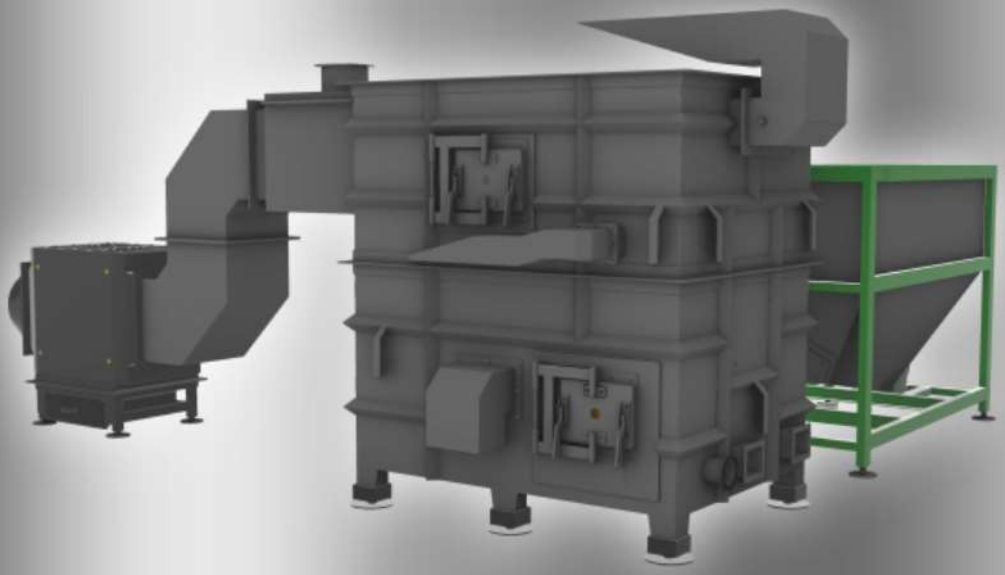
Hot air industrial boilers, mobile container boiler rooms

