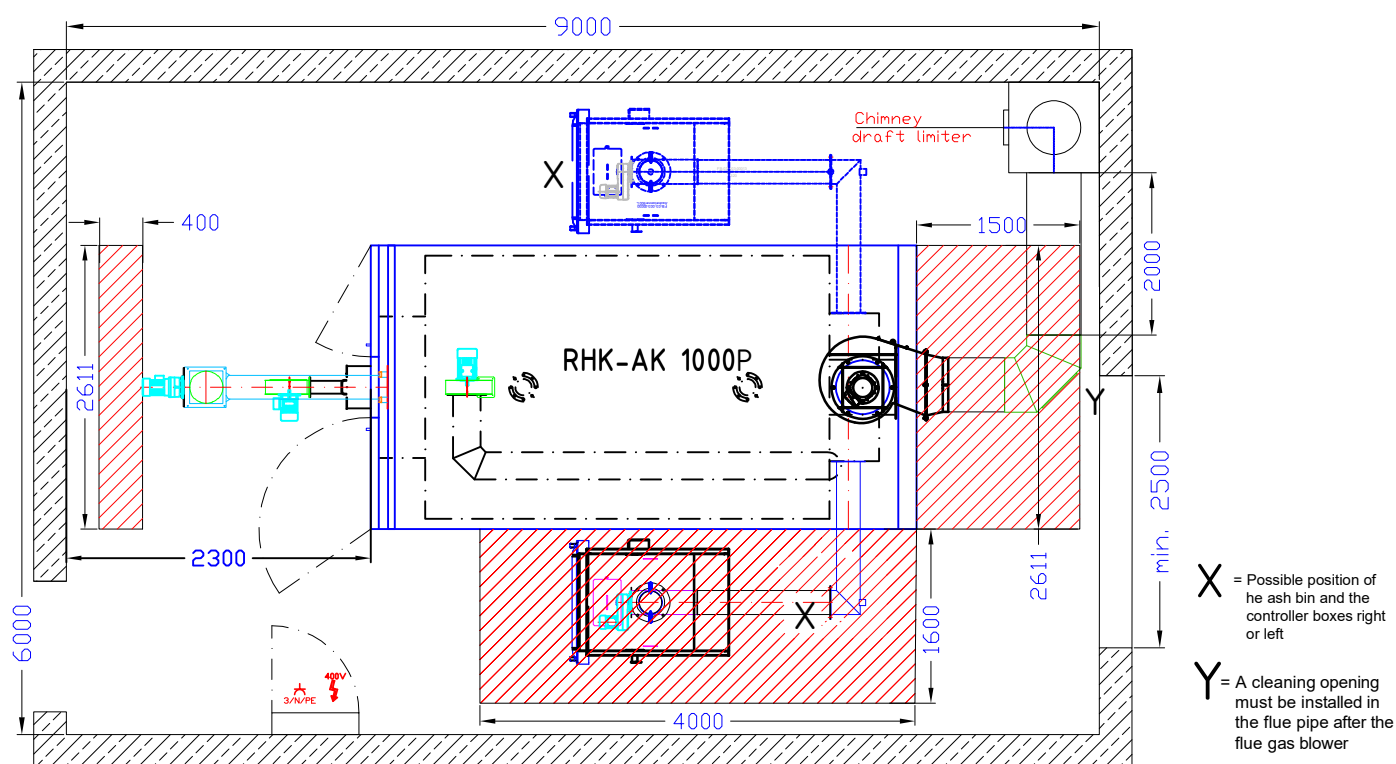
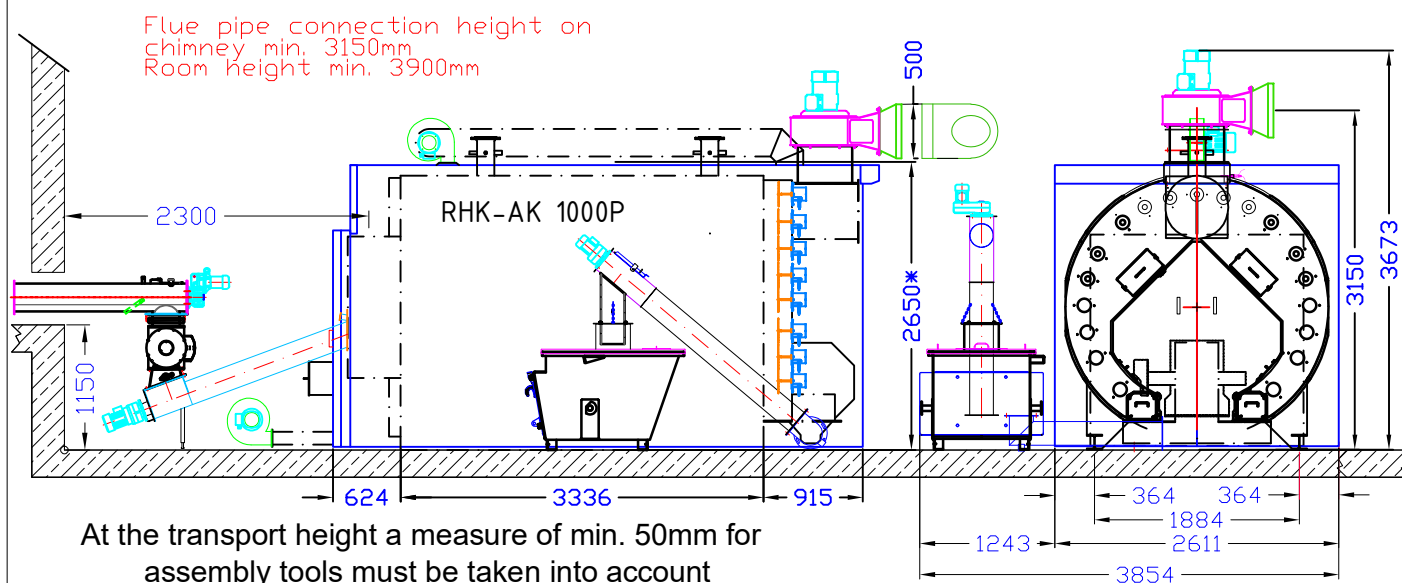


