

INCINERATORS FOR ORGANIC WASTE – ROLLING MODEL

Our company has a series of ROLLING model discontinuous incinerators, with a rotary combustion chamber, designed for the thermal destruction of organic waste such as animal carcasses or parts of them, butchery scraps, etc.

This type of waste is marked by high humidity levels, up to 70%, therefore low calorific power.

Since they comprise a rotary combustion chamber, they promote the remixing of the material, hence increasing exposure to the burner flame and therefore accelerating the incineration process.

The choice of incinerator is made according to the internal dimensions of the combustion chamber or, alternatively, the maximum amount of product to be loaded.

The operation is according to cycles. The waste is fed into the combustion chamber after which the incineration process begins.

Two cycles per day are normally performed.

The incinerator comprises the combustion chamber, equipped with a large front hatch, and supported by 4 wheels. Through a chain gearmotor system, it is given a slow rotation speed.

The incinerator comprises the combustion chamber, equipped with a large front hatch, where the combustion of the waste takes place, and the post-combustion chamber where the fumes from the previous chamber are fully oxidised, bringing them to 850°C for 2 seconds with minimum oxygen of 6%.

Each chamber is therefore equipped with a diesel, natural gas or LPG powered burner.

Both chambers are made of painted sheet carbon steel internally coated with refractory and insulating material of a suitable thickness.

The burners used are monoblock and have one or two stages according to the model; their power is appropriate for the volume of the chamber in which they are installed.

For gas burners (natural gas or LPG), the burners are equipped with a gas ramp to fulfil the requirements of EN 746.2 legislation in force.

Our ROLLING model incinerators are equipped with a section of chimney, made of sheet metal internally coated in refractory material, to ensure suitable draught and guarantee the expulsion of the fumes, while still keeping the incinerator under vacuum conditions so as to prevent any leaks into the environment.

The control and command are handled by an electric panel on which the heat regulators are fitted for controlling the burners, the timers for setting the duration of the process and the start/stop selector.

The burners are turned on and off automatically by the panel according to the temperatures reached, measured by the thermocouples.

The operation is fully automatic; after the closure of the door the incineration process starts, which automatically finishes at the end of the time set for the cycle. After a partial cooling step, the hatch can be opened and another load can be carried out.

At the end, the ash must be unloaded through the front hatch. The amount usually corresponds to 3-5% of the weight of the waste introduced.



The ash can be unloaded manually with a shovel or, preferably, using an aspirator.