DILOTOP

MACHINE & EQUIPMENT

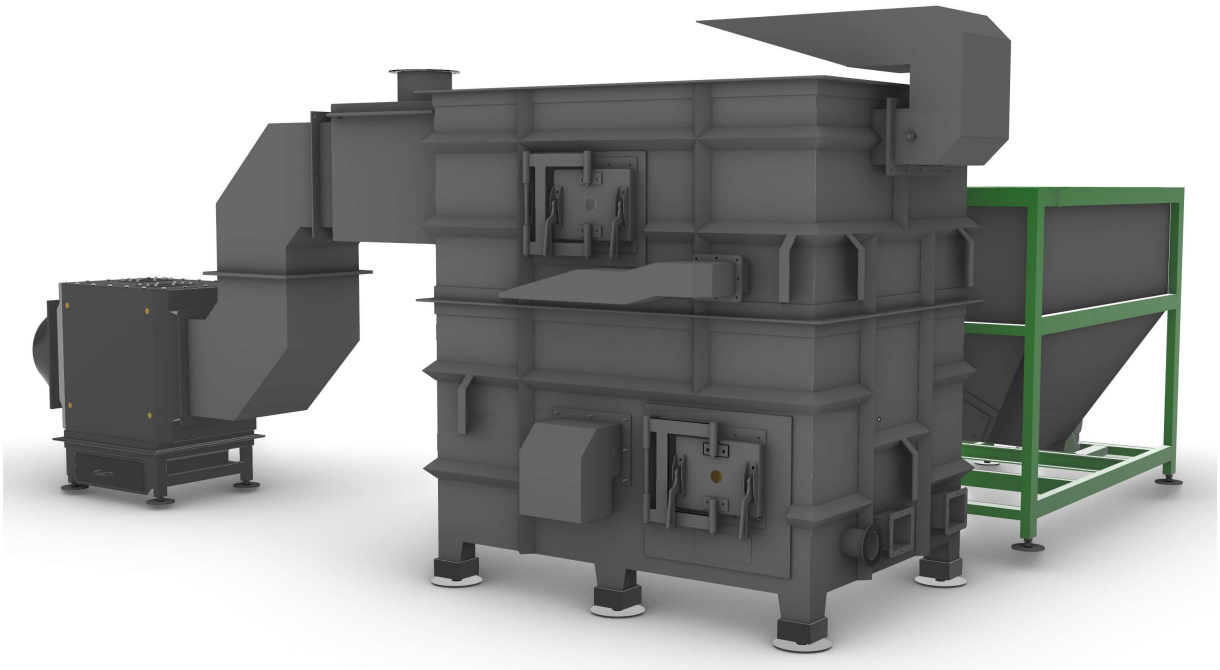


Machine & Equipment

DILOTOP
MACHINE &
EQUIPMENT

Industrial boilers

Industrial hot-air boilers are designed for heating buildings where filtered hot air supplied by a boiler and fan can be used. This mainly concerns the heating of halls, agricultural buildings, cereal dryers, wood chip or sawdust dryers, residential buildings, etc. The boilers are structurally assembled primarily for biomass combustion, they can also be equipped with a light fuel burner or a gas combustion unit. We also offer mobile container boiler rooms, which are located in a 20´ or 40´ transport container and there is the possibility of handling and transport. The container unit includes a fuel storage, the boiler itself with accessories, a fan, a dust separator, etc. Hot air boilers are manufactured in several modifications, heat output and design.



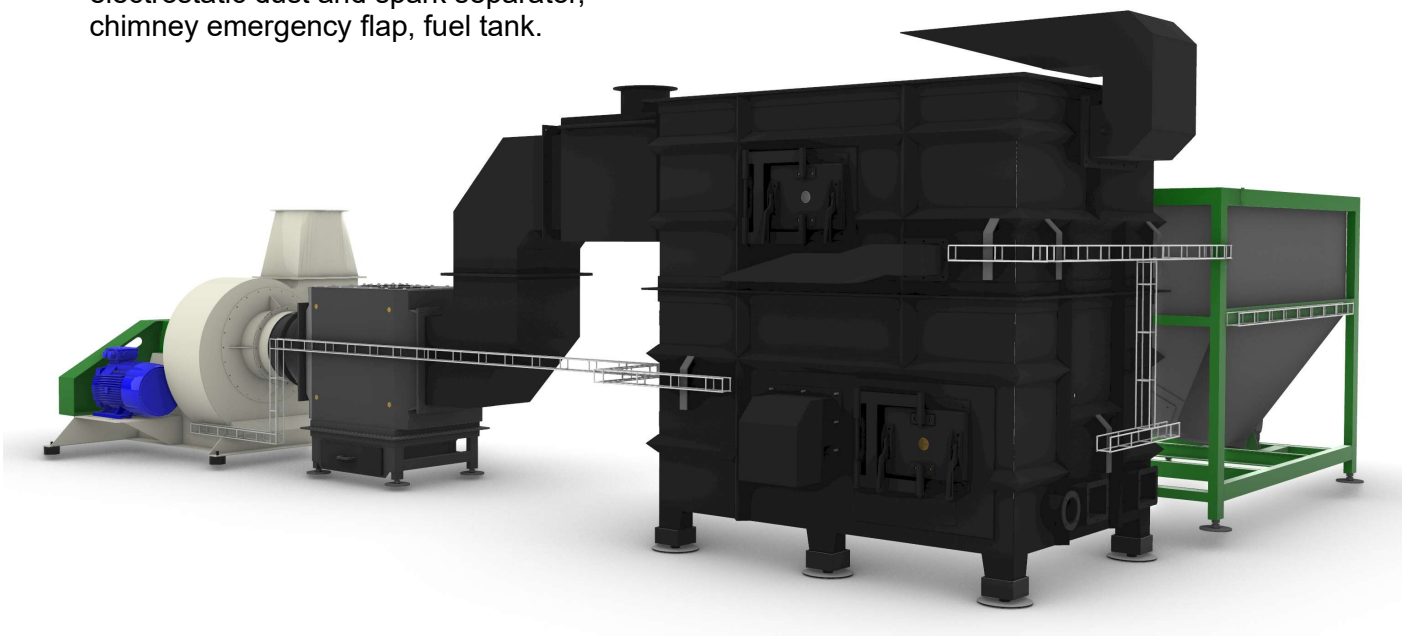
Overview of the type and performance of hot air boilers

