NANNETTI

LABORATORY KILN

LKN-40-600-CA model

DESCRIPTION

It's an electric laboratory kiln, with an internal volume of approximately 40 lt which can operate at a maximum temperature of 1100°C.

It's designed to obtain the best compromise between the heating speed and the operating life of both the resistors and the thermal insulation.

Thermal insulation is a combination of preformed ceramic fiber panels.

The epoxy-coated steel structure and rubber-based support feet make this kiln compact and lightweight.
It can be placed on any table or laboratory bench.

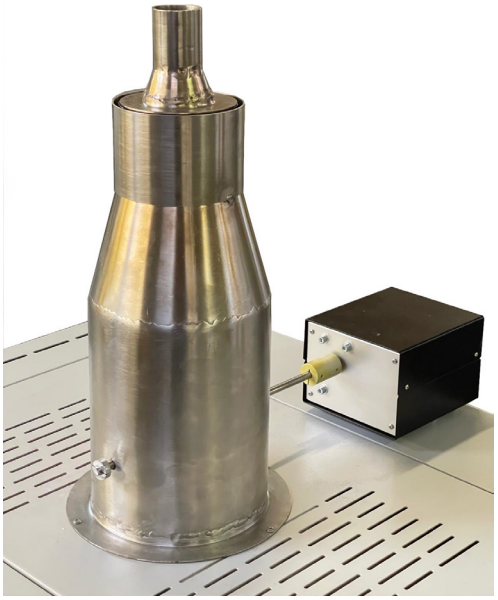
The heating part consists of:
- resistances made with Khantal-type spring-shaped wire and mounted on ceramic spark plugs located in the sole and sides of the internal chamber

(THE MAXIMUM RECOMMENDED WAITING TIME, AT THE MAXIMUM TEMPERATURE, IS **30** *MINUTES)*

TECHNICAL FEATURES

- heating elements[1], located in the sole and sides
- double-walled structure with natural ventilation
- opening with a swing door
- the kiln is not equipped with seals
- safety micro-switch on the door
- temperature and cooking cycle control using the LUMEL RE-82 programmer
- type K thermocouple
- *upper exhaust chimney (automatic)*
- *rear chimney*

1 *composed of spiral-wound wire resistors (Kanthal alloy), supported by easily removable and replaceable spark plugs*



At the top there is an automatic chimney (programmable):
- to capture the gases that develop during the cooking phases
- to facilitate the cooling phase (*forced type*)

The air taken from outside is introduced into the chamber through a hole made in the sole.

CONTROL PANEL

Temperature and cooking cycle control is entrusted to a Lumel RE82 microprocessor programmer.
A maximum of 15 programs can be configured and stored, each consisting of a maximum of 15 ramps.

THE INSTALLED POWER AND THE FORCED COOLING SYSTEM ALLOW A CYCLE TO BE CARRIED OUT (from cold to cold), REACHING A MAXIMUM TEMPERATURE OF 600°C, WHICH TAKES AROUND 150/180 MINUTES.
(the test is performed without the material inside the chamber)

Detail of the rear chimney

The requirement is to have an outlet to potentially connect a device to extract air, so it can circulate within the chamber.

Detail of the upper chimney

The upper chimney is equipped with a removable reduction.
The reduction, having a Ø of 42 mm, is used to connect the pipe during the gas sampling phase.
During the "forced" cooling phase, the reduction (with the attached tube) must be removed to have an air outlet diameter suitable for the volume that will have to pass.

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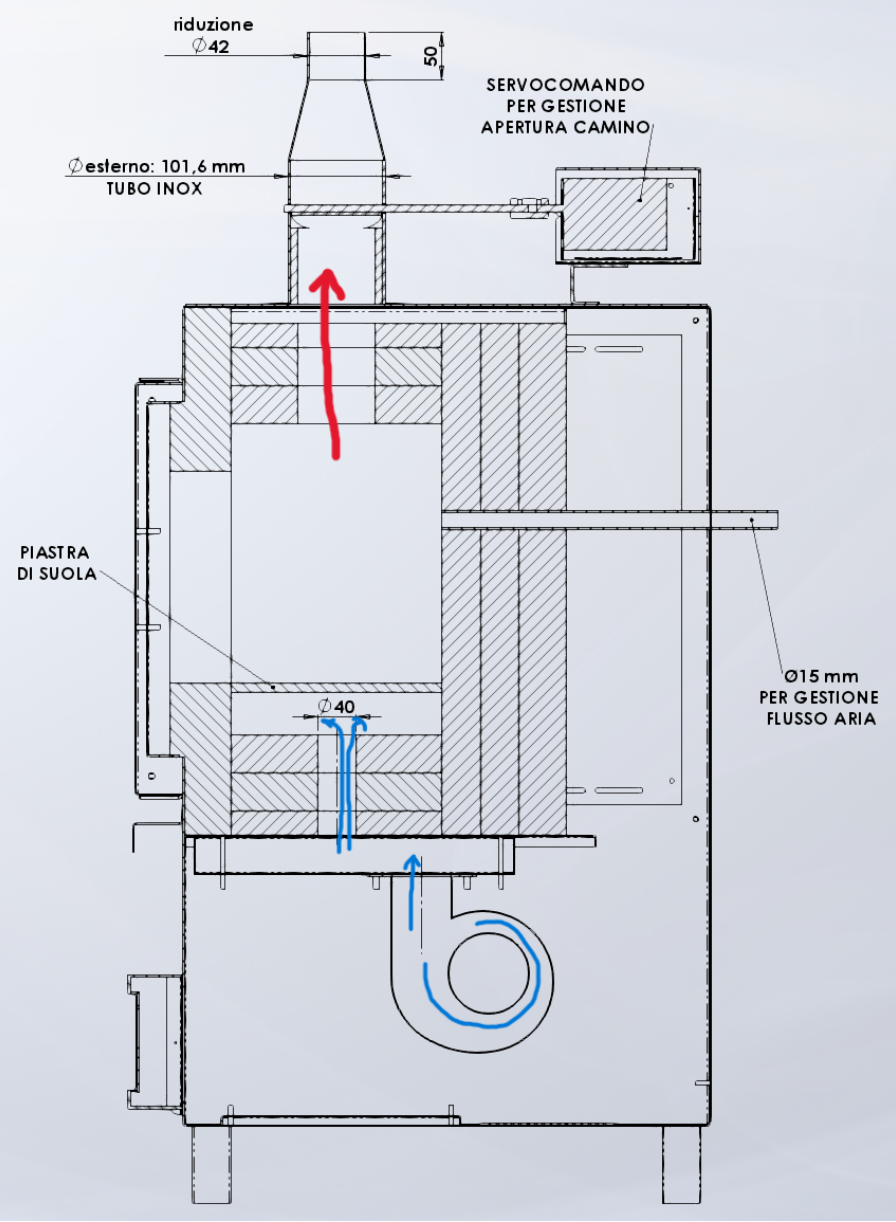

