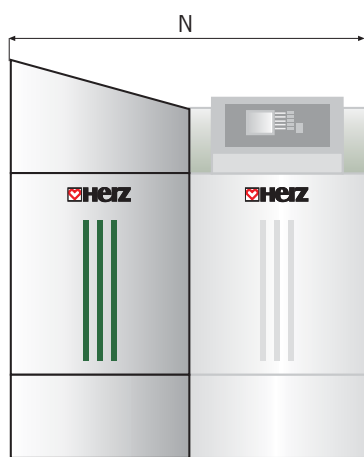
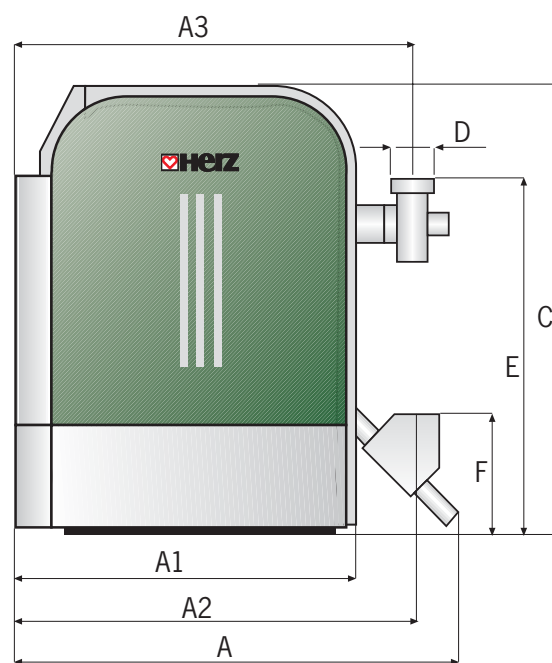
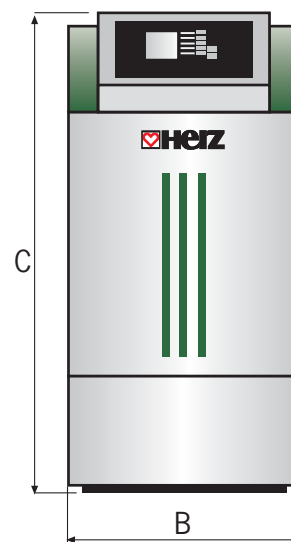
Technical Specification		10	20	30	45	60
Output range	kW	3,4-14,9	5,3-20	6,4-31,6	11,8-47	11,8-62
Boiler weight	kg	261	310	310	518	518
Degree of efficiency $\eta_f$	%	>93	>93	>93	>93	>93
Max. Permissible feed pressure	mbar	0,10	0,10	0,10	0,10	0,10
Permissible operating pressure	bar	3,0	3,0	3,0	3,0	3,0
Max. Permissible flow temperature	°C	95	95	95	95	95
Water capacity	L	55	76	76	178	178
Electric supply	V/Hz	230/50	230/50	230/50	230/50	230/50
<b>We reserve the rights for technical modifications</b>						

Dimensions (mm)		10	20	30	45	60
A Length overall		1350	1350	1350	1600	1600
A1 Length boiler		865	940	940	1140	1140
A2 Length boiler plus distance to BBP centre line		1195	1190	1190	1435	1435
A3 Length boiler plus distance to flue pipe centre line		970	1045	1045	1275	1275
B Width		590	590	590	750	750
C Height		1130	1230	1230	1480	1480
D Smoke flue diameter		130	130	130	150	150
E Height to flue pipe top edge		925	1025	1025	1305	1305
F Height to BBP top edge		390	390	390	505	505
G Height to flow connection		860	960	960	1200	1200
H Height to return flow connection		670	770	770	1015	1015
J Height to feed and drain connection (1/2")		265	265	265	265	265

pelletstar 10/20/30: flow connection 1" return flow connection 1"  
 pelletstar 45/60: flow connection 6/4" return flow connection 6/4"

Dimensions with additional tank* (mm)		10	20	30	45	60
M Overall length		1240	1240	1240	1430	1430
N Overall width		1110	1110	1110	1265	1265
O Height		1395	1395	1395	1645	1645

\*For manual filling and suction discharge



The hopper is also available for hand filling (pelletstar BioControl Compact)



# The complete system using HERZ...

A sensible combination for the future:  
**Pellet boiler with solar heating**  
The HERZ Sunstar flat collector is hot!

- To increase convenience and reduce costs, solar collectors can be connected either directly to the domestic hot water cylinder, providing 'free' top up hot water or supplied into the buffer tank to supplement the hot water to the space heating system.



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## Quality with HERZ:

- Pellet boilers
- Wood chip boilers
- Wood gasification boiler
- Heat pumps
- Buffer / Hot water tanks
- Solar technology

The right to make technical amendments is reserved! GB-12-2009

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HERZ-Feuerungstechnik  
exceeds the strictest  
emission regulations.