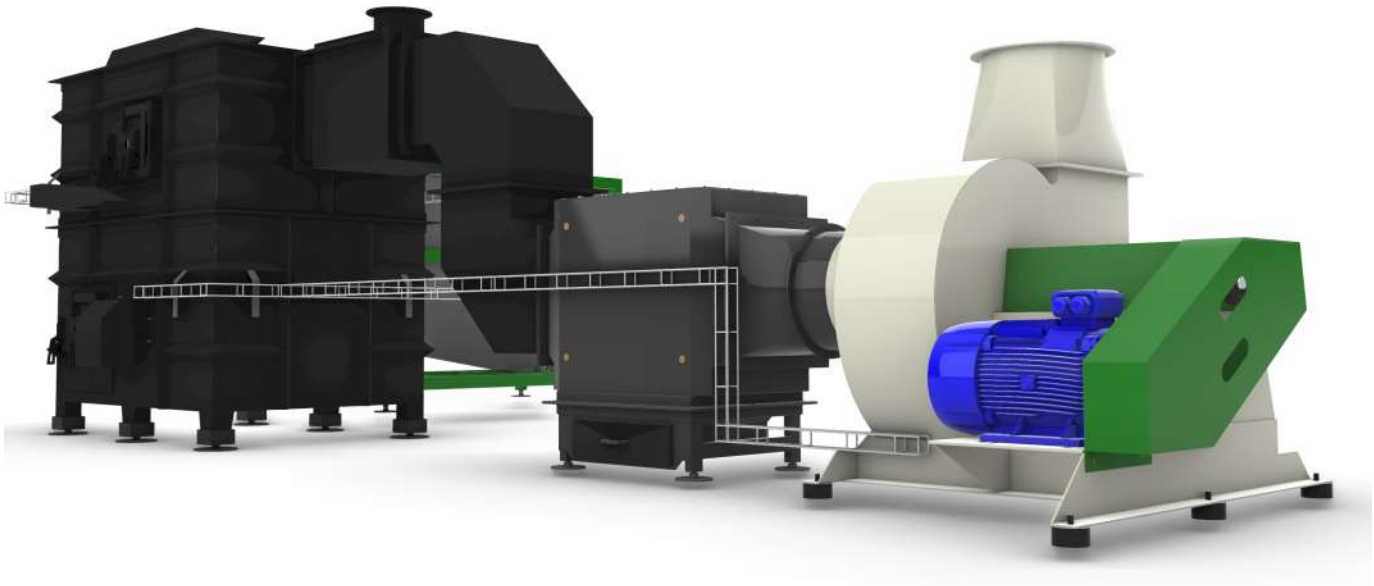
Type designation	Rated performance	Outlet temperature	Electric power	Dimension of the boiler LxWxH (mm)	Total weight
KD150	150 kW	**50 - 480 °C** Flue gases	2,2 kW	1150x800x1200	1 120 kg
KD300	300 kW		2,6 kW	1210x900x1200	1 620 kg
KD500	500 kW		2,8 kW	1450x950x1300	2 750 kg
KD900	900 kW		3,4 kW	1960x1230x2100	4 420 kg
KD1300	1,3 MW		3,8 kW	2250x1510x2180	7 990 kg
KD1800	1,8 MW		4,2 kW	2710x1780x2420	11 780 kg

Boiler assembly with accesories

Performance series: 150 kW - 1,8 MW

Stationary hot-air boiler with exhaust fan,
electrostatic dust and spark separator,
chimney emergency flap, fuel tank.