When configuring the program to run the cooking cycle, you must pay attention to the programming of the upper chimney and the lower fan.
Since the upper chimney is intended to perform two different activities, it is necessary to set its opening or closing on each individual section of the program.

Therefore, for each section of the cycle it will be essential to indicate the opening/closing of the chimney and the switching on/off of the fan.

Ev1 will appear on the upper display while OFF will appear on the lower display.

This parameter regulates the opening of the chimney during the section running.
To have the chimney open, while the segment is operating, select ON.
Also, the Ev2 parameter must be programmed, which regulates the suction fan during the execution of the curve section.

Activity 1
To open the chimney and be able to draw gas, you will need to set parameter Ev1 to ON and parameter Ev2 to OFF simultaneously.

Activity 2
To start forced rapid cooling, at the end of the stationary period, it will be necessary to set parameter Ev1 to ON and parameter Ev2 to ON simultaneously.
(The fan and chimney work in combination.)

Furthermore, at the rear of the kiln, there is a tube with a 15 mm diameter opening to allow you to manage any air flow through your appliance.

IMPORTANT !!!

- Before starting the forced cooling, it is necessary to physically disconnect the automatic chimney from the gas intake pipe
- When programming, particular attention must be paid to avoiding activating the fan and simultaneously keeping the upper chimney closed (strictly prohibited due to problems with creating pressure inside the chamber).

A smooth pipe terminal (Ø42 mm) is provided for connecting the upper chimney to the gas intake system.
It features a clamp fastening.

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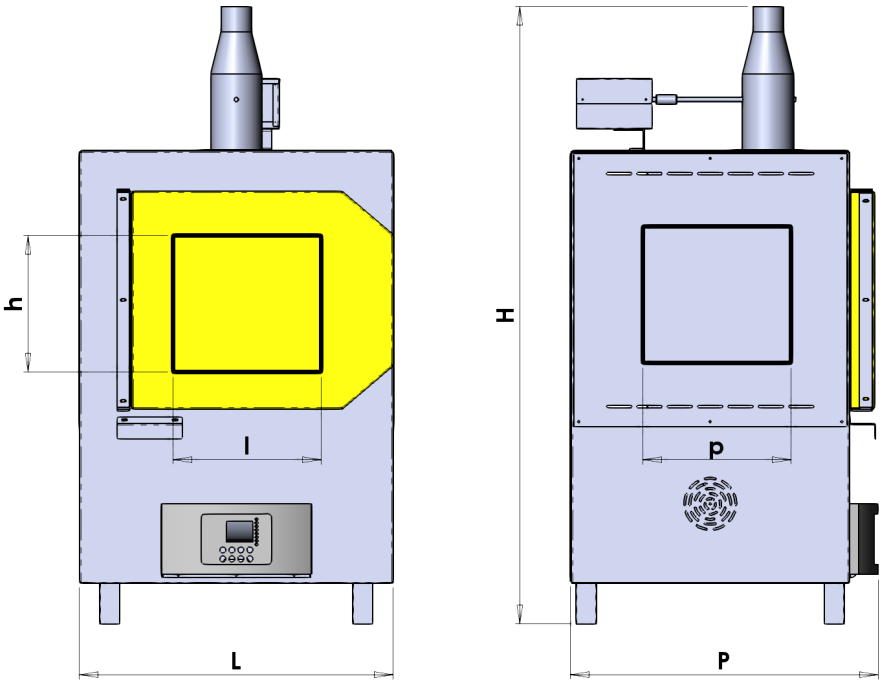

TECHNICAL FEATURES										
Mod.	Max temp. °C	Internal dimensions [mm]			External dimensions [mm]			Power kW	Tension [V]+N+T	Weight [kG]
		Largh. [l]	Prof. [p]	Alt. [h]	Largh. [L]	Prof. [P]	Alt. [H]			
LKN-40-600-CA	1100	350	350	350	900	850	1570	10	400	190

(All data is not binding, the manufacturer reserves the right to modify them)