1 Installation dimensions RHK-AK 1000 P/PZ

1.1 Space requirements and boiler dimensions



The required straight measuring section is 1000mm up to 75Kw and from 1000KW 4x Flue pipe diameter but min. 1000mm.

The required flue pipe-side connections must be carried out on site

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1.2 Technical Data

RHK-AK 1000 P/PZ

Designation	Unit	AK 1000 P/PZ
Transport width	mm	2500
Transport length	mm	4950
Transport height	mm	2650
Water content	Liter	5600
Weight	kg	14000
Heat exchanger surface	m ²	85
Heat output range	kW	256-910
Nominal heat output	kW	910
Efficiency with wood chips FL/PL	%	93,3 / 93,7
Flue draft requirements chimney	Pa	5
Flue draft mass flow FL / PL	g/s	603 / 197
Flue gas temperature FL/PL	°C	122 / 82
Necessary feed pressure FL / PL	Pa	10 / 10
Water pressure drop at 10K	mbar	312,40
Water pressure drop at 20K	mbar	81,14
max. operating pressure	bar	3 respectively 4**
Heat flow	mm	DN150
Heat return	mm	DN150
Reserve flow	mm	DN100
Reserve return	mm	DN100
Filling/Emptying	Zoll	1 1/2
Thermowell	Zoll	1/2
Flue pipe diameter	mm	500
min. supply/exhaust air	cm ²	1870
Flow rate at 15K	m ³ /h	52,21
Boiler doors		2
Boiler class		5
Seasonal space heating energy efficiency	%	81
max. Flow temperature without SWT****	°C	85
max. Flow temperature with SWT****	°C	95*****
min. Return temperature	°C	55
Fuel type		A1 / P16S - P31S / M30 acc. to DIN EN ISO 17225-4
Recommended buffer volume	Liter	20 / kW Nominal heat output***
Electrical power consumption P _N / P _{min} (P)	kW	3,1 / 0,7
Electrical power consumption P _N / P _{min} (PZ)	kW	3,2 / 0,7
Standby power consumption	kW	0,012
Cold water temperature SWT****	°C	10
max. operating pressure SWT****	bar	3
Mode of operation		non-condensing
Airborne noise emission L _{WA}	dBA	87*
Reduction measures airborne noise		Flue gas silencer**
Electrostatic particle separator (P)		19x Heizoclean EF185 in FG-collector**
Electrostatic particle separator (PZ)		19 Heizoclean EF185 in collector +4 in mounting piece of cyclon**
Electrical connection		400V / 3N PE - permanent connection
Electrical protection		C 40A
FI-circuit breaker		Typ A IΔN 300mA

