

# WOOD CHIP

# HEATING



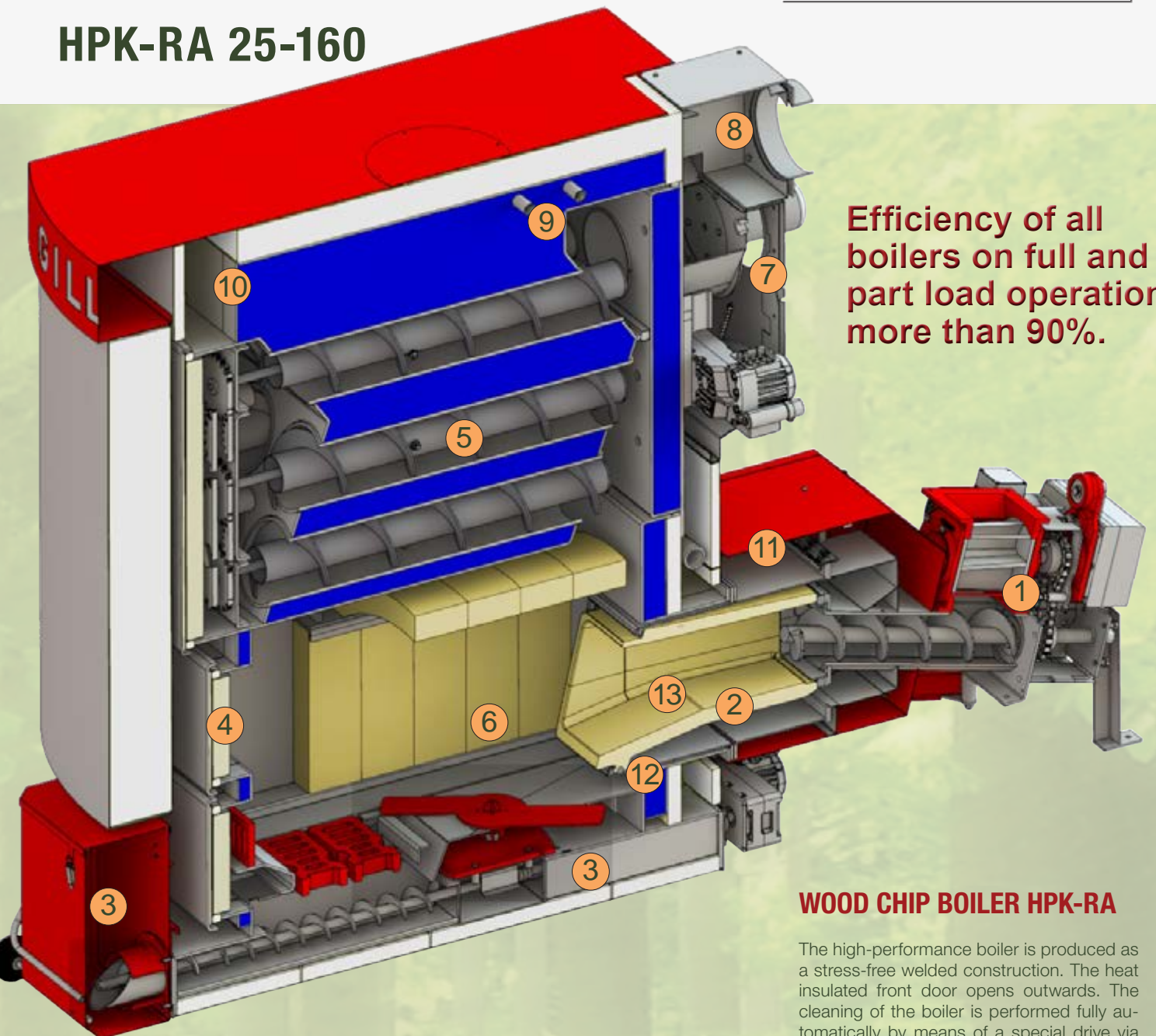
**GILLES**  
*Touch*

HPK-RA 25-160

# WOOD CHIP HEATING

## HPK-RA 25-160

**TÜV certified**



**Efficiency of all  
boilers on full and  
part load operation  
more than 90%.**

### DESCRIPTION

- ① Cell wheel
- ② Wood chip burner in high-quality heat-resistant ceramic
- ③ Ash removal via ash agitator with special drive technology – ash compression resulting in long emptying intervals
- ④ Combustion chamber door for log wood operation (no changeover required)
- ⑤ Horizontal pipe heat exchanger with automatic cleaning
- ⑥ Ceramic-lined afterburning chamber with individually offset heat-resistant fire bricks
- ⑦ Flue gas fan for optimal ignition process and permanent negative pressure in the boiler
- ⑧ Lambda probe for fuel detection and optimised, clean combustion process
- ⑨ Overheat protection
- ⑩ Welded multiple-draught boiler in 6 mm boiler plate
- ⑪ Shunt circuit with pump and mixing valve available
- ⑫ Primary air modulating variable
- ⑬ Secondary air modulating variable


