

ELECTRIC INDUSTRIAL OVENS PRAPAN ENTERPRISES



Salient Features

- **SS Structural unit that is built to last**
- **Effective air distribution**
- **Easy Installation**
- **Simple and Complex control systems available**
- **Safe Operation and easy maintenance**
- **Made with the best quality parts**

INTRODUCTION

Prapan Enterprises has been involved in designing and manufacturing of Industrial grade Ovens since 1980s. All our ovens are designed and manufactured to meet our customer's need. Our ovens are used for industrial applications, including curing, drying, preheating, ageing, tempering and annealing, in the processing, packaging, plastics, rubber, automotive and metal working industries. The Ovens are manufactured as per International Safety Norms.

Other Features:

- Zone temperatures (multiple heat zones)
- Process Time
- Circulating Fan Speeds
- Extended loading and unloading zones
- Special belt construction or attachments
- Cooling zones to reduce part temperature

TYPES OF OVENS

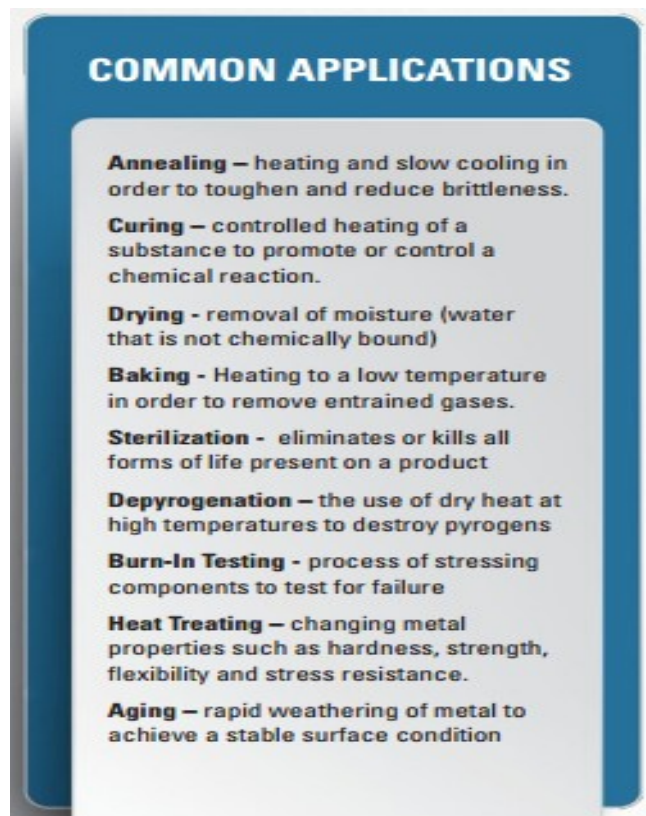
- **CABINET OVENS**
- **CONTINUOUS PROCESS OVENS**
- **BATCH OVENS**



INDUSTRIAL OVEN SELECTION GUIDE

Define your Application :

The first and most important step in finding the right piece of equipment is to determine what function your equipment needs to serve. The scope of thermal applications is endless and can range from common to complex



INDUSTRIAL OVEN SELECTION GUIDE

Batch or continuous model oven will work best for your process :

Batch Ovens

For applications where the load size or production volumes vary substantially, batch processing is a good approach. Batch ovens are also ideal for situations that require a high degree of flexibility in terms of process variables such as temperature or dwell (soak) time.



Continuous Ovens

Where a large quantity of similar product pieces are processed, continuous operation may be the optimal approach. Continuous ovens help ensure consistent thermal processing times for each part in high-volume applications, such as manufacturing electronic components or automotive parts. Continuous ovens may also allow several discrete processes to be combined, reducing material handling and increasing throughput.





INDUSTRIAL OVEN SELECTION GUIDE

Choose the best chamber size to suit your processing needs :

Chamber size depends on the size of the product or parts, the number of products in each batch, and the number of batches required per day to meet production requirements. If the interior space is too small, insufficient space between parts results in poor performance. If it is too large, space, time and energy are wasted. When using forced recirculating airflow, parts benefit from spacing, but the oven can be loaded more densely vertically because airflow is distributed along the entire side wall. Parts should be kept 2-3 inches from the oven wall.

Consider your Temperature Requirements :

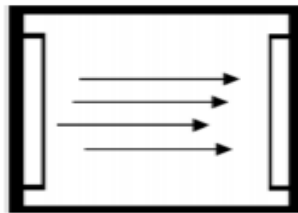
When considering the temperature requirements for your application, first note the minimum and maximum operating temperatures required.

Additional temperature considerations include:

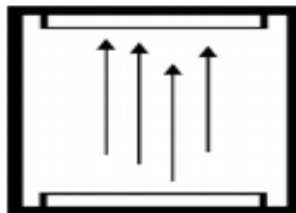
- The required dwell time at temperature, and the overall cycle time.
- The type and amount of product load. The oven design will need to have sufficient heating capacity to bring the product to the desired temperature within the specified time.
- Whether the heat-up rate needs to be controlled or if the product can be allowed to reach temperature as quickly as possible.
- Any specific cool-down requirements.