* Airborne noise emissions of the wood chip boiler system in the boiler room; no informative value for noise emissions at the chimney end or its surrounding areas ** Depending on equipment *** Deviating in case of funding **** Safety heat exchanger

***** Tolerances of the safety thermostat must be observed

The system shall only be operated under negative pressure!

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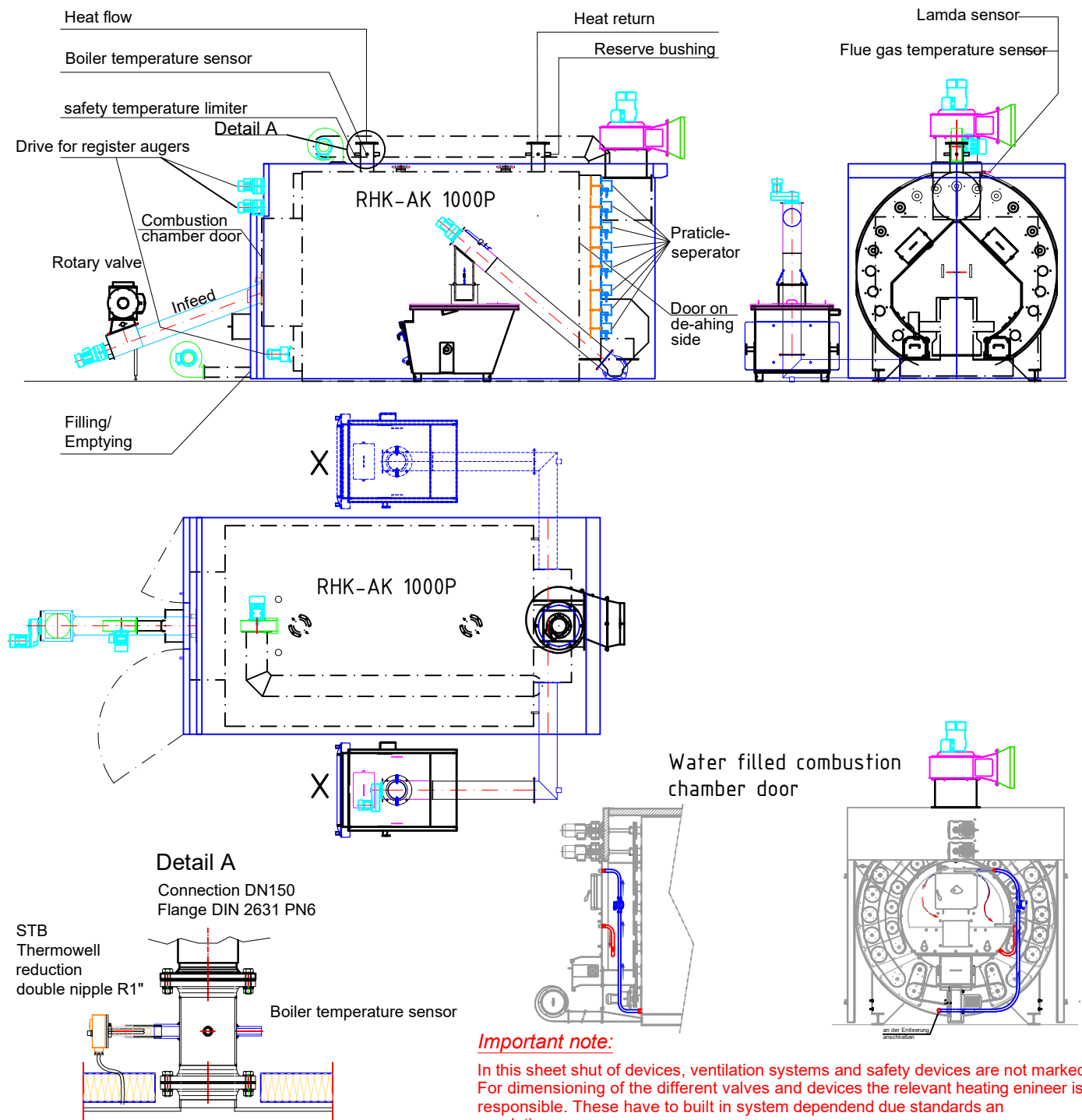
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1.3 Connections - Attachments



