



*Innovative heating
systems for:*

- » **Woodchips**
- » **Biomass**
- » **Pellets**
- » **Shavings**

Heizomat[®]



**GERMAN QUALITY SINCE 1982 WITH
NATIONWIDE CANADIAN SUPPORT**



1.877.359.0234 • www.heizomat.ca



Factory Maicha

Energy in Balance with Nature

In 1982 Robert Bloos created the first discharging system for woodchips. The idea behind it was to burn wood from his own forest with the same comfort as with fossil fuels.

We now produce products encompassing all things around woodchips at two locations in Bavaria, Germany. The core business are our woodchip boilers, from which we have been able to install more than 35.000 units in more than 30 countries. Chipping machines, filling equipment for woodchip storages, woodchip transportation systems, grippers and innovative solar trackers round off our product range.

We are convinced that heating with woodchips continues to be the best alternative for fossil energy sources. Thanks to sustainable forestry, the planting of fast-growing trees on plantations, along streams and on the sides of fields and roads, we will be able to continue to generate affordable and CO₂ neutral energy in balance with nature.



HSK-A built in 1986



Factory Heidenheim



more than 250 employees

We are revolutionising heating with woodchips!

Many Heizomat inventions are industry standards today.

Milestones:

- 1982 The first Heizomat
- 1983 Agitator Ø 5 m
- 1984 Rotary valve
- 1987 Automatic deashing
- 1989 The first Heizohack
- 1990 Large boilers up to 850 kW
- 1992 Heizohack crane fed
- 1995 Lambda - control
- 1996 Autom. heat exchanger cleaning
- 1997 Automatic ignition
- 1998 Microchip-based regulation
- 2000 Chain deashing
- 2003 Channel in route form
- 2004 Heizogreif forestry grippers
- 2005 HM 14-800 KL lorry chipper
- 2005 Touch control panel
- 2005 Air jet ignition
- 2006 Discharger with separate drive
- 2008 Visualisation
- 2010 Parallel motion
- 2011 Vertical filling systems
- 2012 Siemens-Simatic control unit
- 2014 Chain discharging systems
- 2015 System manager
- 2016 Heizotruck
- 2017



Large systems since 1990

Factory Maicha



Office:

- Management
- Sales
- Construction
- Work preparation
- Development
- Software programming
- Logistics
- Customer services

Production:

- Apprentice workshop (21 Apprentices)
- Control box construction
- Chipper final assembly
- Sheet metal working
- Paint shop
- Auger welding shop
- Channel production
- Cladding construction
- Special construction
- Turning shop
- Shipping
- Laser
- Laundry
- Chipper repair

Production area:

13,000 m²

Number of employees:

approx. 160



Channel production



Turning shop



Exhibition



Controller box production



Chipper final assembly

Factory Heidenheim



Production:

- Boiler construction
- Chipper construction
- Sawmill
- Tube laser
- Mould construction of the boiler refractory
- Production of the refractory lining
- Production of small parts

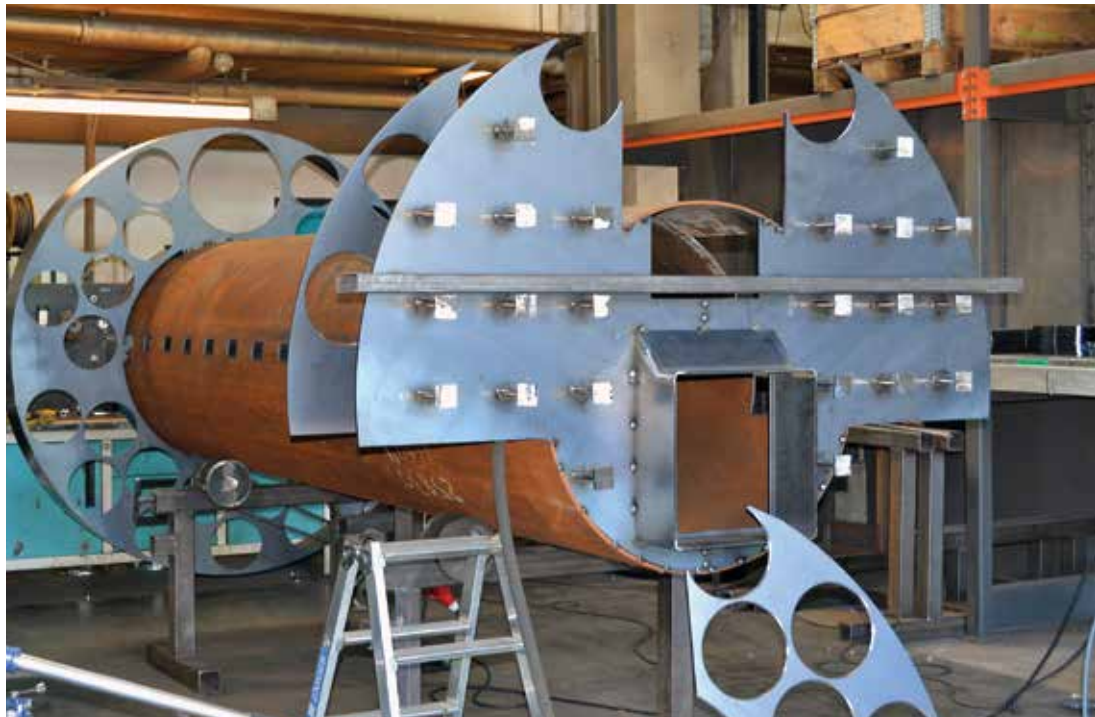
TÜV-compliant test bench

Production area:

18,500 m²

Number of employees:

approx. 90



Welding shop



TÜV-compliant test bench



Production hall

HSK-RA woodchip boiler

Output range:

30 - 200 kW

Efficiency:

> 90 %

Fuel:

Woodchips as per EN 17225-4
A1/P45 M30, pellets, sawdust

Combustion chamber:

6 mm wall thickness, refractory lining
with high-quality fireclay bricks

Heat exchanger tubes:

6.3 mm wall thickness, large volume
register pipes with 200mm diameter,
seamlessly welded with cleaning
augers inside.

