DRYING

INDIRECT HEATING
WITH OIL OR GAS TYPE WWL MTP / KTI

For indirect heating of the drying air in a Cimbria continuous flow dryer with either oil or gas an WWL hot air generator is used.

Design and function
The utilization of a WWL indirect hot air generator on a Cimbria continuous flow dryer ensures that the flue gas never is in direct contact with the material to be dried.

A heat source (an oil or gas burner) generates the heat in a fire chamber. The flue gas is conducted into a chamber where it turns and is conducted through several rows of horizontal tubes. It turns again into another chamber and is conducted out through an outlet that is placed in the end of the hot air generator (accessory).

A fan blows cold air up around the burner chamber and between the tubes. The heat is emitted from the tubes to the cold air that becomes hot drying air. The drying air is sucked via the channels into the drying column.

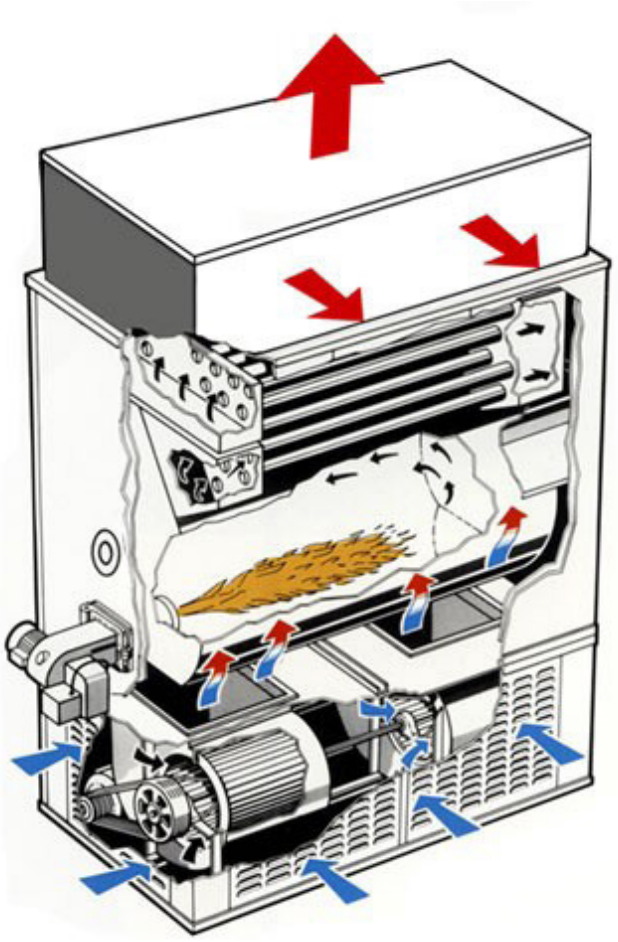
Control and safety
The heating source and the hot air temperature are controlled from the dryers control panel.
The hot air generator is complete with an overheating thermostat set on 90°C. In case of overheating the thermostat stops the heating source so the hot air generator is not damaged.
When the drying process is stopped and the hot air generator is hot, a thermostat ensures that the fans in the burner and the main fans on the dryer continues until the hot air generator is cooled down to 50°C.

Fire chamber
The fire chamber in the hot air generator is manufactured in suitable heat resistant steel, which ensure a long life time of the hot air generator.

External design
The carrying frame is manufactured in steel profiles. The cover plates are manufactured in galvanised plates with 30 mm insulation. The burner is enclosed in a rain tight box.

Fan and noise reduction
In the bottom section of the hot air generator, one or more fans are positioned in a frame construction of steel profiles.

Types of oil
Please contact Cimbria A/S if it is necessary to use other oil types than diesel oil / fuel oil, as it might be necessary to manufacture the internal construction in acid proof steel.



Furnace type	kW
MTP/KTI 480/75-300	560
MTP/KTI 560/75-400	650
MTP/KTI 760/75-450	880
MTP/KTI 850/75-525	990
MTP/KTI 950/75-525	1 100
MTP/KTI 1170/75-650	1 400
MTP/KTI 1360/75-850	1 580
MTP/KTI 1850/75-1000	2 200
MTP/KTI 2270/75-2000	2 640
MTP/KTI 2870/75-2500	3 340
MTP/KTI 3200/75-2500	4 000

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