### WOOD CHIP BOILER HPK-RA

The high-performance boiler is produced as a stress-free welded construction. The heat insulated front door opens outwards. The cleaning of the boiler is performed fully automatically by means of a special drive via 6 mm strong auger flights. The gasification combustion chamber built on a direct pass principle is fitted with a variable, ceramic (replaceable) radiator roof cladding. High combustion temperatures and a long furnace duration of the gases is the guarantee for a clean burning process. Welded multiple-draught boiler in thick-walled boiler plate St. 360 (6 mm width). Horizontal heat exchanger in seamless drawn thick-walled boiler pipes, 70 mm width external insulation, operational pressure max. 3 bar, incl. heat exchanger. Automatic ash discharge integrated in boiler base and ash container. Suitable for the automated burning of wood chips up to G50 / P45, W30 Ö-NORM M7133, pellets Ö-NORM M7135 / DIN plus, EN14961-2 / ENplus A1.

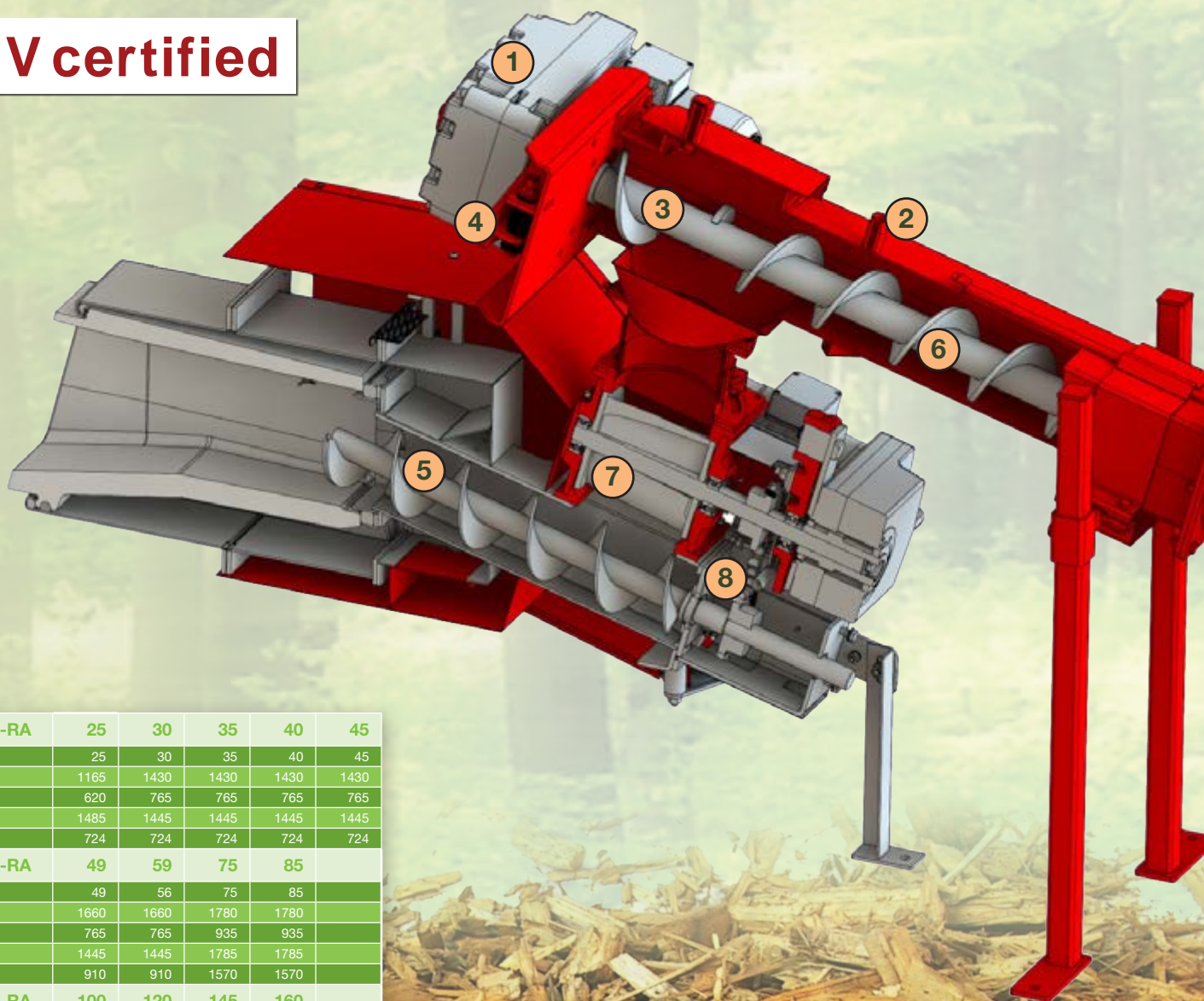
HPK-RA 25-85 rolling ash container 43 l,  
HPK-RA 100-160 ash container 80 l.