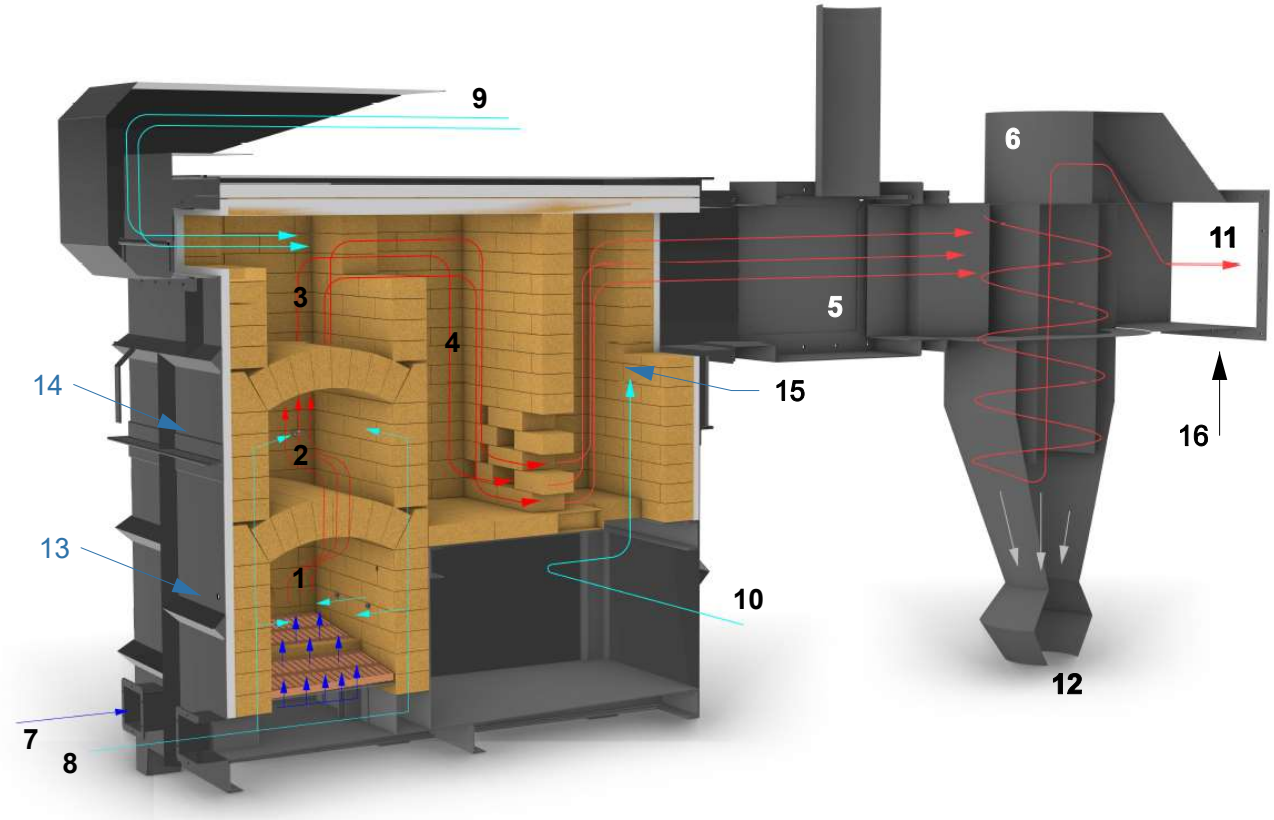




DILOTOP
MACHINE &
EQUIPMENT

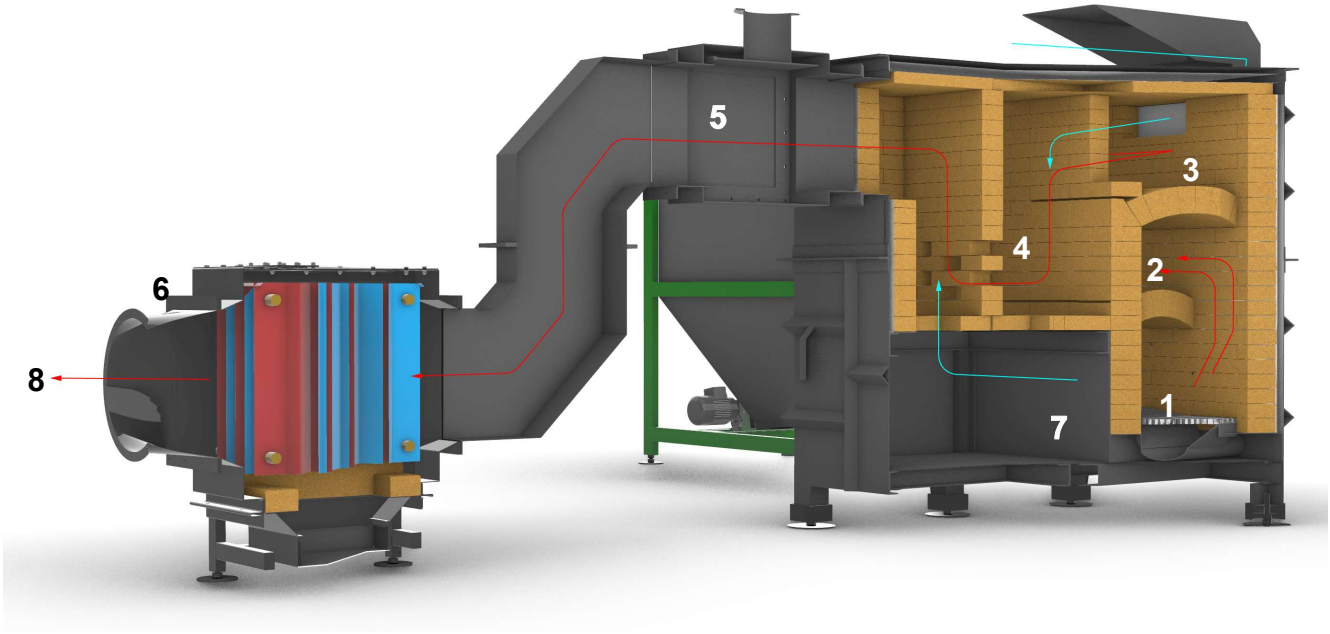
Schematic of a hot air boiler

Hot air boiler with cyclone spark separator

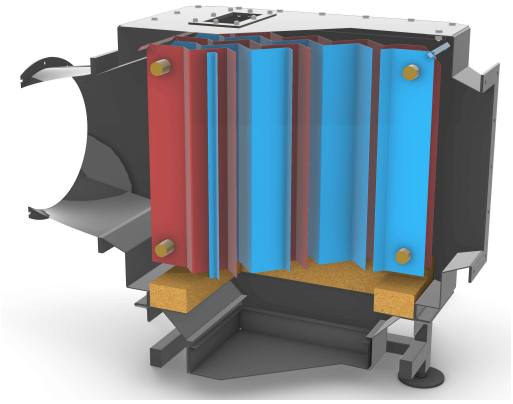


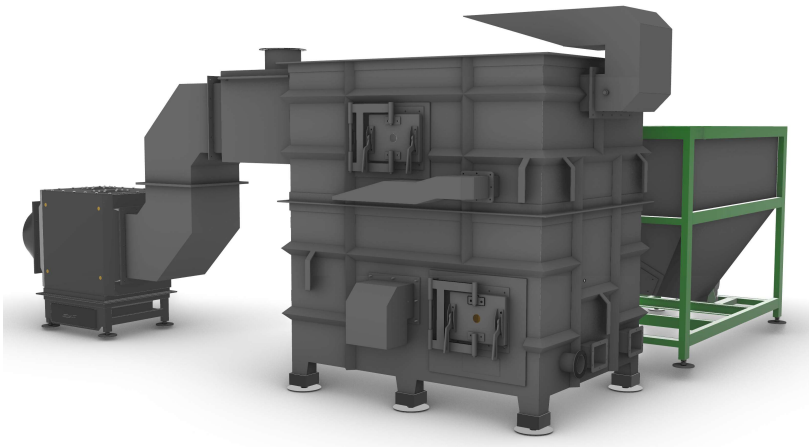
1. Furnace, fuel - wood chips, wood pellets, agro pellets
2. Combustion chamber
3. Mixing chamber
4. Afterburning chamber
5. Emergency chimney flap
6. Spark and dust separator
7. Primary air inlet under the grate (fan)
8. Secondary air inlet of the furnace and combustion chamber (fan)
9. Air inlet to the mixing chamber - regulation by servo drive
10. Air inlet for temperature control
11. Drying air outlet into the cylinder 50-480 °C
12. Dust and spark exhaust
13. Thermocouple Furnace temperature 1200 °C
14. Thermocouple combustion chamber temperature 1600 °C
15. Thermocouple for regulating the required drying temperature 600 °C
16. Thermocouple for inlet drying temperature 600 °C

