

ERVD series (max temp. 1330°C)



DESCRIPTION

This type of kiln consists of a robust structure in steel fire painted at 180°C with epoxy paints scratch-resistant.

Thermal insulation is composed of low-density refractory bricks and preformed ceramic fiber sheets that are highly resistant to temperature and thermal shock.

The kiln includes, depending on the various models, various zones with different characteristics and precisely:

- smoke entry and evacuation area
- preheating zones
- firing zones
- cooling zones

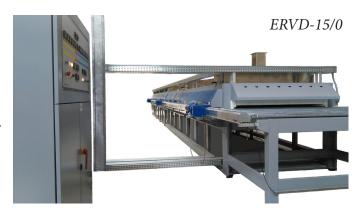
MATERIAL FEED SYSTEM

The tiles are fed into the kiln via ceramic rollers (\emptyset and pitch depending on the size of the kiln), which are set in rotation.

The movement system is equipped with a number of gearmotors that varies according to the length of the kiln.

In general, each gearmotor acts on three or four sections simultaneously. Each gearmotor drives, via a bevel gear connection, a transmission shaft on supports.

On each axle are mounted bevel gears with straight teeth that transmit the 90° motion to the corresponding coupled pinions.





The second pinion is assembled on an axis, supported by 2 bearings, while at the other end of the shaft a bushing is fixed which, through two axial springs, transmits the rotation to the ceramic rollers.

In the axis of the crowns of the right and left crosspieces of each drive, there are two cams with 8 notches that a sensor reads continuously indicating, as a safety measure, that the axis is always rotating.

HEATING SYSTEM

The heating system consists of both resistances in spiral-wound Kanthal wire and resistances in Silicon Carbide.

They are inserted from the side of the kiln allowing them to be easily replaced by removing only the protective casing; an operation that does not require the intervention of a specialized technician.

This kiln, in the cooking zone(s), can operate up to a maximum temperature of 1330°C and the upper and lower heating elements are managed independently.

In the cooking zones, the temperature uniformity between the right and left side is electronically controlled within a range of \pm 3 °C.

CONTROL PANEL (TOUCH SCREEN terminal)



- resistive TOUCH display, multilingual
- storage of up to 30 recipes
- 3 types of recipe planning: manual / weekly / scheduled
- creation of the graph of recorded temperatures
- privileged access to basic settings and advanced kiln management settings
- system error display and report bar
- ETHERNET port for remote control in teleassistance



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The <u>electrical system</u> consists of an independent cabinet that contains all the equipment necessary for controlling the kiln.

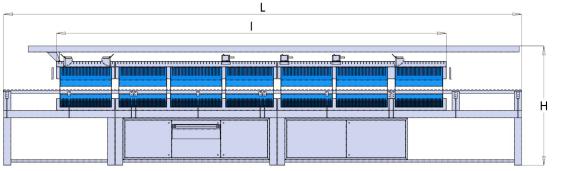
A Power Line Monitoring System (S.A.I.) connection is also included.

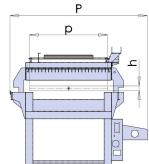
In the event of a power outage, this system, powered by a backup source (*battery system not included*), allows the rollers to continue turning.

This prevents:

- damage to the rollers at temperatures above 1000°C
- the material (inevitably to be discarded) remains inside the kiln

MODEL RANGE





| TECHNICAL FEATURES | | | | | | | | | | | |
|--------------------|-------|-----------------|--------------|---------------|---------------|-----------|---------------|--------|---------------|--|--|
| Mod. | Temp. | | nternal | | External | | | Power | Tension | | |
| | max | dimensions [mm] | | | dime | nsions | [mm] | supply | | | |
| | [°C] | Length [1] | Width [p] | Height [h] | Length [L] | Width [P] | Height [H] | kW | 3Phases + N+T | | |
| ERVD-6/0 | | 6300 | 800 | | 8400 | 1900 | | 98 | | | |
| ERVD-6/1 | | 6300 | 1000 | | 8400 | 2100 | | 98 | | | |
| ERVD-8/0 | | 8400 | 1000 | | 10500 | 2100 | | 110 | | | |
| ERVD-8/1 | | 8400 | 1200 | | 10500 | 2300 | | 140 | | | |
| ERVD-11/0 | 1330 | 10500 | 1000 | 50 | 12600 | 2100 | 2230 | 180 | 400 | | |
| ERVD-11/1 | | 10500 | 1200 | | 12600 | 2300 | | 225 | | | |
| ERVD-15/0 | | 14700 | 1400 | | 18900 | 2500 | | 285 | | | |
| ERVD-15/1 | | 14700 | 1600 | | 18900 | 2700 |] | 305 | | | |
| ERVD-18/0 | | 18900 | 1600 | | 23100 | 2700 | | 315 | | | |

(all data are not binding, the manufacturer reserves the right to modify them)

| ZONES_maximum programmable temperature [°C] | | | | | | | | | | | | |
|---|-----------|--------|---------|----------------------------------|--------------|----------------|---------|----------------|----------------|----------------|--|--|
| Model | Zones | | | maximum programmable temperature | | | | | | | | |
| | prheating | firing | cooling | preheating 1 | preheating 2 | preheating 3-5 | firings | cooling 1-2 | cooling 1-3 | cooling 1-4 | | |
| ERVD-6/0 & 6/1 | 2 | 1 | 4 | 900 | 1100 | / | | 900 | / | | | |
| ERVD-8/0 & 8/1 | 2 | 2 | 5 | 900 | 1100 | / | | / | 900 | , | | |
| ERVD-11/0 & 11/1 | 3 | 2 | 6 | 900 | 1000 | 1100 | 1330 | / | 900 | / | | |
| ERVD-15/0 & 15/1 | 5 | 2 | 7 | 900 | 1000 | 1100 | | / | 900 | | | |
| ERVD-18/0 | 5 | 3 | 9 | 900 | 1000 | 1100 | | / | / | 900 | | |

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