Horizontal heat exchanger:

A natural air draught is created
by the horizontal heat exchanger,
resulting in a reduced electricity
demand and an improved heat
yield. Thanks to the robust cleaning
augers, rolled from 8 mm thick steel,
the heat exchanger cleaning is prac-
tically maintenance free! A high level
of efficiency is created at the lowest
of fluegas temperatures.

Automatic ash removal:

The ash from the combustion
chamber is moved by the ash scraper
through the cast iron grate, the heat
exchanger is cleaned via augers.

Ash container:

Optionally 40 l, 240 l or 900 l

Insulation:

60 mm

Air jet ignition:

A robust glow bar is used for ignition
mode. Placed in the air jets protected
from ash and soot. Energy saving,
just approx. 0.15 kWh per ignition!



Minimal space required



Automatic combustion chamber deashing

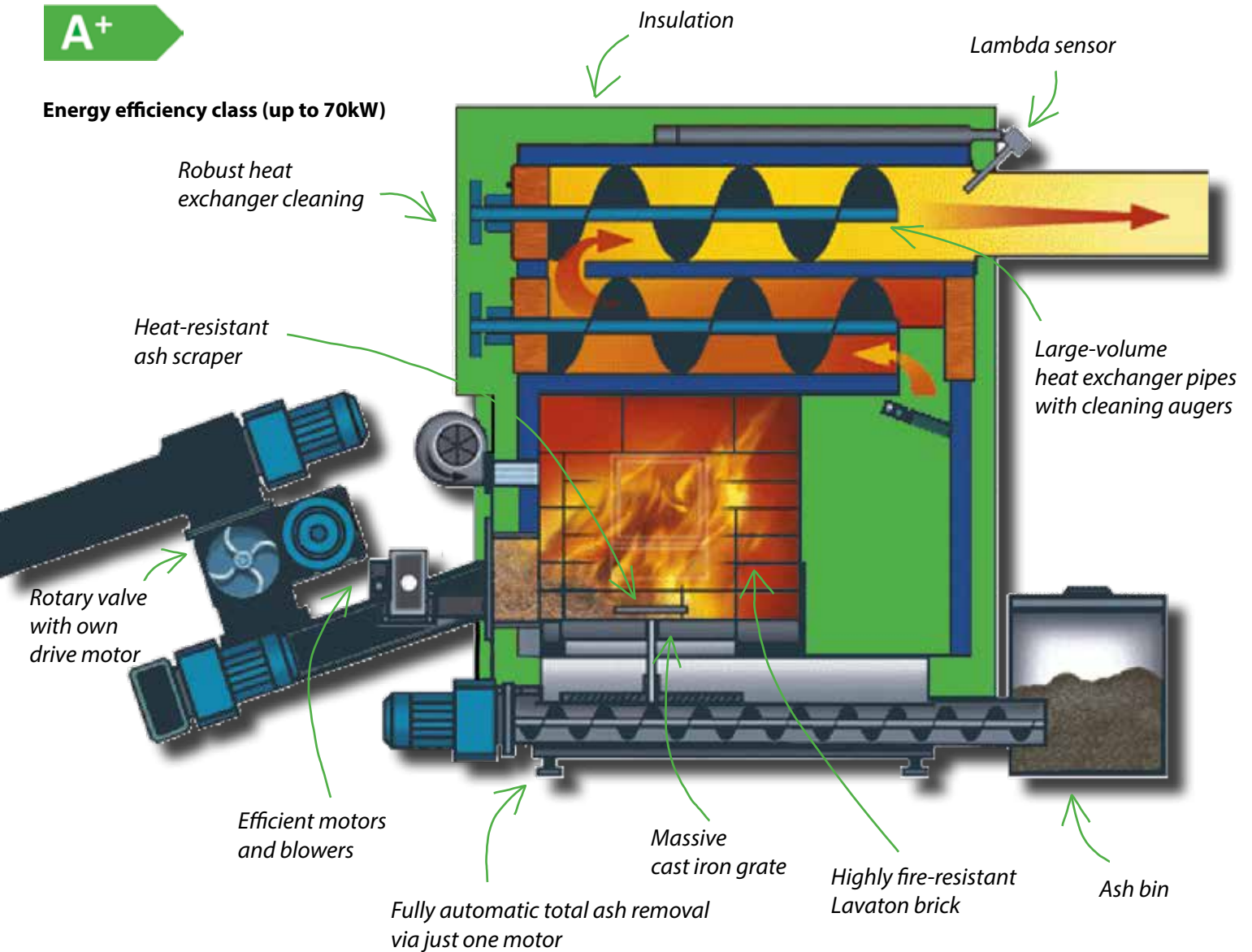


Robust drive unit of the automatic heat exchanger cleaning



A⁺

Energy efficiency class (up to 70kW)



HSK-RA 60 built in 2007



In the event of electrical power outage, emergency use with log wood is possible!

RHK-AK biomass boiler

Output range:

30 - 990 kW

Efficiency:

> 90 %

Fuel:

Woodchips as per EN 17225-4
A1/P45 M30, pellets and biomass

Combustion chamber:

8 mm wall thickness, refractory lining
in heart shape made from resistant
refractory concrete

Heat exchanger tubes:

6.3 mm wall thickness, large volume
register pipes with 200mm diameter,
seamlessly welded with cleaning
augers inside.

Horizontal heat exchanger:

A natural air draught is created
by the horizontal heat exchanger,
resulting in a reduced electricity
demand and an improved heat
yield. Thanks to the robust cleaning
augers, rolled from 8 mm thick steel,
the heat exchanger cleaning is prac-
tically maintenance free! A high level
of efficiency is created at the lowest
of fluegas temperatures.

Automatic ash removal:

The ash from the combustion cham-
ber is moved through the patented
de-ashing chain, the heat exchanger
is cleaned via augers.

