



Heizomat

Innovative heating systems for:

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

» ASME H-stamp for pressure vessels available on request
» UL / CSA certification available



GERMAN QUALITY SINCE 1982



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



Family business since 1982



Large systems since 1990

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 Diamond-shaped channel
- 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 Ultrasonic sensor
- 2018 CX-district heating control
- 2019 400 liter ash-container
- 2020 Register brushes patented
- 2021 TP20 industrial control
- 2022 Local heating manager TP20
- 2023 Pallet chipper SPE 1600
- 2024 Introduction of Heizomat portal

Factory Maicha



Office:

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

Production:

- Apprentice workshop (25 Apprentices)
- Controller 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. 190



Control cabinet construction



Training workshop



Chipper final assembly



Large exhibition with 3,500 m²

Factory Heidenheim



Tube laser

Manufacture:

- Boiler construction
- Chipper construction
- Sawmill
- Tube laser
- Mold making and boiler fireclay
- Manufacture of the lining
- Manufacturing of small parts

TÜV-compliant test bench

Production area:

21,000 m²

Number of employees:

approx. 130



Chipper construction



21,000 m² Production area



Boiler construction

HSK-RA woodchip boiler

Output range:

25 - 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 and brushes 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, 400 l or 900 l

Insulation:

up to 80 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!



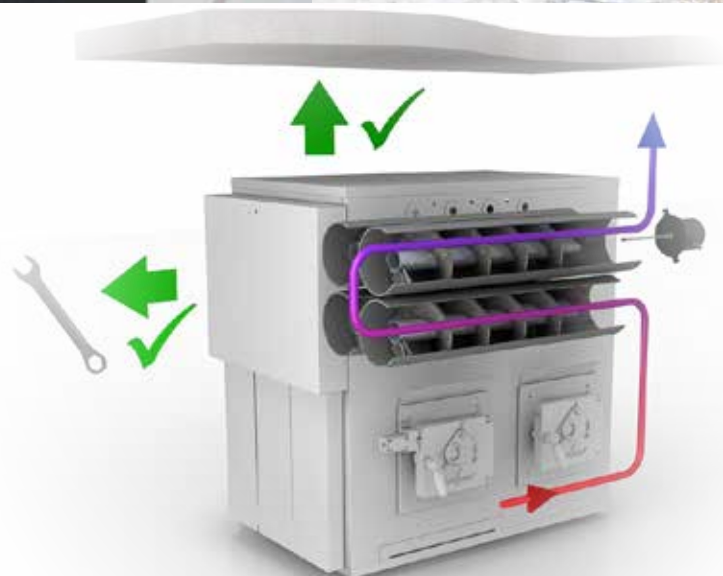
Minimum space required



Air jet ignition



*Automatic combustion
chamber deashing*



Maintenance-friendly design and suitable for low installation heights

TECHNICAL HIGHLIGHTS

Register brushes
More efficient energy transfer and better cleaning

Electrostatic filter Heizoclean
clean - durable - reliable

Large volume heat exchanger surface
completely water-cooled with 6.3 mm wall thickness