Hot air boiler with electrostatic spark separator



1. furnace, fuel - wood chips, wood pellets, agro pellets
2. combustion chamber
3. mixing chamber
4. afterburning chamber
5. emergency chimney flap
6. spark and dust separator
7. air inlet for temperature control
8. drying air outlet into the cylinder 50-480 °C



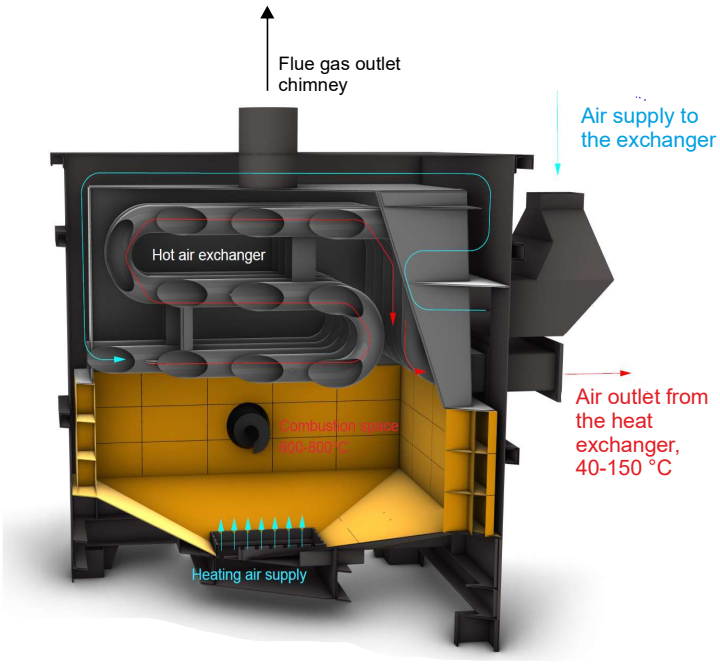


The hot-air boiler can be equipped with a centrifugal cyclone separator in combination with an electrostatic spark separator. This combination ensures maximum cleaning of flue gases from dirt and sparks.