Ash container:

Optionally 40 l, 240 l or 900 l

Insulation:

80 mm sandwich panels

Air jet ignition:

A robust glow bar is used for ignition
mode. Placed in the air jets protected
from ash and soot. Energy saving,
just approx. 0.15 kWh per ignition!
Approx. 0.15 kWh per ignition!



Maintenance-friendly cover



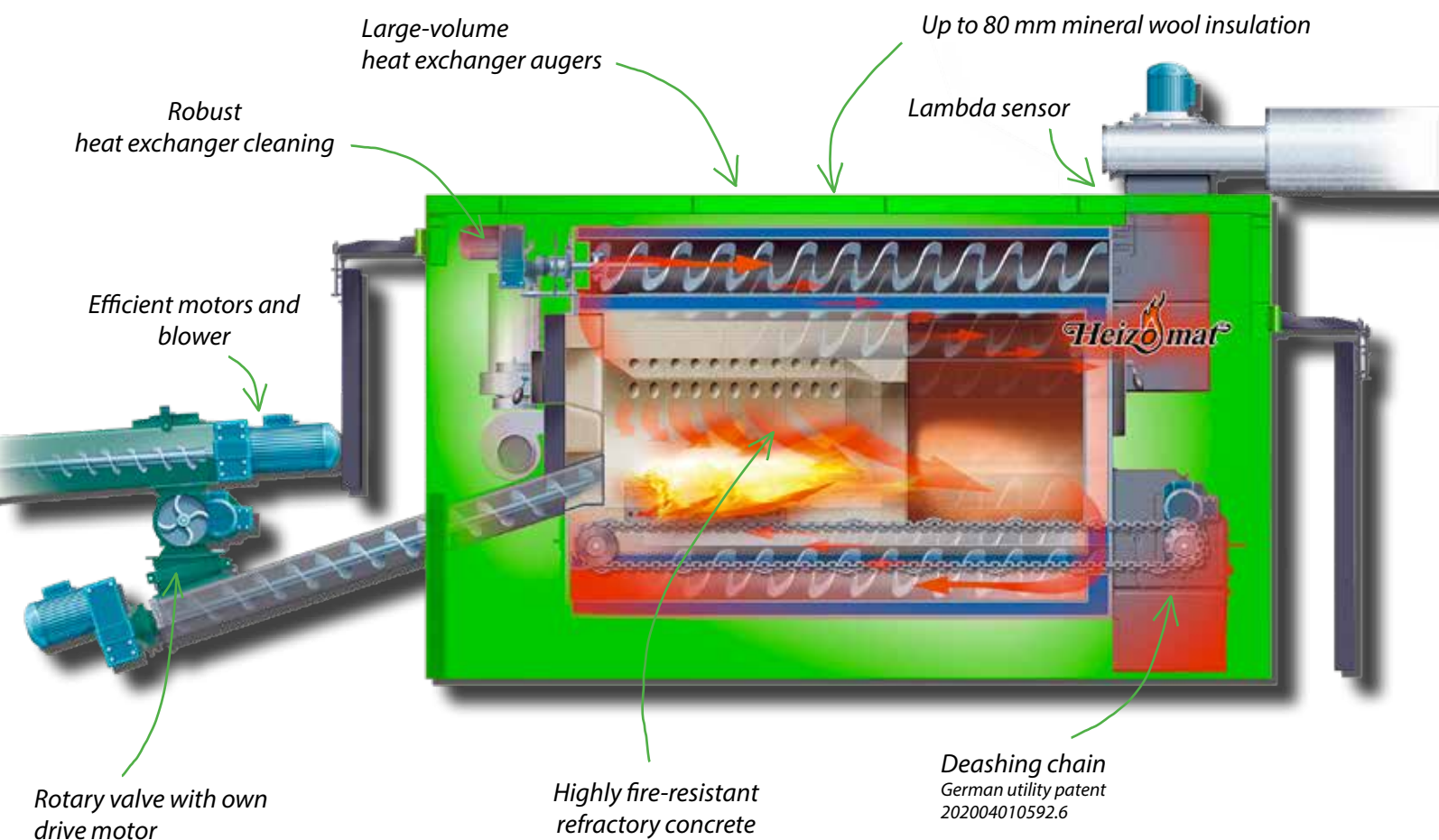
Combustion chamber with best emission values



Robust automatic heat exchanger cleaning

A⁺

Energy efficiency class (up to 70kW)



Trendsetting technology

Discharging technique

Articulated arm:

Robust milling arm for room sizes from Ø 1 m to 7 m, preloaded with chain and tension spring. No intermediate floor required. Loading heights of up to 10 m possible!

Parallel motion agitator:

Circular emptying of the silo! No swinging of the milling arms, no loading of the arms and connections. - Patent -

Bunker gear box:

Specially sealed bevel helical gear box with 5.000 Nm transmittable torque. Completely maintenance-free, installed in a water-proof die-cast chassis.

Discharger auger:

On 50 mm solid shaft. Smooth transportation thanks to loosening geometry.

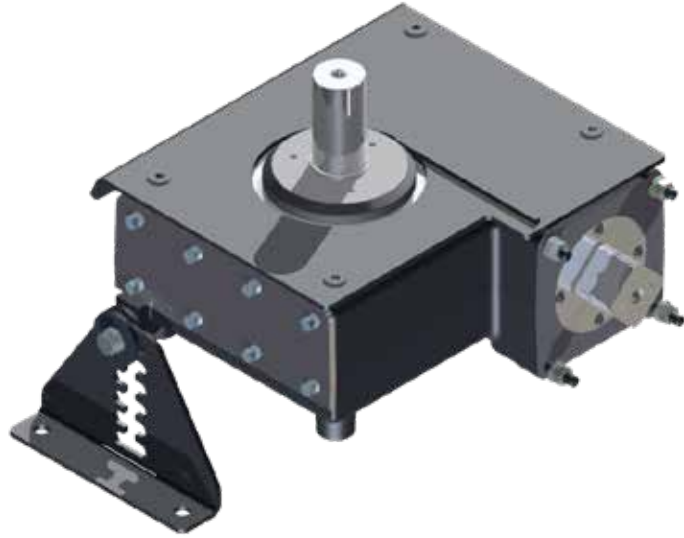
4-chamber rotary valve:

Effective TÜV-checked burn-back protection with trimmer unit! There is hardly any chance of sticking for nails etc. thanks to the 4 chambers. Crossed edge for an easy cut. Installed in massive die-cast chassis.