The flue gas system must be resistant to condensation and may be operated in damp/wet mode. The boiler should be accessible from three sides.

Room height and position of the multicyclone/particle separators after consultation with the Heizomat specialist advisor.

For connection points for the necessary potential equalization on the boiler, see the supplementary sheets for installing potential equalization and installing the particle separators.

We recommend a buffer storage volume of 20 L/kW of nominal heat output or the specifications of the respective country.

We reserve the right to make technical changes that serve the purpose of ongoing development.

The equipment of the system can vary depending on the legal requirements of the destination country.

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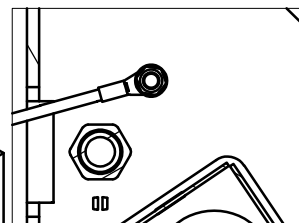
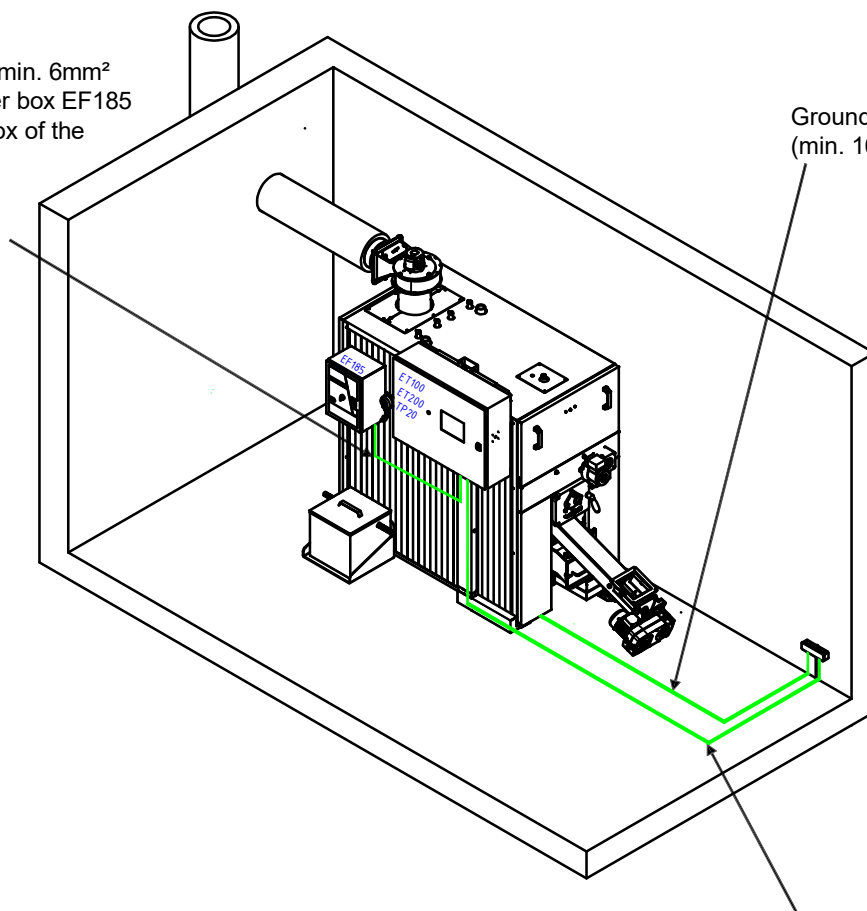
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1.4 Equipotential bonding and Shielding of the sensor lines