High quality insulation
up to 80 mm rock wool

Robust heat exchanger cleaning
completely external

Highly efficient motors and blowers



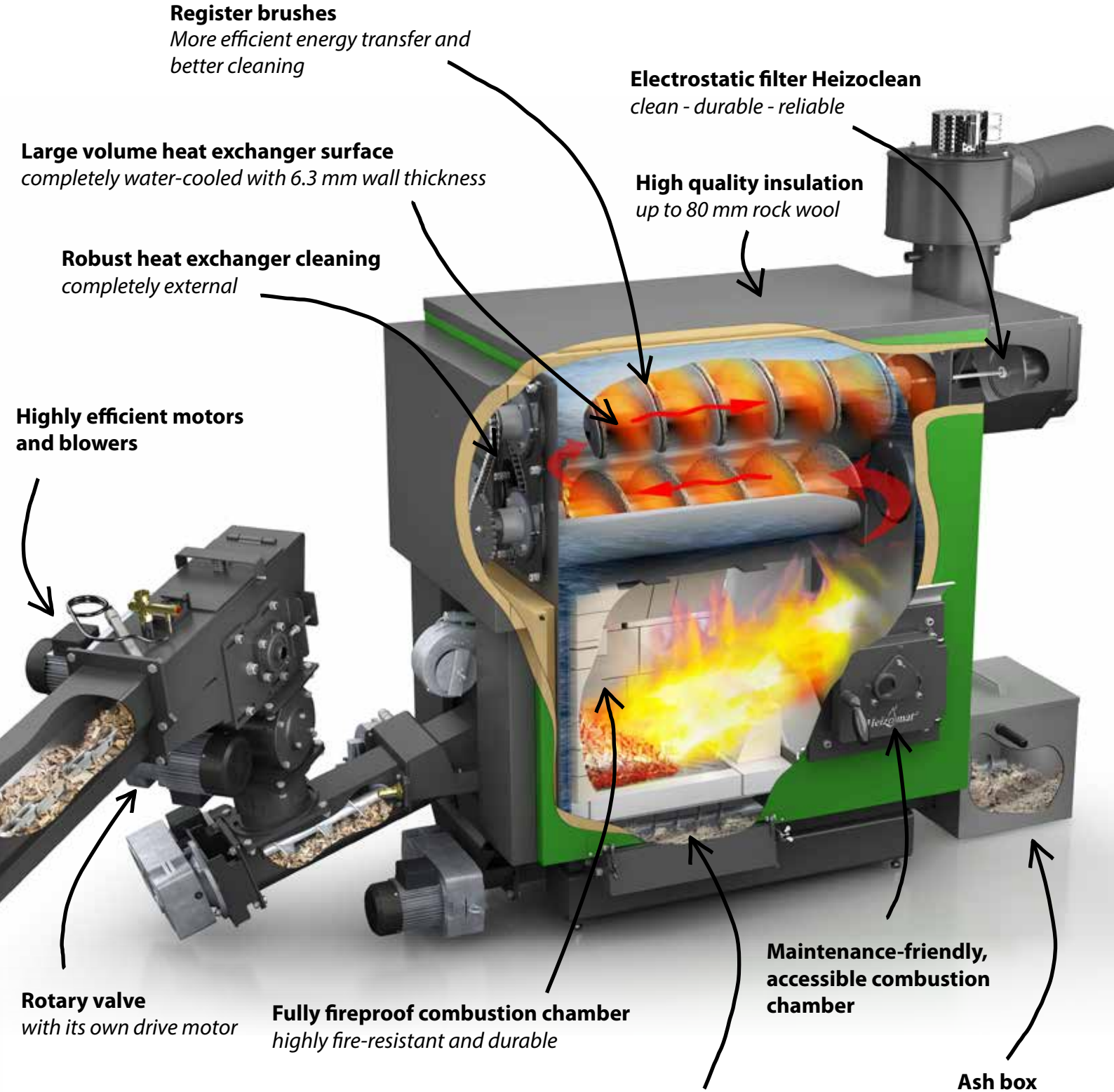
Rotary valve
with its own drive motor

Fully fireproof combustion chamber
highly fire-resistant and durable

Maintenance-friendly, accessible combustion chamber

Full automatically ash removal
just with using one motor

Ash box



RHK-AK biomass boiler

Output range:

30 - 990 kW

Efficiency:

> 90 %

Fuel:

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

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 and brushes 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, 400 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!