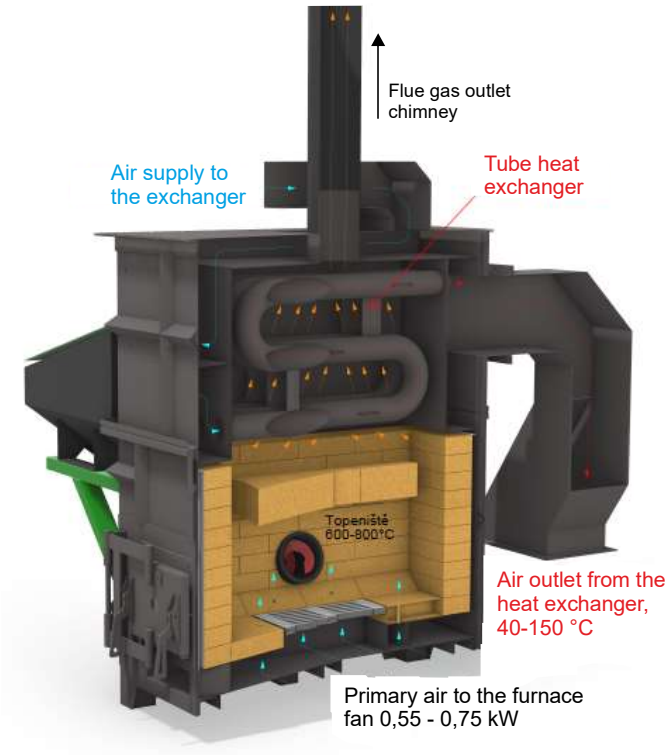
DILOTOP
MACHINE &
EQUIPMENT

Hot air boiler with heat axchanger

Type 75-300 kW



Type 500-1000 kW



Hot air boiler with heat axchanger

A hot-air boiler with an exchanger is designed for the distribution of hot air into a set, where it is necessary to dry with clean air without flue gases and impurities from combustion. The advantage of this type of boiler is the possibility of using it for drying commodities that cannot be contaminated by flue gases. These are commodities that will be further used as feed or in the food industry after processing.

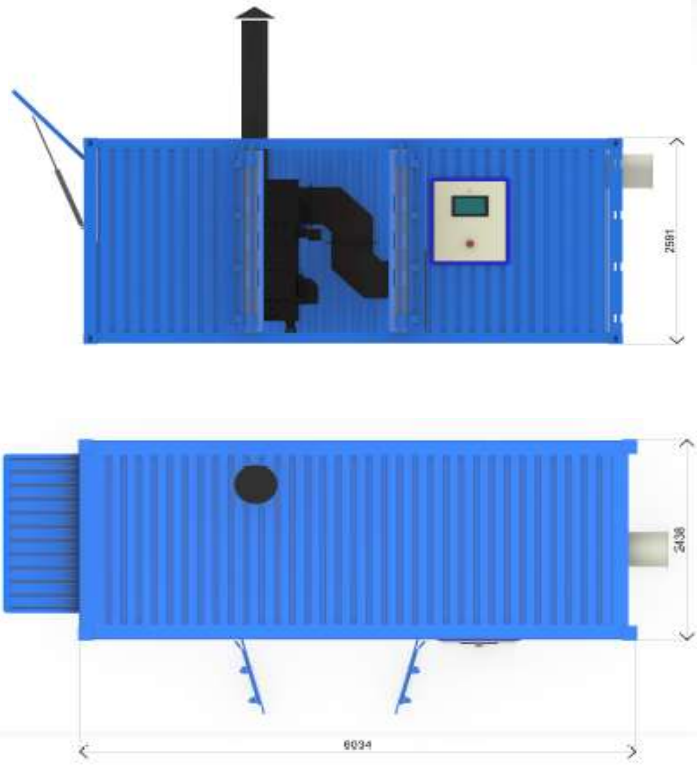
The maximum outlet temperature of the drying air for these types of boilers is 150 °C, it is regulated as needed in the range from approx. 50 °C to max. 150 °C.

Overview of the type and performance of hot air boilers with the heat exchanger

Type designation	Rated performance	Outlet temperature	Electric power	Dimension of the boiler LxWxH (mm)	Total weight
KDV75	75 kW	**50 - 150 °C** Clean air without fumes	1,5 kW	1120x1000x1250	1 110 kg
KDV100	100 kW		1,7 kW	1320x1090x1410	1 510 kg
KDV300	300 kW		2,4 kW	1680x1250x1530	2 990 kg
KDV500	500 kW		3,1 kW	1990x1350x1910	5 460 kg
KDV800	800 kW		3,8 kW	2440x1510x2090	8 140 kg
KDV1000	1,0 MW		4,2 kW	2940x1880x2420	13 620 kg

Mobile container boiler rooms

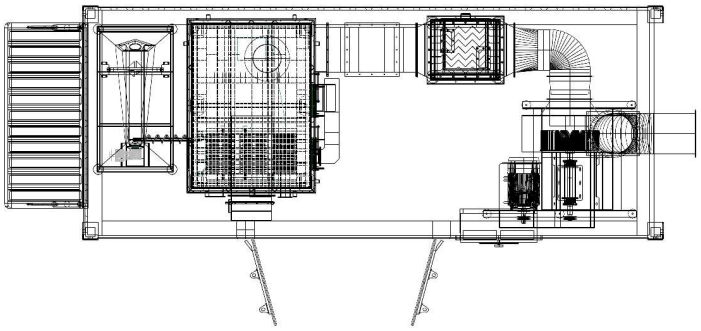
Container boiler
container 20´
container 40´