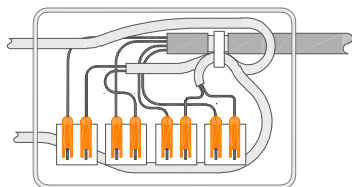
Grounding cable (min. 6mm² CU) from controller box EF185 to the controller box of the boiler.



Shielded sensors including shielded connection cables are to be used for **boiler temperature-, flue gas temperature-, return temperature- and return temp. mixer.**

Grounding cable (up to 100 kW min. 6mm², above 100 kW 10mm²) from the boiler controller box to the equipotential bonding bar

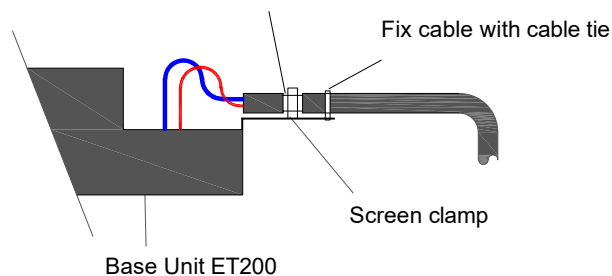
If the cables need to be extended, the shields in the clamping socket must be electrically conductive connected to each other.



Grounding of the sensor cables in the control box:

HeizoControl ET100/ET200:

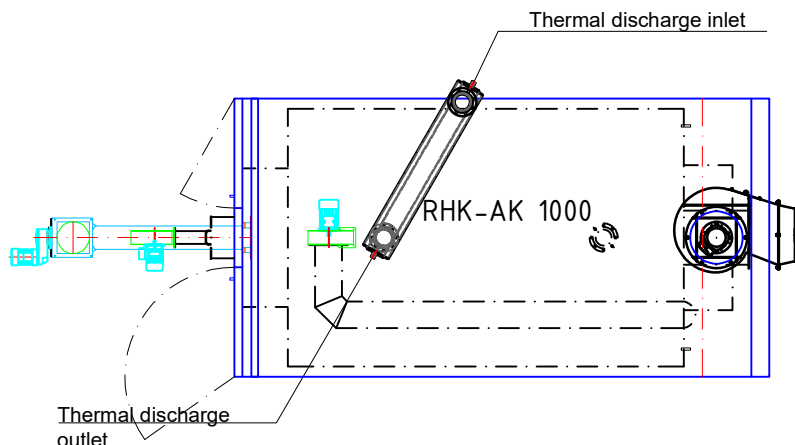
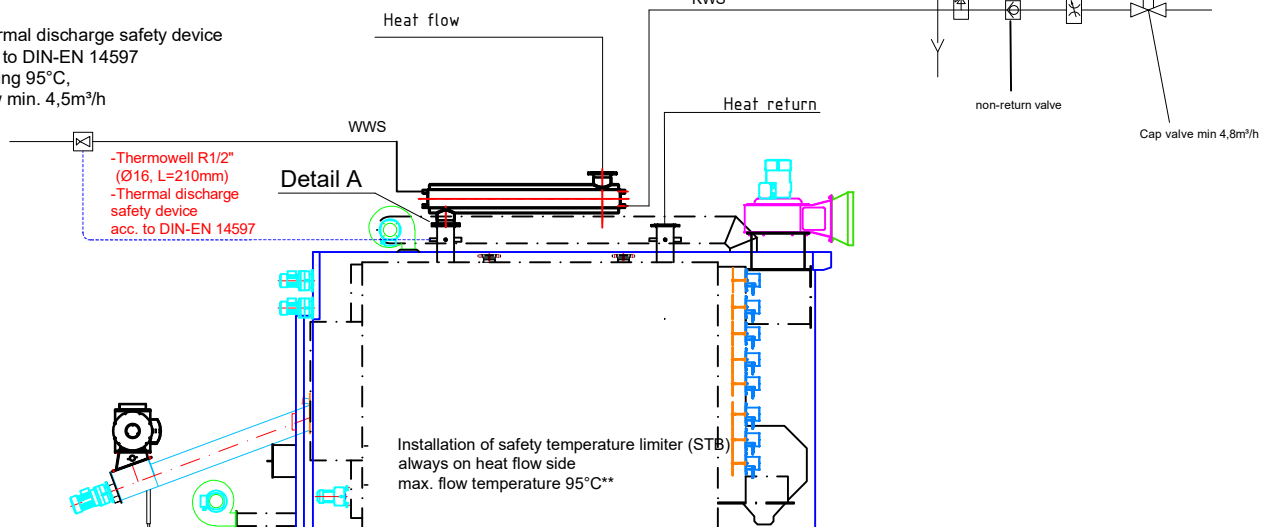
Uncover cable shielding in the area of screen clamp and fix it with cable ties.