Maintenance-friendly cover

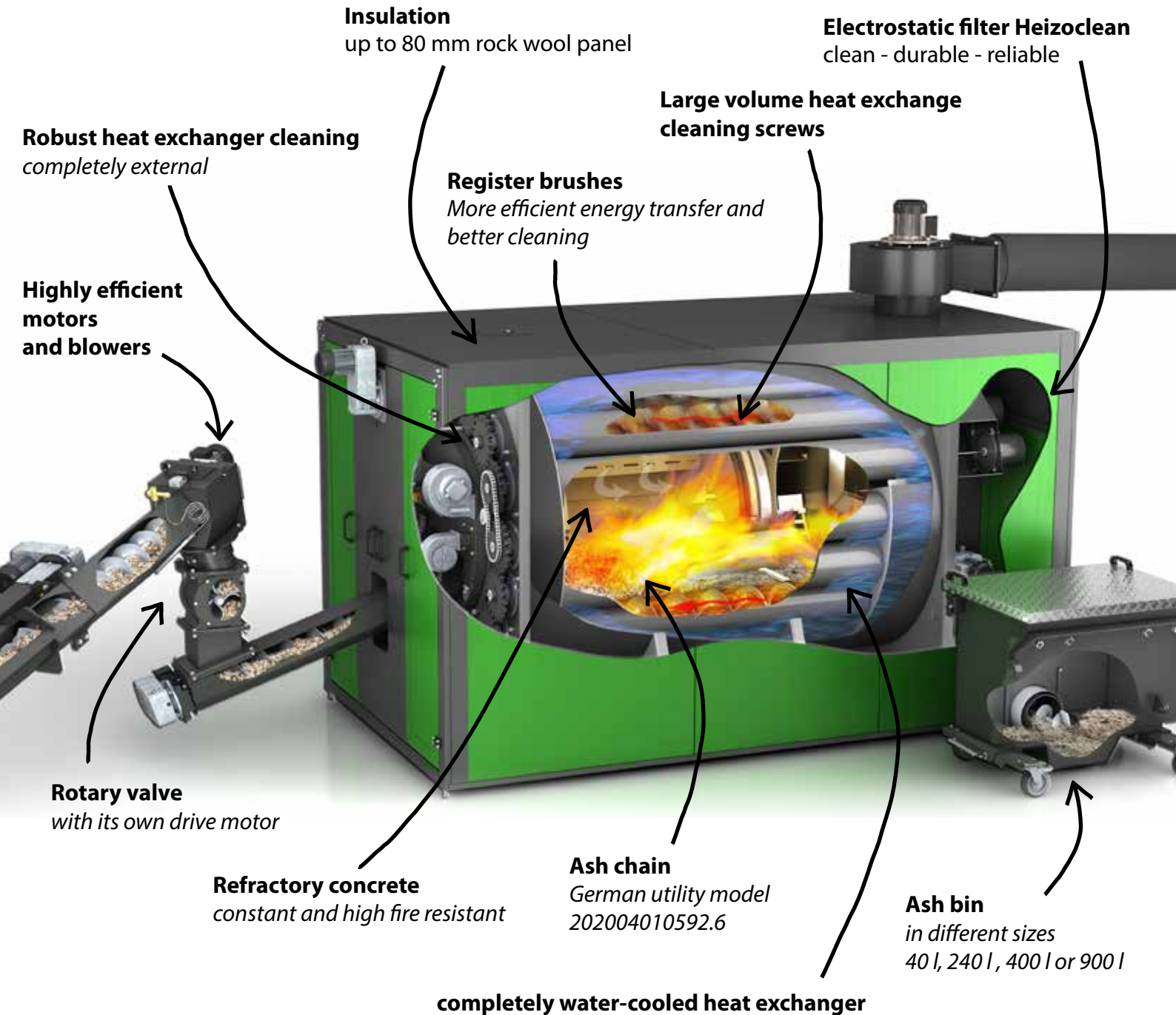


Combustion chamber with best emission values



Best patented efficiency through the use of register brushes

TECHNICAL HIGHLIGHTS



Trendsetting technology

Discharging technique

Articulated arm:

Robust milling arm for room sizes from Ø 1 m to 6 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.

Chain discharging system:

By using the chain discharging system a energy savings of up to 50% are possible. Wood chips and pellets could be transported without being crushed. This has the effect that the chain discharging system could be built up to 20 m in length.

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 subjacent installation of the agitator. Drive of the inclined chain conveyor takes place via the motor of the discharger auger respectively chain.