# WOOD CHIP HEATING

GILLES

- 1 **Helical gear motor** (high efficiency, low power consumption)
- 2 **Connection point sprinkler valve**
- 3 **Ripping hook**
- 4 **Start-up cushioning and vibration reduction**
- 5 **Auger channel**
- 6 **Transport auger** (continuously welded auger flights, robust auger)
- 7 **Cell wheel** (100% burn back protection) 
- 8 **Proximity sensor**

**TÜV certified**



GILLES HPK-RA	25	30	35	40	45
Nominal load	25	30	35	40	45
Length l (mm)	1165	1430	1430	1430	1430
Width b (mm)	620	765	765	765	765
Height h (mm)	1485	1445	1445	1445	1445
Weight (kg)	724	724	724	724	724
GILLES HPK-RA	49	59	75	85	
Nominal load	49	56	75	85	
Length l (mm)	1680	1680	1780	1780	
Width b (mm)	765	765	935	935	
Height h (mm)	1445	1445	1785	1785	
Weight (kg)	910	910	1570	1570	
GILLES HPK-RA	100	120	145	160	
Nominal load	100	120	145	150	
Length l (mm)	2155	2155	2620	2620	
Width b (mm)	935	935	935	935	
Height h (mm)	1785	1785	1785	1785	
Weight (kg)	1963	1963	2463	2463	

# WOOD CHIP HEATING

## WOOD CHIP TRANSPORT SYSTEMS

- 1 Drive motor with oil immersed helical gear and start-up cushioning, vibration reduction, high efficiency, low power consumption
- 2 Robust auger with progressive flights suitable for wood chips up to G50/P45 Ö-NORM M7133
- 3 Double hinged arm system for optimal clearing of the wood chip storage room
- 4 Ripping hook
- 5 The helical gear box with shaft lip seal, high efficiency