Inclined chain conveyor:

For horizontal or subadjacent installation of the agitator. Drive of the inclined chain conveyor takes place via the motor of the discharger auger respectively chain.

P45 woodchips possible as standard



Bunker gear box - the centrepiece

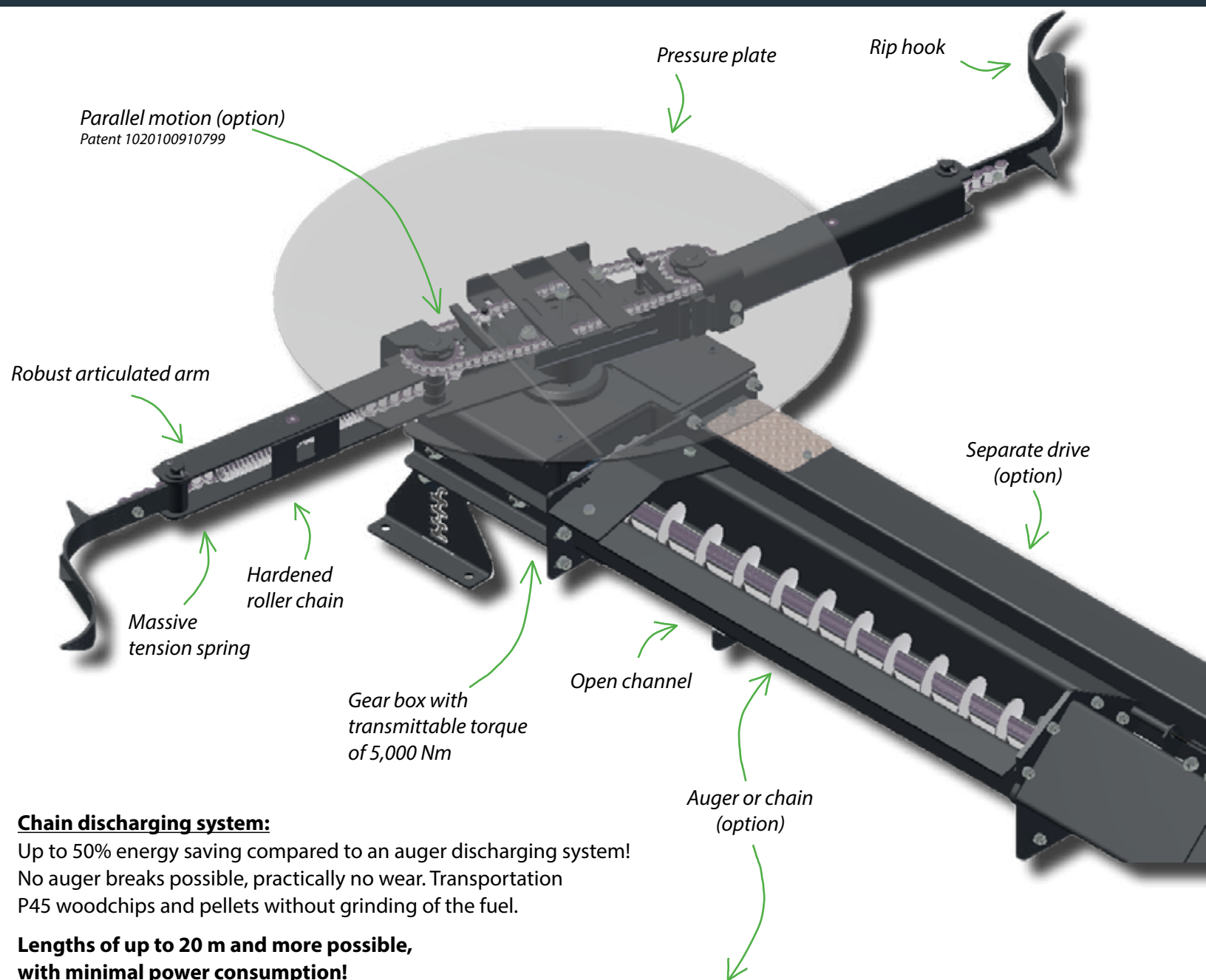


Discharge channel with inclined chain conveyor

Four chamber rotary valve with it's own drive ensures max. torque and incomparably high cutting force



Agitator with auger



Modern industrial control

Heizocontrol ET100

Home Edition

Equipment options

for the control of:

- Up to 2 heating circuits regulation dependant on atmospheric conditions
- Buffer tank with up to 3 temperature sensors
- Domestic water tank
- Control and visualisation of the E-filter
- Sm@rtServer for visualization on PC or smartphone
- Continuous load control
- Ignition-mode
- Lambda regulation
- Return temp. increase
- Chimney sweep mode for full and part load measurement
- E-mail messenger
- System diagnosis indicator
- Power control by heat quantity
- Operating hours counter
- Measured value recordings
- Security key
- Different languages selectable