Fuel transport for wood chips up to B1/P45

Discharge channel with inclined chain conveyor



Bunker gear box - the Centerpiece



Multicyclone - for best emission values



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



Heizoclean EF185

Chain discharging system - patented

Forklift traverses for ash bins



Ash bins

40 Liter



240 Liter

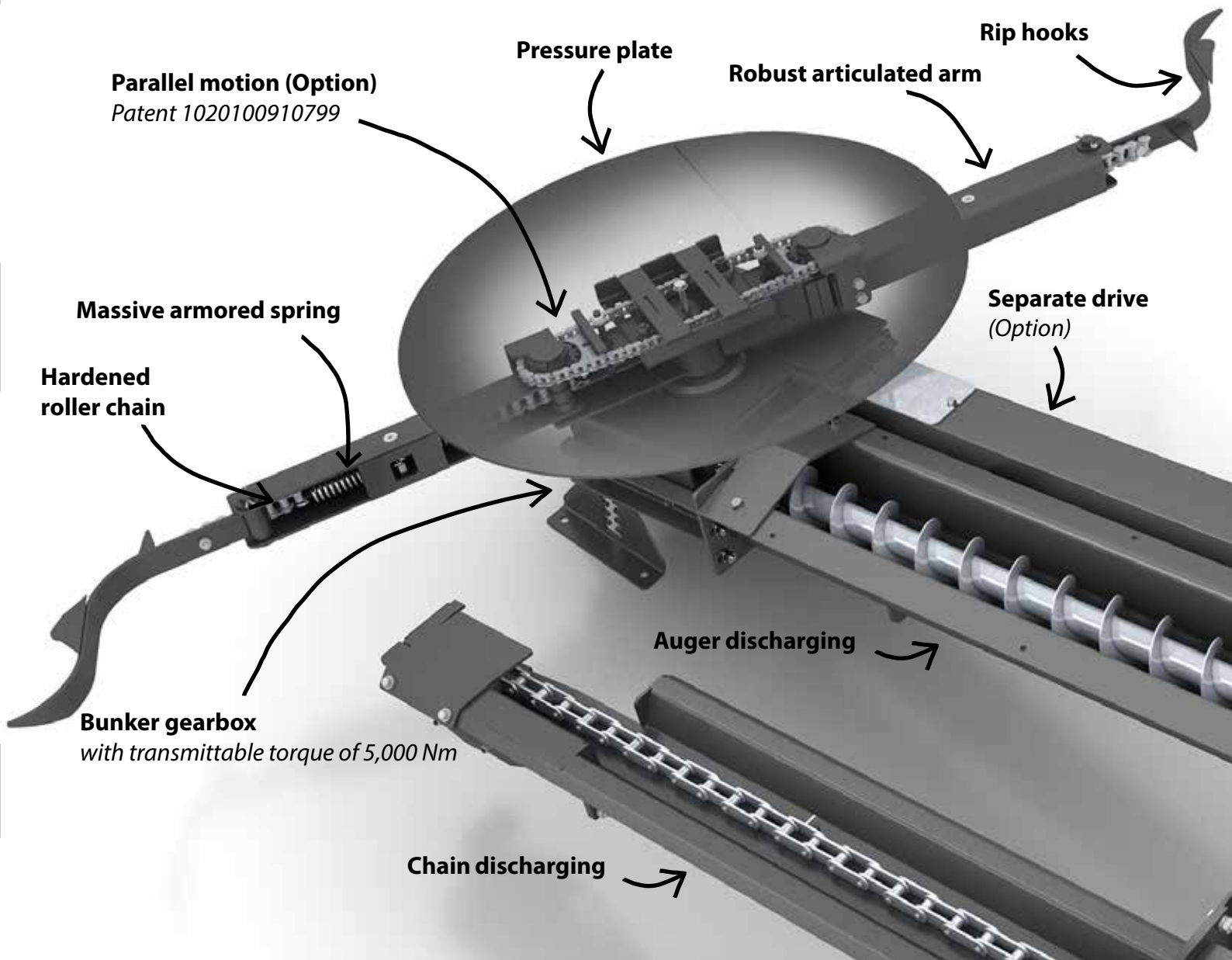


400 Liter



900 Liter





Parallel motion (Option)
Patent 1020100910799

Pressure plate

Robust articulated arm

Rip hooks

Massive armored spring

Hardened roller chain

Separate drive (Option)

Bunker gearbox
with transmittable torque of 5,000 Nm

Auger discharging

Chain discharging



Moving floor discharge

Moving floor width: 2.600 mm

Moving floor length: up to 15.400 mm

Custom moving floor systems for wood chips

Features:

- Driveable moving floor
- Filling height up to 4 m
- One hydraulic unit for up to four push rods
- Connection to multiple heating systems possible

Modern industrial control

Heizocontrol TP20

Equipment options

for the control of:

- Up to 3 heating circuits regulation dependant on atmospheric conditions
- Buffer tank with up to 4 temperature sensors
- Domestic water tank
- Domestic water circulation
- Solar function
- Control and visualisation of the E-filter
- Sm@rtServer for visualization on PC or smartphone
- EC fan control
- 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
- Operating hours counter
- Security key
- Can be combined with the TP20 district heating manager
- and much more

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

Global availability
(20-year replacement parts warranty)



Local heating manager

Equipment options:

- up to three weather compensated heating circuits
- Buffer storage with four temperature sensors
- Domestic hot water storage tank with circulation and disinfection
- Solar system with two zones
- The plate heat exchanger can be used to separate the system
- Network flush function
- Communication via Modbus TCP with the ET200
- and much more