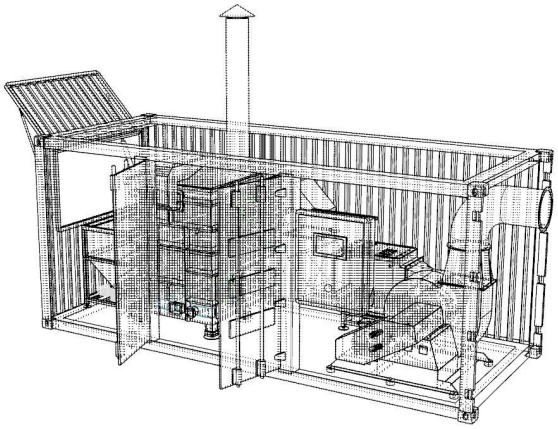


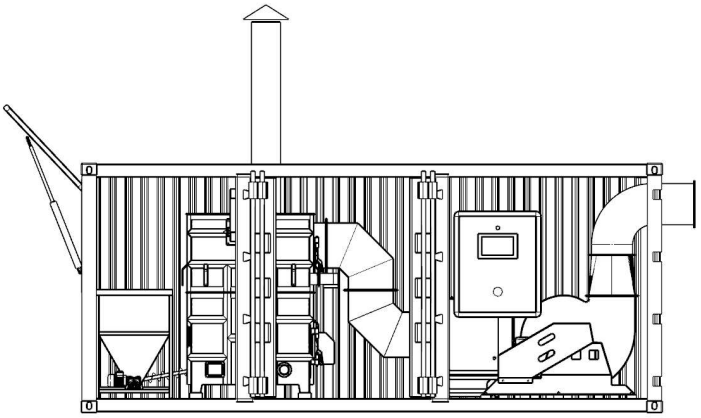
DILOTOP
MACHINE &
EQUIPMENT

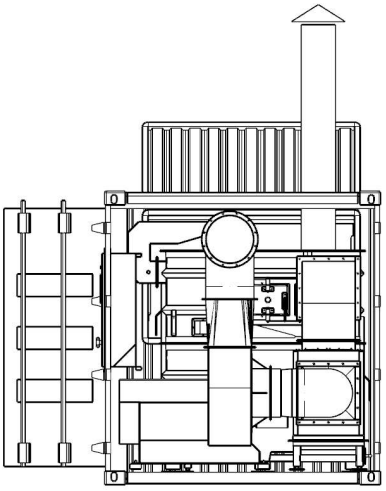
Diagram of a container boiler room

Mobile container boiler room with a hot-air boiler located in a 20´ or 40´ transport container, with a heat output of 150 kW - 1 MW, a transport fan with an output of 500 - 6,000 m3/hour, an outlet temperature of 50 - 480 °C depending on the type of boiler. The boiler is assembled for the use of fuel such as biomass, light fuel oil or gas. The boiler room also includes a fuel tank integrated in the container, depending on the size and output of the boiler, it can also be used as an additional tank outside the container. Control and operation is provided by a control system for full automatic operation of the boiler room, the set is equipped with safety elements for safe operation. Boilers and boiler rooms are designed individually according to the needs and requirements of the customer with regard to the spatial layout, the need for power and the operation itself. The boilers meet all emission and technical requirements for operation in the EU and the USA.









Realization

Contact

DILOTOP
MACHINE & EQUIPMENT

DILOTOP s.r.o.
Štefánikova 220/20h
742 21 Kopřivnice

Business representation

Jurij Ruščak
info@dilotop.com
+420 602 407 975

Projection, development,
production and service
CEO

Jaroslav Janák
tech@dilotop.com
+420 722 675 237

www.dilotop.com