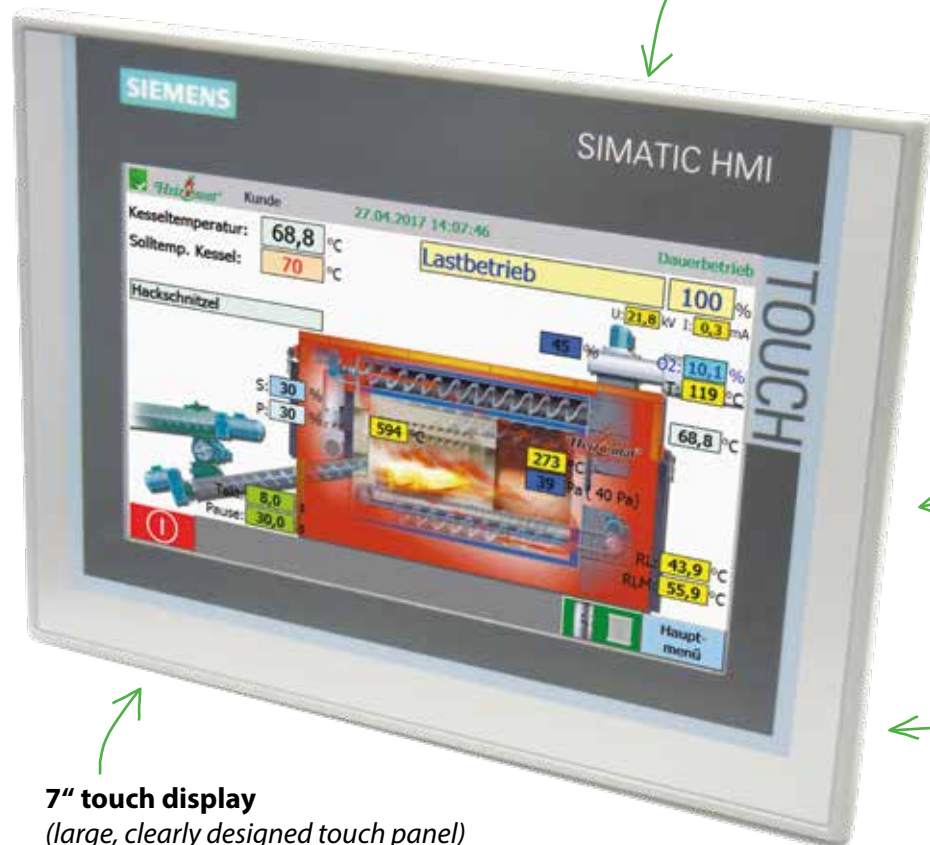
Heizocontrol family

Sensational technology with self-explanatory menu navigation together with our three decades worth of experience regarding the heating of wood is offered by Heizocontrol ET100 and ET200.

Thanks to the industrial quality and the use of Siemens components a global availability of replacement parts as well as a long life cycle are guaranteed.

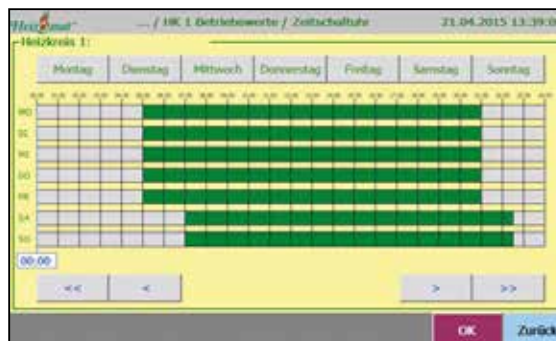
Global availability

(20-year replacement parts warranty)



7" touch display

(large, clearly designed touch panel)



Simple setting of the timer for every heating circuit



Chimney sweep mode for a comfortable exhaust measurement



Industrial quality
(Siemens components)

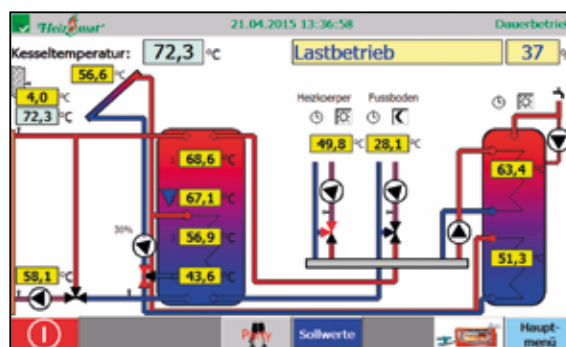
Simple wiring
(no separate clamping necessary)

Modular design of components
(simple and convenient expansion of control unit)

Visualisation
(display via PC, tablet or smartphone)

Self-explanatory use
(helpful info texts in every menu)

All at a glance
(an overview of all values)



Selection of various fuels,
which can be freely defined

Continuous load control
for ideal combustion

Heizcontrol ET200 Professional Edition

Equipment options for the control of:

- Up to 6 heating circuits regulation dependant on atmospheric conditions
- Two buffer tanks with up to 8 or 2x4 temperature sensors
- Solar function
- Up to two domestic water tanks
- Domestic water circulation
- Remote control
- Control and visualization of up to 2 e-filters
- Sm@rtServer for visualization on PC or smartphone
- Continuous load control
- Ignition-mode
- Lambda regulation
- Return temp. increase
- Chimney sweep mode for full and part load measurement
- Boiler sequence control (Cascade)
- E-mail messenger
- System diagnosis indicator
- External boiler temperature control via 0-10 V signal
- External planned performance via 0-10 V signal
- Power control by heat quantity
- Modbus TCP
- Flexible planned performance
- Operating hours counter
- Measured value recordings
- Security key
- Can be combined with the CX200

Modern industrial control

Heizocontrol CX200

Home remote thermostat

With the new Heizocontrol CX200 controller upgrade there is the complete solution for your district heating system. The local heat manager controls up to six houses each with up to four heating circuits, domestic water, solar function and much more.