Complete systems for your heat grid

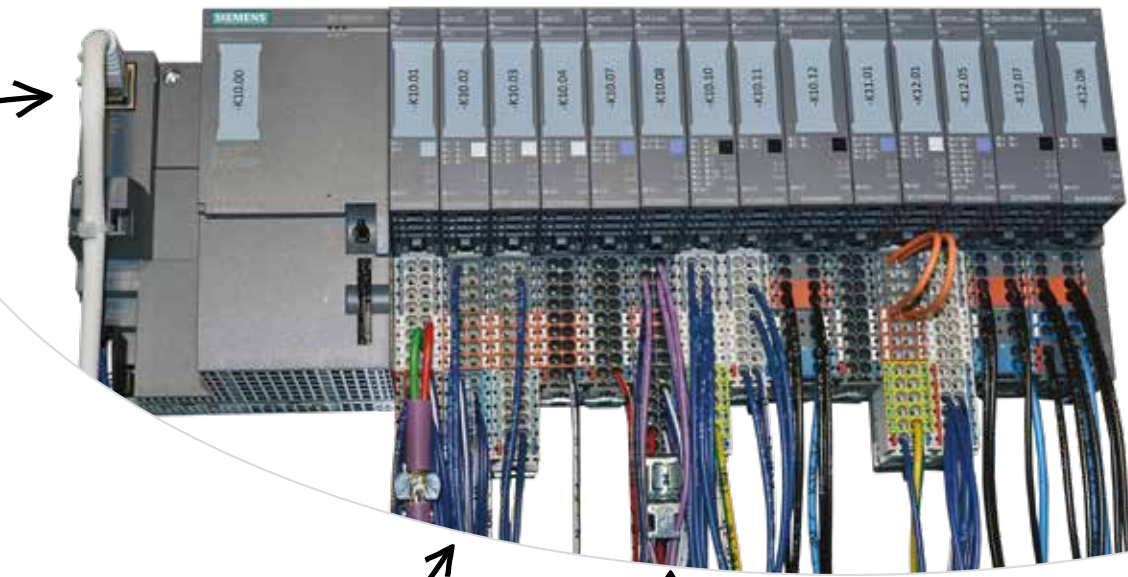
(System manager for up to 6 regulated houses and more)



Heizocontrol ET200

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
- Optional with RV automatic reverse operation
- Security key
- Can be combined with the TP20 district heating manager
- and much more



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)

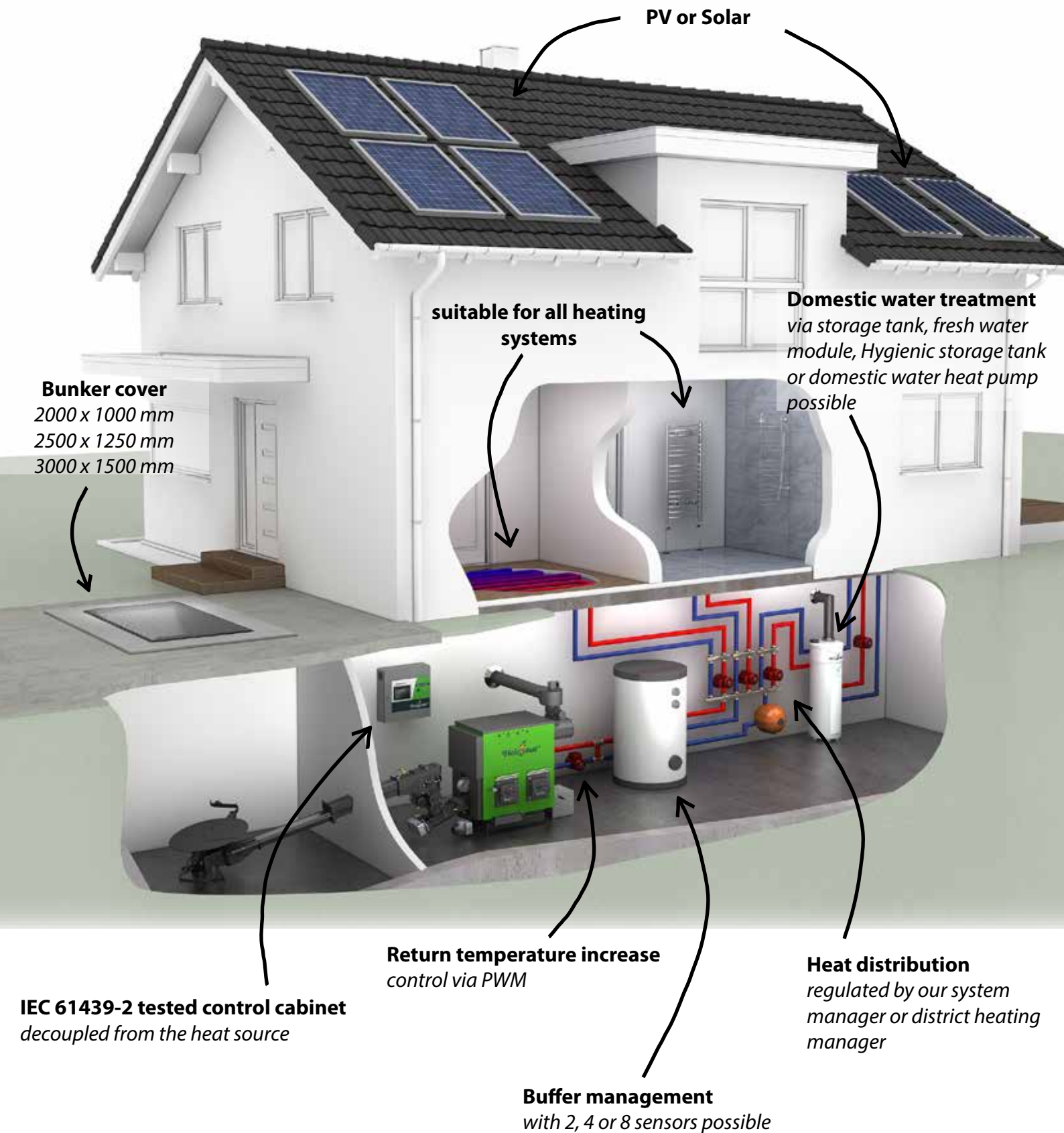
All at a glance
(an overview of all values)