# WOOD CHIP HEATING

## WOOD CHIP TRANSPORT SYSTEMS



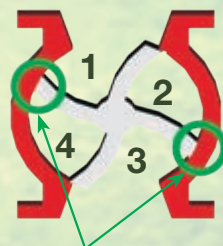
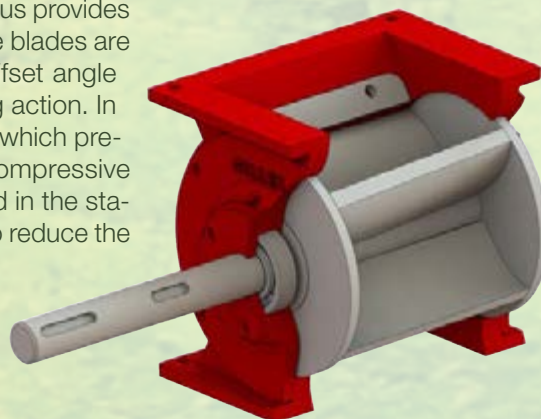
Transport auger with continuously progressive 8mm auger flights (stops that material getting stuck).

## GILLES special features

### Gilles Cell wheel

The multi-tested full-metal cell wheel reliably interrupts the boiler from the fuel store and thus provides 100% protection against burn back. The blades are attached to the running wheel at an offset angle to the rotary axis to enhance the cutting action. In addition, the blades are slightly curved, which prevents noise generation and reduces compressive forces. A fixed cutting edge is integrated in the stable and noise-damping cast enclosure to reduce the size of longer pieces of material.

*100% protection against burn back  
Proven on thousands installations*



Energy-saving 4-chamber system with low running surface



IBS proved.

# HEATING CONTROL SYSTEM

## Intelligent control

# GILLES Touch

### ✓ Higher efficiency

### ✓ Energy saving

(Energy efficient control of the electrical components)

### ✓ Smooth control of the drives

(Components: Ignition fan, 3 way diverting valve, transport system)



**Programming and updates possible via USB stick**



### Benefits:

- ▶ Settings for different fuels
- ▶ Modulation of the boiler
- ▶ Convenient setting and alteration of all heating functions via smart phone, tablet or PC/Mac
- ▶ Automatic error message notification via e-mail
- ▶ Remote monitoring of the boiler via internet
- ▶ Graph record of all heating parameters on the internal memory
- ▶ Modular design (expandable)
- ▶ Robust design of switch cabinet
- ▶ Cascade control
- ▶ Password protected
- ▶ Modbus and/or BAC-Net compatible
- ▶ Enabling of external heat source
- ▶ Recording of all operation parameters via USB stick

### Optional:

- Automatic error message notification via SMS



- ▶ Boiler & stoker status displayed
- ▶ Status display => which components are currently active
- ▶ All important settings can be seen on the main screen, such as temperatures, O<sub>2</sub> value, fans, etc.



- ▶ Display of the actual values and the set points
- ▶ All fans performances visible



- ▶ Trend logging over 6 months with USB Stick
- ▶ Trend log exportable to USB stick
- ▶ All values displayed on the controller can be recorded and saved