ROLLING INCINERATORS TECHNICAL DATA

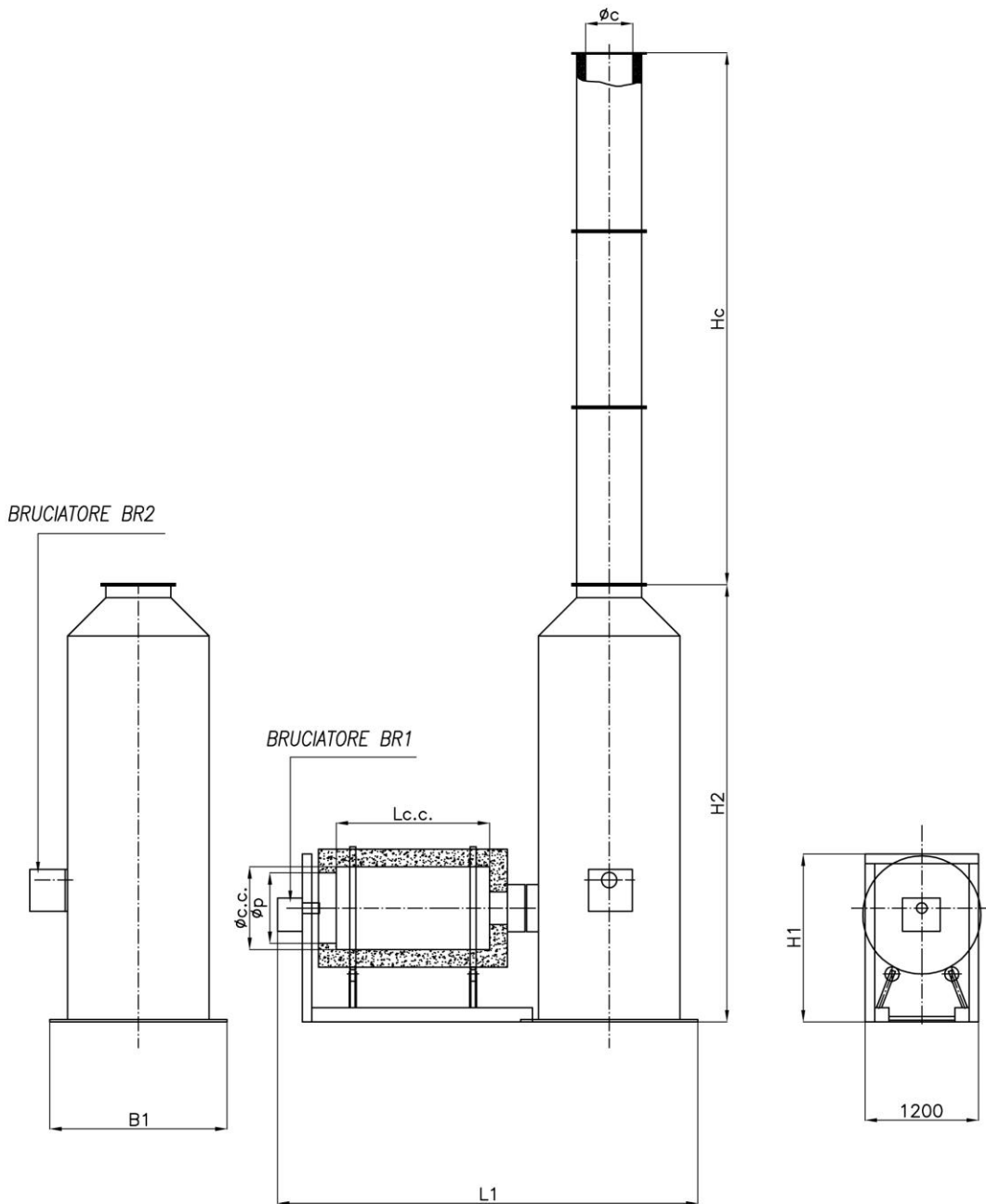
	Model	RL 2	RL 3	RL 4
Type of incinerator		rotary	rotary	rotary
Operation		Cycle	Cycle	Cycle
Combustion chamber volume	m ³	0.50	1.00	2.50
Load capacity	kg	125	250	625
Cycle duration	hours	3.5	3.5	4
Calorific power of waste	Kcal/kg	1,000	1,000	1,000
Post-combustion chamber volume	m ³	2.0	2.8	5.0
Combustion chamber burner power	kW	116	210	348
Post-combustion burner power	kW	232	407	605
Electric power supply	V/Hz	400/50 three- phase	400/50 three- phase	400/50 three- phase
Installed electric power	kW	1.0	1.8	2.8
Standard fuel		diesel	diesel	diesel
Consumption for 1 st cycle (ref. diesel)	kg	74	119	229
Consumption for subsequent cycles (ref. diesel)	kg	37	70	162
Consumption for 1 st cycle ref. natural gas	Nm ³	107	172	333
Consumption for subsequent cycles (ref. natural gas)	Nm ³	53	101	235
Gas pressure (for natural gas power supply)	mbar	25	25	25

DIMENSIONS

		RL 2	RL 3	RL 4
Internal diameter of combustion chamber Φ c.c.	mm	700	900	1,200
Internal length of combustion chamber Lc.c.	mm	1,300	1,620	2,210
Diameter of combustion chamber hatch Φ c.c.	mm	600	800	1,050
Length L1	mm	3,560	3,900	5,000
Breadth B1	mm	1,500	1,500	1,900
Height H1	mm	1,420	1,600	1,900
Height H1	mm	3,700	4,800	5,250
Length of chimney Lc	mm	3,000	4,000	4,000
Diameter of chimney Φ c	mm	400	510	510
Weight	kg	6,000	7,000	9,000



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incinerators



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