Clear menu navigation with
self-explanatory structure

Intelligent heat transfer control

We take care of everything!



System solutions



Laundry technology

"Two Birds with one **Boiler**"

CO² - neutral
auf Basis Holz

Electricity saving
through existing
hot water

For direct feeding
in washing machines
and Dryers

... this guarantees
cost savings!



The expensive electrical energy
is only used for the control unit
and drive.

90°

Users

Industry
Agriculture
Hotel
Business
retirement homes
etc.



Buffertank as heat interface unit



Buffer tank sizes:

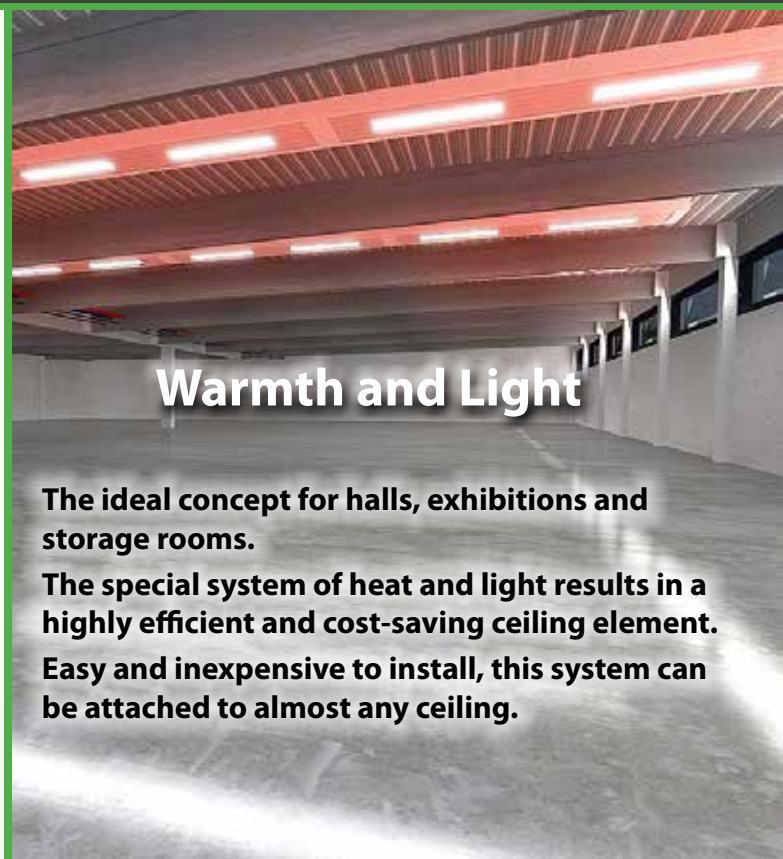
- 600 liter
- 800 liter
- 1.000 liter

Highlights:

- Integrated heat meter
- Efficient insulation
- Speed-controlled pump

Options:

- Plate heat exchanger
- Integrated hot water production via stainless steel corrugated pipe



Warmth and Light

The ideal concept for halls, exhibitions and storage rooms.

The special system of heat and light results in a highly efficient and cost-saving ceiling element. Easy and inexpensive to install, this system can be attached to almost any ceiling.