# GILLES Touch Remote access

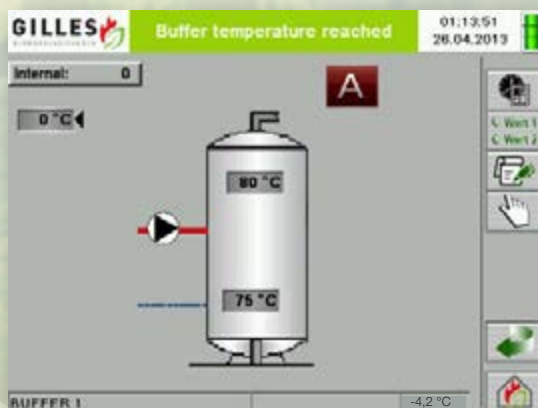
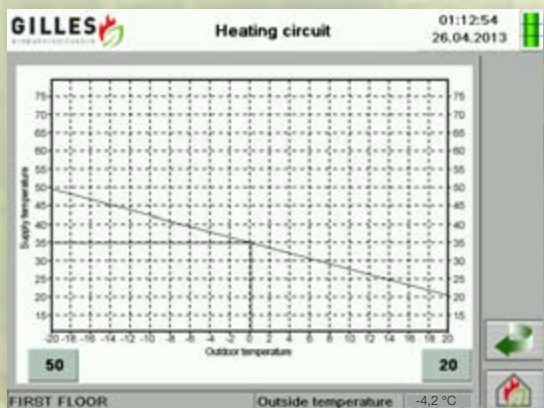
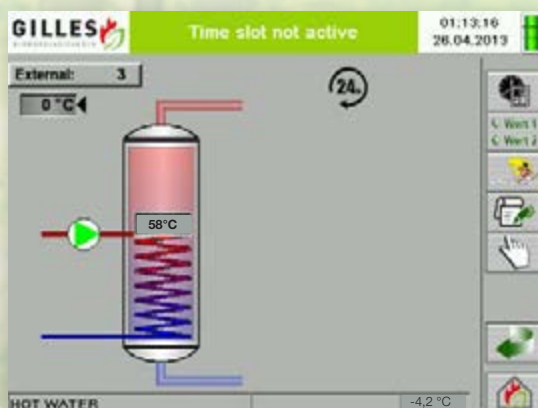
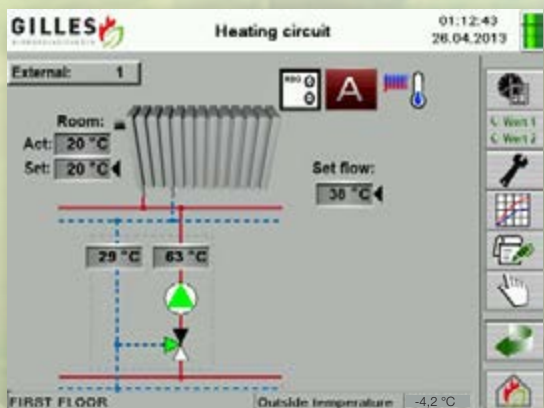
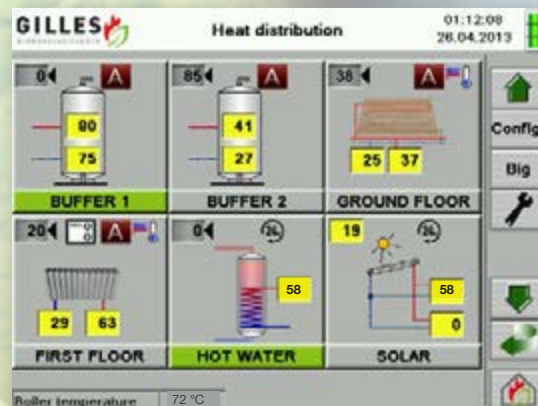
# HEATING CONTROL SYSTEM

## with integrated heating circuit control

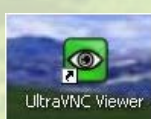


Previously it was only possible to regulate the heating circuits with the room control unit. Now it's possible to control it with the Gilles touch control panel. You can regulate the heating times, room temperatures and all important parameters easily with the Gilles touch control panel. In addition you are able to change your settings with your smart phone and tablet computer.

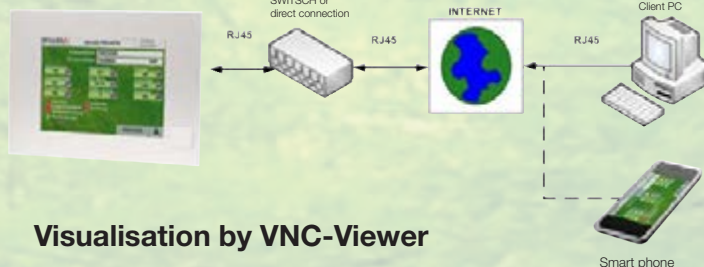
**The result of these innovations is optimal comfort with absolute control and lower heating costs.**



### Visualisation link / GSM-Visualisation



Communication via smart phone app



### Visualisation by VNC-Viewer

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...thousands of satisfied... **GILLES** customers!