INDUSTRIAL OVEN SELECTION GUIDE

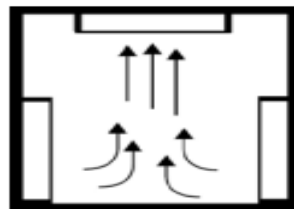
- Know how critical temperature uniformity is for your process .
- Choose the best Airflow for your product load
- Define any Special Processing Needs



Horizontal



Vertical (up or down)



Uniflow

CABINET OVENS



These chambers are designed to meet your most demanding needs. Our precision engineering, heavy duty construction and exceptional performance along with a variety of airflow patterns and optional equipment provide the right solution for your heat processing requirements. Standard sizes range from 3.3 cuft up to 96 cuft and standard temperatures up to 500 degree celcius.

Technical Features:

- Compact model with user friendly PLC system
- High volume recirculation blowers or fans
- Batch Timer- Shuts heat off at the end of a timed cycle (on models with single set point controllers only)
- Incoloy sheathed or SS 316 heating elements
- SS interior

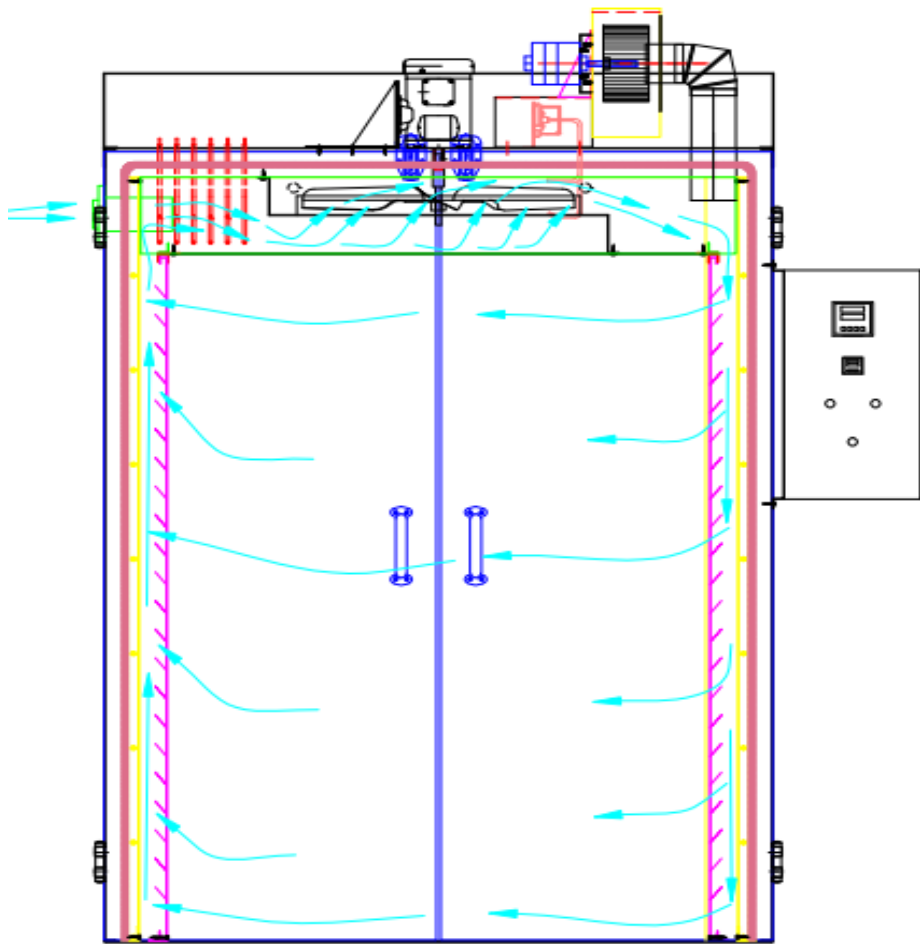
Optional Features:

- Frame and Covers can be made out of SS if required.
- Programmable Controller
- Shelves
- Alarm Indicator
- Custom designs
- Different airflow patterns will change the external size, external size is figured with a 14" dia control panel on the right side.
- Optional KW available



Air Flow Patterns :

HORIZONTAL AIR FLOW



Note:- This image is just for illustration purpose,.

CONTINUOUS PROCESS OVENS

Continuous Process Ovens can be used for a range of applications including:

- Tempering
- Annealing
- Curing
- Pre-heating
- Drying
- Heat-shrinking
- Heat-forming





Technical Features:

- Welded steel structural unit that is built to last
- Heavy gauge aluminum or steel interior
- Easily accessible interior for maintenance and cleaning
- Effective air distribution system
- GMP model
- Simple or complex control systems available
- Temperatures up to 600 °C

Optional Features:

- Zone temperatures (multiple heat zones)
- Process Time
- Circulating Fan Speeds
- Extended loading and unloading zones
- Special belt construction or attachments
- Cooling zones to reduce part temperature



PRAPAN ENTERPRISES

**Plot No. C-1, M.I.D.C.'s Mira Industrial
Area, Mira Village, Off. W.E. Highway,
Mira Road (E) – 401104**

Phone: 022 – 2845 6265

**E-mail: prapan1971@gmail.com
info@prapanenterprises.com**