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## INDUSTRIAL OVEN

We are able to provide **industrial ovens** specialized in the **post-curing treatment**.



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## WHAT MAKES OUR OVEN RANGE UNIQUE

### HOMOGENOUS TEMPERATURE

Air flow management to obtain differences in temperature even better than 5 degrees.

### O.R.S VALVE

Security valve for the reduction of oxygen in the chamber. It reduces the risk of a fire

### SAFE USE

The interior of the chamber is completely "sealed" and doesn't allow the fumes to pollute the insulation.

### PLC SIEMENS

The electric panel allows you to:

- have under control all the temperature parameters.
- interface and control the oven through a PC.
- record time/ temperature graphs

### EXCHANGER HEAT

It allows to pre-heat the incoming air by 30/50 °C, reducing energy consumption and condense the outgoing fumes.

### H.E.P.A. FILTERS

Where it's necessary to treat food or medical material, we filter incoming air through absolute filters.

### AIR EXCHANGE

The post-curing of silicone requires a lot of attention for the exchange of fresh air, we can manage the correct quantity air with respect of the kg of the treated material.

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## Our Ovens



**Static Oven for Elastomer Vulcanization**

Oven studied for the treatment of post-curing of elastomer materials such as NBR, Silicone, Viton, etc.

Max temp. 200/300 °C



**Rotating Oven for Elastomer Vulcanization**

Oven studied for the treatment of post-curing of elastomer, such as O-ring, for which flatness is required.

Max. temp. 300 °C



**Sintering Oven PTFE**

Oven studied for the specific application of sintering treatments on PTFE polymers.

Max. Temp. 450 °C



**Pre-heating Oven Moulds**

Oven designed to hold the moulds before being installed on the press.

Max. Temp. 200 °C

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WE ARE ABLE TO PROVIDE **MADE TO MEASURE** OVENS STUDIED TO SATISFY YOUR NEEDS

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## Static oven for cycles of Vulcanization Elastomer

This oven has been studied to satisfy the technical specifications for the **post-curing** treatment of elastomer materials such as NBR, silicone, Viton, etc. that require temperature precision, homogeneity and absolutely air exchange.

The FG oven is made of an entirely stainless steel chamber, a group of armoured electric resistances in stainless steel, a motor for ventilation and an electric panel with an electronic programmer capable of storing desired work cycles. The door seals are made of fiberglass for high temperatures ensuring excellent sealing.

### Characteristics

The oven is characterized by the numerous characteristics that allow to improve the post-curing process.



**Internal flaps**  
for adjusting the air flow



**Heat exchanger**  
allows considerable energy savings



**Motorized door**



**Control and regulation of incoming air**



**ORS safety valve**  
for oxygen reduction, installed on both incoming and outgoing pipe



**Siemens PLC thermoregulator**  
improves control and temperature regulation

### Optional



**Shelves and trolleys**  
they facilitate handling. The removable shelves allow you to easily position materials to be treated



**Rotating basket**  
steel trolley with a rotating basket. Recommended for obtaining flatness of O-Rings and flat gaskets.



**Cooling station**  
both for deck and trolleys with a rotating basket, it allows quick cooling of materials, freeing the oven for new production cycles.



**Basket with rods**  
steel trolley with a rotating basket. Recommended for obtaining the flatness of O-Rings of larger dimensions.

### Technical data of some models

Model	Internal volume (l)	Internal dimension (cm)	Static Trolley (shelves/m <sup>2</sup> )	Rotating Trolley (lit.)
FG-MINI	800	92 x 71 x 114	9 / 4 m <sup>2</sup>	200
FG-S	2.200	125 x 130 x 161	12 / 12 m <sup>2</sup>	650
FG-N	3.000	111 x 150 x 182	14 / 14 m <sup>2</sup>	600
FG-L	3.400	127 x 150 x 182	14 / 18 m <sup>2</sup>	850
FG-XL	4.900	174 x 150 x 182	28 / 27 m <sup>2</sup>	1.700
FG-XL-MAXI	7.400	177 x 200 x 217	32 / 62 m <sup>2</sup>	2.500



## Rotating oven for cycles of Vulcanization Elastomer

It is an oven designed for the post-curing treatment of elastomeric materials and in particular for O-Rings, for which flatness is required.

All types of materials can be treated such as: NBR, Silicones, Viton etc. The material to be treated is poured into a perforated rotating stainless-steel basket and placed in continuous rotation, it is also hit by two streams (to the right and left of the basket) of hot air. The air is heated by means of stainless steel finned armoured resistances with high heat exchange.

### Characteristics

The oven is characterized by the numerous characteristics that allow to improve the post-curing process.



**ORS safety valve** for oxygen reduction, installed on both incoming and outgoing pipe



**Control and regulation of incoming air**



**Heat exchanger** allows considerable energy savings



**Siemens PLC thermoregulator** improves control and temperature regulation

### Technical data of some models

External Dimension (cm)	Weight (kg)	Basket Volume (l)	Electric Power engines (kw)	Electric Power resistance (kw)
234 x 250 x 265	1.700	840	2,4	18





## Polymer Sintering Oven (PTFE)

These ovens have been studied for the specific application of sintering treatments on PTFE polymers.

The maximum working temperature is 450 °C.

The isolation has been studied to have the minimum external temperature dispersion. The enhanced ventilation allows excellent distribution inside the chamber. There are 4 interacting temperature probes for monitoring as well as optimal management of the ramp and thermal stability.

The motorized door allows easy loading and unloading of the material.

The electric panel of our design and the use of a Siemens PLC thermoregulator connected via Ethernet to our remote management software allows the best possible programming as well as the recording of the time/temperature cycle. A "redundant" security system monitors that the alarm and danger temperatures aren't exceeded.

The heat exchanger allows considerable energy savings.

### Characteristics

The oven is characterized by the numerous characteristics that allow to improve the post-curing process.



**Internal flaps**  
for adjusting the air flow



**Heat exchanger**  
allows considerable energy savings



**Motorized door**



**Control and regulation of incoming air**



**ORS safety valve**  
for oxygen reduction, installed on both incoming and outgoing pipe



**Siemens PLC thermoregulator**  
improves control and temperature regulation



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## Pre-heating Oven Moulds

This oven has been designed to house the moulds before being installed on the press.

The mould heated at approximately 150 °C allows a significant reduction in production start-up waiting times, reductions of approximately half the time have been made.

The oven is a traditional electric heating oven but with a very sturdy and resistant structure, inside the chambers there are roller conveyors of hardened material with bearings for high temperatures and an air circulation fan which guarantees excellent temperature distribution and a rapid heating of the moulds.

Strong mechanical stops ensure that the mould is locked and secure.

The construction of these ovens are "dedicated" and they are designed according to customer specifications, of the quantity, of the minimum and maximum dimensions as well as the weight of the mould. They can be designed to house moulds vertically or horizontally.

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### Characteristics

The oven is characterized by the numerous characteristics that allow to improve the post-curing process.



Ignition timer



Electric thermoregulator  
improves control and  
temperature regulation





We have specialised for 20 years in the supply and consultancy of scientific instrumentation for quality control and R&D laboratories.

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