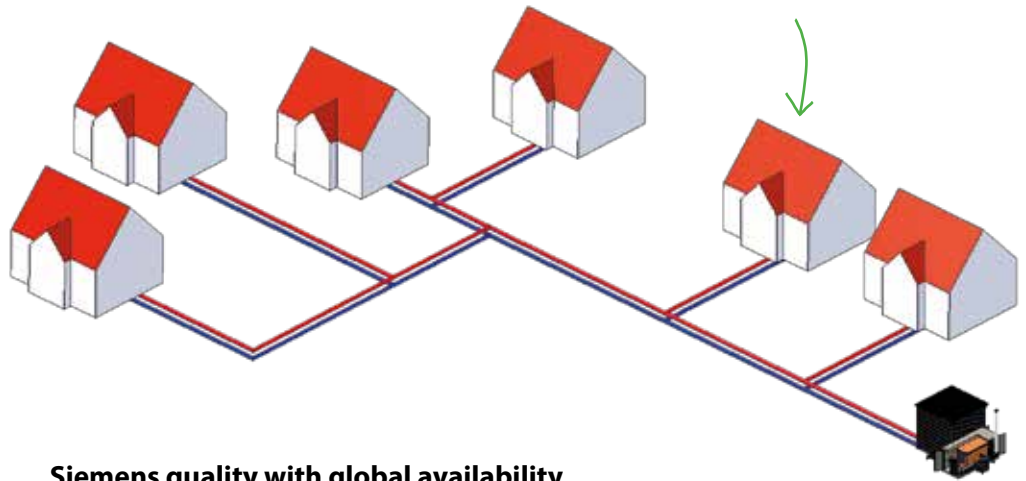
The CX200 is connected to the ET200 via bus connection and thereby allows the most optimum data exchange between heat generator and heat consumer.

The Heizocontrol CX200 is designed and delivered in the familiar Siemens quality.

Equipment options:

- Up to 3 heating circuits depend on atmospheric conditions
- An unregulated heating circuit
- Buffer tank with up to 2 temperature sensors
- Domestic water with circulation and disinfection (Legionella)
- Solar system
- Plate heat exchanger can be used
- Network flushing function
- Remote access
- and much more

Complete systems for your district heating system
(Regulation for up to 6 houses)



Siemens quality with global availability
(20-year replacement parts warranty)



7" touch display
(Large, clearly designed touch panel)

Visualisation
(Remote access via VNC client)



Clear menu navigation with
self-explanatory structure

Comfortable setting and
programming of heating circuits

Robust design
(In familiar Heizomat quality)

Safety first
(TÜV tested)

Simple assembly
(With bayonet lock)

Eligible
(BAFA innovation promotion)

Average separation efficiency
(Up to **82 %**)

Heizoclean EF185

Clean, robust, efficient

With the HeizoClean EF185 electrostatic particle separator you can use the future of filter technology in your Heizomat today. Along with the innovative control concept the EF185 sets new standards in filter technology for biomass systems with its robust design, automatic cleaning and simple handling.

The HeizoClean EF185 charges dust particles flowing past in the flue gas using electrostatic charging. At the same time, via the HeizoControl ET, the current and the voltage are automatically adapted to the dust load, thereby achieving an average separation efficiency of up to 82 %.

Thanks to high-quality components, and a robust and easy-maintenance design the new EF185 particle separator is once again a real Heizomat product that justifiably carries the HeizoClean name and signifies a further milestone in the automatic combustion of wood.

**Heizoclean EF185 installed in an
RHK-AK 800**



Perfect concept

Perfect concept

The Heizomat system is attuned to all conventional heating systems. Be it underfloor heating, radiators, ceiling fan heaters, fresh water module or district heating. We can offer the perfect solution for each system. Do you want to expand your system with a matching return temperature increase, storage technology or domestic water heat pump? No problem, even your photovoltaic system will find the right place in the Heizomat system.

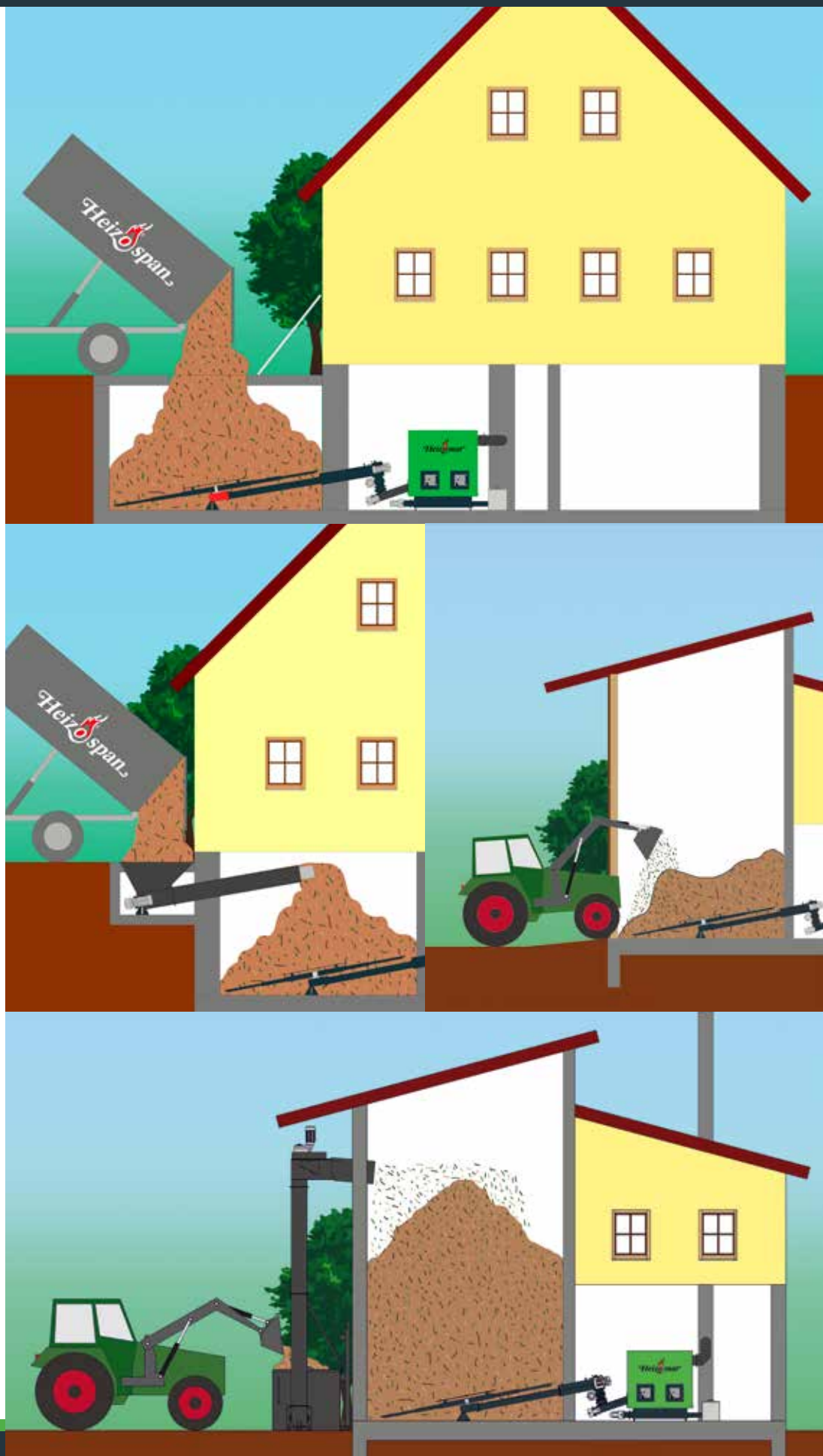
From A for agitator to Z for...