Normal buffer tanks in different sizes available on request

Technical data

HSK - RA	<i>HSK-RA 30 P</i>	<i>HSK-RA 40 P</i>	<i>HSK-RA 60 P</i>	<i>HSK-RA 75 P</i>	<i>HSK-RA 100 P</i>
Heat capacity (kW)	0 - 30	0 - 40	0 - 60	0 - 75	0 - 100
Heat exchange surface (m²)	3,80	4,90	5,90	8,10	10,50
Boiler / system weight (kg)	770	860	950	1.300	1.470
Water capacity (l)	188	210	255	280	360
Boiler length (mm)	935	1135	1335	1335	1635
Boiler width (mm)	775	775	775	925	925
Höhe Kessel (mm)	1.442	1.442	1.442	1.536	1.536
Flue tube diameter (mm)	200	200	200	200	250
Operating pressure max (bar)	3,0	3,0	3,0	3,0	3,0
Boiler temperature max (°C)	95	95	95	95	95
Return temperature min (°C)	> 55	> 55	> 55	> 55	> 55
Heat flow	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
Heat return	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
Safety heat flow	1"	1"	1"	1"	1"
Safety heat return	1"	1"	1"	1"	1"

HSK - RA	<i>HSK-RA 150 P</i>	<i>HSK-RA 200 P</i>	<i>HSK-RA 250 P</i>	<i>HSK-RA 350 P</i>	<i>HSK-RA 450 P</i>
Heat capacity (kW)	0 - 150	0 - 200	0 - 250	0 - 350	0 - 450
Heat exchange surface (m²)	15,70	20,90	29,50	40,60	47,10
Boiler / system weight (kg)	2.140	2.660	3.730	5.330	5.800
Water capacity (l)	625	810	1.220	1.680	1.920
Boiler length (mm)	1635	2135	2.764	3.100	3.350
Boiler width (mm)	975	975	1.132	1.352	1.352
Höhe Kessel (mm)	1.980	1.980	1.980	2.413	2.413
Flue tube diameter (mm)	300	300	300	350	350
Operating pressure max (bar)	3,0	3,0	3,0	3,0	3,0
Boiler temperature max (°C)	95	95	95	95	95
Return temperature min (°C)	> 55	> 55	> 55	> 55	> 55
Heat flow	2"	2"	2"	DN 80	DN 80
Heat return	2"	2"	2"	DN 80	DN 80
Safety heat flow	1 1/4"	1 1/4"	1 1/2"	1 1/2"	1 1/2"
Safety heat return	1 1/4"	1 1/4"	1 1/2"	1 1/2"	1 1/2"

RHK - AK	RHK-AK 30 P	RHK-AK 50 P	RHK-AK 60 P	RHK-AK 75 P	RHK-AK 100 P	RHK-AK 150 P	RHK-AK 150 (H)
Heat capacity (kW)	0 - 30	0 - 50	0 - 60	0 - 75	0 - 100	0 - 150	0 - 150
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 P	RHK-AK 200 (H)	RHK-AK 300 PZ	RHK-AK 400 PZ	RHK-AK 500 PZ	RHK-AK 600 PZ	RHK-AK 800 PZ	RHK-AK 1000 PZ
Heat capacity (kW)	0 - 200	0 - 200	0 - 300	0 - 400	0 - 500	0 - 600	0 - 800	0 - 910
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

- ASME H-stamp for pressure vessels available on request
- UL / CSA certification available

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.

Another highlight in our product portfolio is the Heizomat container solution, which offers up to 800 kW of power in a quick and easy plug-and-play solution.



Heizomat Container Solutions

- » *Plug & Play up to 800 kW*
- » *Fast, effective and simple planning*
- » *Statics and wind load calculation included*
- » *Low space requirement*
- » *Integrated multicyclone*



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 handfed 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:

- 530 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

Heizoblock

- Modular concrete formwork
- Concrete blocks with 500x500, 1000x500 or 1500x500 mm possible