1.5 Safety heat exchanger with thermal discharge safety device*



Thermal discharge safety device
acc. to DIN-EN 14597
Setting 95°C,
Flow min. 4,5m³/h



Attention!
When installing SWT pay attention to transport height

Thermowell for thermal safety discharge:

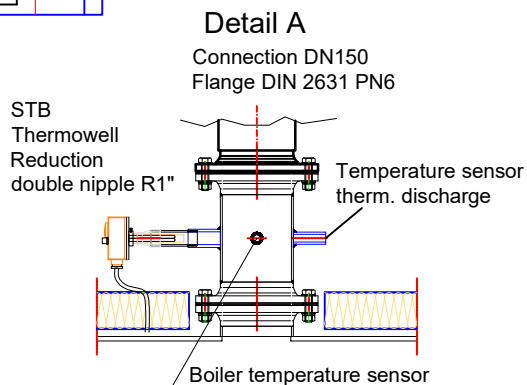
R₂¹", D=16mm, L=210mm
Type 3065, DIN TH79703

WWS -Hot water outlet for thermal safety discharge
mount valve on outlet

KWS -Cold water inlet for thermal safety discharge

* Special equipment

** Tolerances of the safety thermostat must be observed



Important note:

In this sheet shut off devices, ventilation systems and safety devices are not marked. For dimensioning of the different valves and devices the relevant heating engineer is responsible. These have to be built in system- dependent due to standards and regulations.