We don't just increase your quality of life in the boiler room with sophisticated and modern technology. Filling is also a part of the Heizomat system. That's why, besides different sizes of bunker cover, we also offer various systems for bunker filling. If you want to blow the material 8 m upwards, that's no problem.

Or rather use an auger pushing vertically upwards for low dust. We offer the right solution for your property.

The Heizomat system begins with A for agitator and is far from done with Z for zinc coating.

You can also experience our Heizohack chippers, Heizotruck commercial vehicles, the Heizogreif forestry grippers or the Heizoschaufel bucket for light bulk material.



We take care of everything!

PV or solar

Right for all heating systems

Bunker covering

2000 x 1000 mm

2500 x 1250 mm

3000 x 1500 mm

Domestic water source
possible via tanks, fresh water
module hygiene storage tank or
domestic water heat pump

Heat distribution
regulated by our
system manager or
system controller

Return temperature increase

Buffer management
possible with 2, 4 or 8 sensors

IEC 61439-2 tested control cabinet
Decoupled from the heat source



Heizotrans woodchip blower



A⁺

Energy efficiency class (up to 70kW)

HSK - RA

	HSK-RA 15	HSK-RA 30	HSK-RA 40	HSK-RA 60	HSK-RA 75	HSK-RA 100	HSK-RA 150	HSK-RA 200
Heat capacity (kW)	0 - 14.5	0 - 33	0 - 40	0 - 60	0 - 75	0 - 96	0 - 149	0 - 199
Heat exchange surface (m²)	2.60	3.80	4.90	5.90	8.10	10.50	15.70	20.90
Boiler / system weight (kg)	575 / 1018	770 / 1213	860 / 1303	950 / 1393	1300 / 1743	1470 / 1913	2140 / 2583	2660 / 3103
Water capacity (l)	170	188	210	255	280	360	625	810
Boiler length (mm)	800	935	1135	1335	1335	1635	1635	2135
Boiler width (mm)	775	775	775	775	925	925	975	975
Boiler height (mm)	1442	1442	1442	1442	1536	1536	1980	1980
Flue tube diameter (mm)	180	200	200	200	200	250	300	300
Operating pressure max (bar)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Boiler temperature max (°C)	95	95	95	95	95	95	95	95
Return temperature min (°C)	>55	>55	>55	>55	>55	>55	>55	>55
Heat flow	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"	2"
Heat return	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"	2"
Safety heat flow	1"	1"	1"	1"	1"	1"	1 1/4"	1 1/4"
Safety heat return	1"	1"	1"	1"	1"	1"	1 1/4"	1 1/4"



RHK - AK 50



Energy efficiency class (up to 70kW)

RHK - AK

	RHK-AK 30	RHK-AK 50	RHK-AK 60	RHK-AK 75	RHK-AK 100	RHK-AK 150 (N)	RHK-AK 150 (H)
Heat capacity (kW)	0 - 36	0 - 50	0 - 60	0 - 75	0 - 101	0 - 149	0 - 149
Heat exchange surface (m²)	3.40	4.50	5.60	7.20	8.90	13.93	13.10
Boiler / system weight (kg)	900 / 1343	1000 / 1443	1150 / 1593	1400 / 1843	1500 / 1943	2570 / 3010	2320 / 2763
Water capacity (l)	165	205	250	385	475	712	510
Boiler length (mm)	1383	1583	1783	1690	1940	2450	2427
Boiler width (mm)	860	860	860	1085	1085	1568	1152
Boiler height (mm)	1585	1585	1585	1645	1645	1840	2040
Flue tube diameter (mm)	200	200	200	200	250	300	300
Operating pressure max (bar)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Boiler temperature max (°C)	95	95	95	95	95	95	95
Return temperature min (°C)	>55	>55	>55	>55	>55	>55	>55
Heat flow	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	DN80	DN 80
Heat return	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	DN 80	DN 80
Safety heat flow	1"	1"	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
Safety heat return	1"	1"	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"

RHK - AK

	RHK-AK 200 (N)	RHK-AK 200 (H)	RHK-AK 300	RHK-AK 400	RHK-AK 500	RHK-AK 600	RHK-AK 800	RHK-AK 1000
Heat capacity (kW)	0 - 199	0 - 199	0 - 300	0 - 400	0 - 500	0 - 600	0 - 800	0 - 990
Heat exchange surface (m2)	18.50	17.10	29.70	33.75	37.10	56.00	74.00	85.00
Boiler / system weight (kg)	3108 / 3737	2860 / 3489	5400 / 6029	6200 / 6829	6800 / 7429	8500 / 9129	9900 / 10529	14000 / 14629
Water capacity (l)	985	660	1258	1580	1805	2680	3940	5600
Boiler length (mm)	2950	2927	3325	3825	4125	4385	5086	5900
Boiler width (mm)	1568	1152	1880	1880	1880	2146	2146	2650
Boiler height (mm)	1840	2040	2020	2020	2020	2066	2066	3050
Flue tube diameter (mm)	300	300	300	350	350	400	400	500
Operating pressure max (bar)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Boiler temperature max (°C)	95	95	95	95	95	95	95	95
Return temperature min (°C)	>55	>55	>55	>55	>55	>55	>55	>55
Heat flow	DN 80	DN 80	DN 80	DN 80	DN 80	DN 125	DN 125	DN 150
Heat return	DN 80	DN 80	DN 80	DN 80	DN 80	DN 125	DN 125	DN 150
Safety heat flow	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	DN 80	DN 80	DN 100
Safety heat return	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	DN 80	DN 80	DN 100

More than heating technology

We don't just want the perfect heating system for our customers. The manufacturing and handling of the fuel are also very important to us. That's why we have been producing chippers under the name Heizohack since more than two decades. With our Heizogreif forestry grippers and the Heizoshovel bucket for light bulk material handling before and after chipping is optimised. Our latest member is the Heizotruck, a vehicle for forestry and agriculture as well as public services.