Heizohack crane fed machine



Heizoblock - concrete formwork

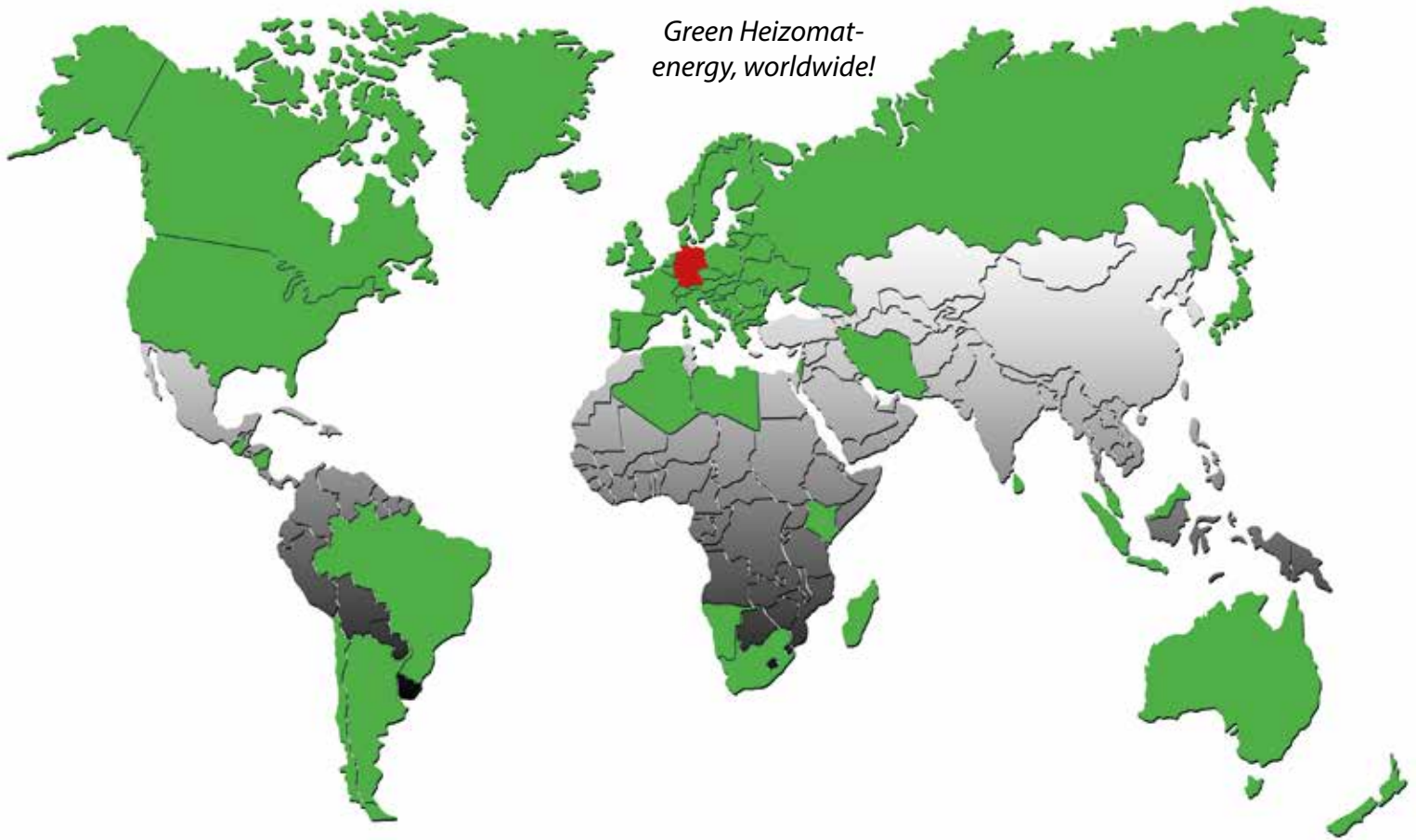


Heizogreif forestry grippers



The Heizotruck

With 400 employees and more than 40,000 customers we are living a heating revolution worldwide - providing comfort and CO₂-neutral heat since 1982! Be a part of it!



Green Heizomat-energy, worldwide!

Instagram



facebook



Tiktok

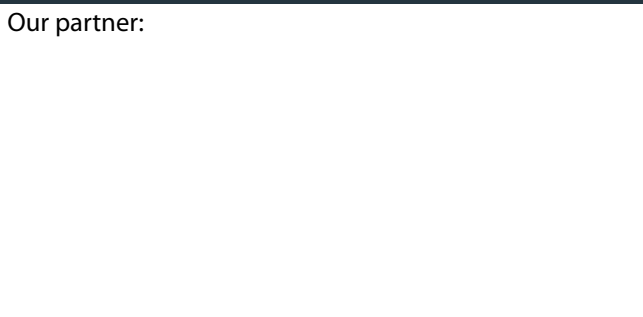


*Technical changes, which serve the continuous further development, are reserved.
Dimensions and weights are all approximate!
Illustrations may contain special equipment.*

The logo for Heizomat, featuring a stylized flame in orange and green above the word "Heizomat" in a green, cursive font with a registered trademark symbol.

Heizomat

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