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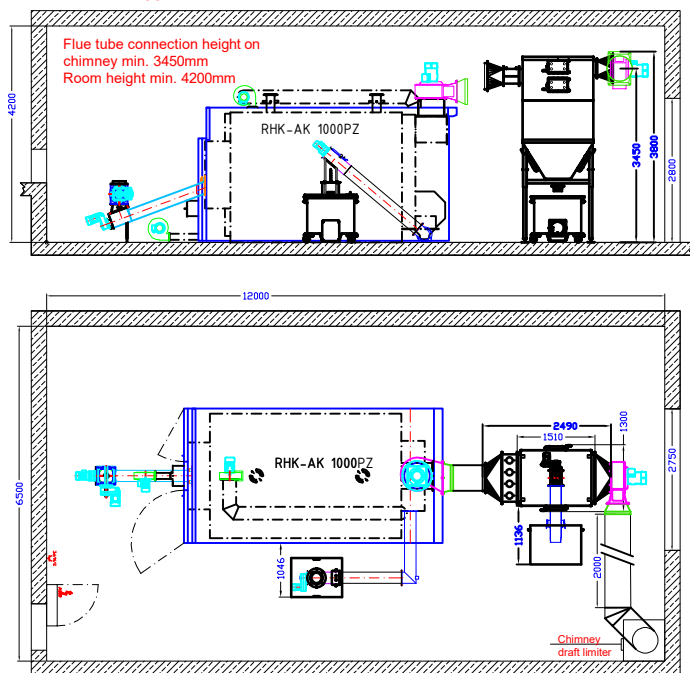
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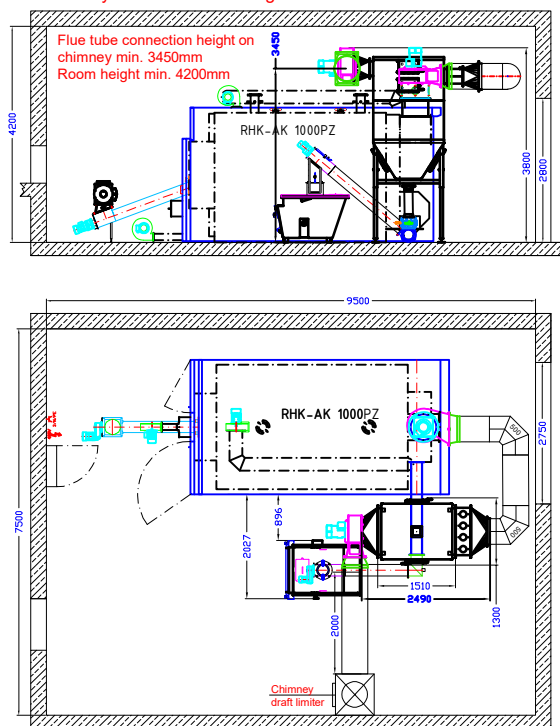
1.6 Space requirements with multicyclone RHK AK 1000 P/PZ



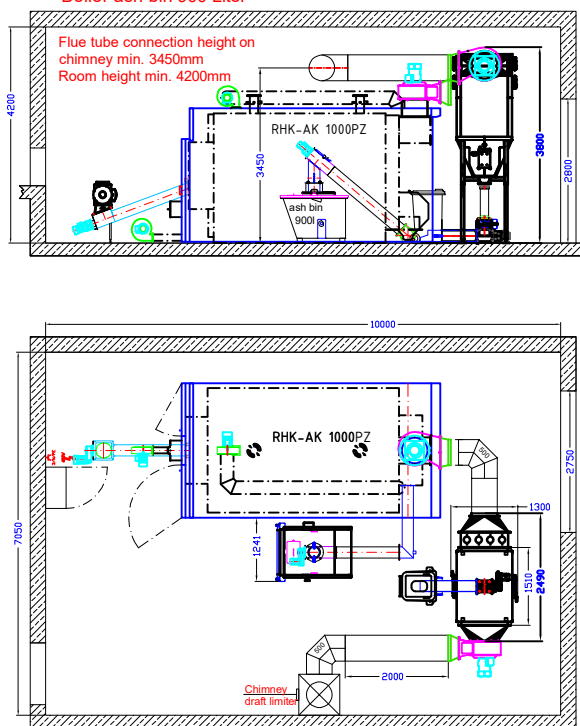
Multicyclone with ash bin 400 Liter
Ash bin 400 Liter



Multicyclone with de-ashing bin 900 Liter



Multicyclone with separate de-ashing 240 Liter
Boiler ash bin 900 Liter



De-ashing also mirrored possible

The required straight measuring section is 1000mm up to 75Kw and from 1000KW 4x Flue pipe diameter but min. 1000mm.

The required flue pipe-side connections must be carried out on site

Technical Data Multicyclone MC 304

Transport width (mm)	1110
Transport length (mm)	1530
Transport height (mm)	3200
weight (kg)	1230

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