Heizohack hand fed machines:

- Infeed diameter 30 to 40 cm
- Drive via PTO, e-motor or Diesel engine
- As 3-point or with trailing axle

Heizohack crane fed machines:

- Diameter up to 80 cm
- Drive via PTO, e-motor or Diesel engine
- With trailing axle, tandem or mounted on a lorry

Heizotruck:

- LoF approval (60 - 80 km/h)
- 510 hp drive
- ISO-BUS terminal
- Rear PTO shaft, fifth-wheel plate
- Front- and rear hydraulics
- And much more

Heizogreif forestry grippers

- For crane, loader and tractor
- Opening width 1500 mm
- As version with 3/2, 4/3 or 5/4 massive steel prongs
- Also as HG 100 logging gripper
- With mounting bracket for Euro 3 or other cultivation systems

Heizoshovel

- With 1 m³, 2 m³ or 3 m³
- With mounting bracket for Euro 3 or other cultivation systems



Heizohack hand fed machine



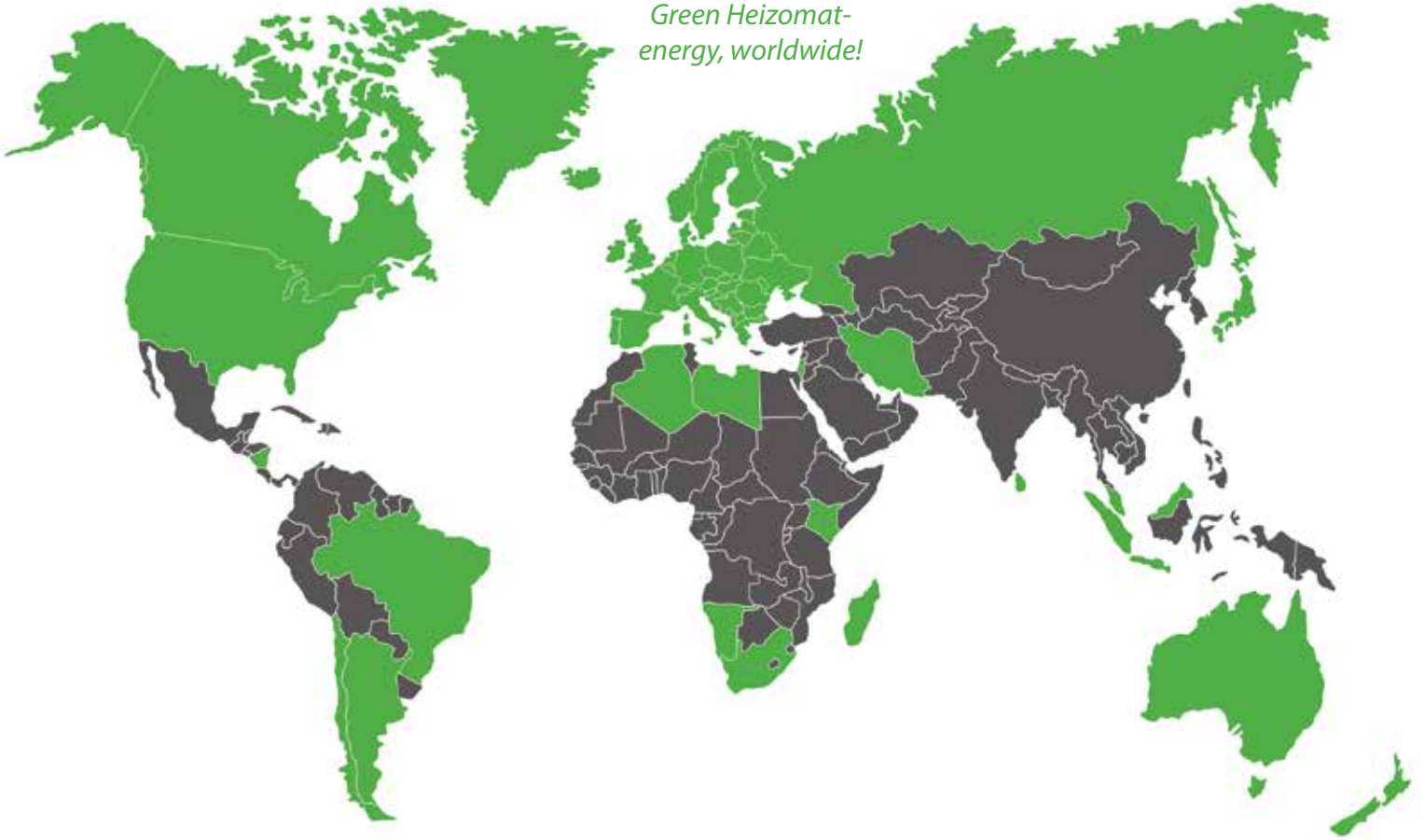
Heizohack crane fed machine



The Heizotruck



*Green Heizomat-
energy, worldwide!*



With 240 employees and more than 35 000 customers we are living a heating revolution worldwide - providing comfort and CO₂ neutral heat since 1982! Be a part of it!

*Technical changes, which serve the continuous further development, are reserved.
Dimensions and weights are all approximate!*



Our Partner:



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Heat automatically with the most CO₂-neutral fuels in the world!