

# COFFEE-TECH ENGINEERING

The Ghibli R-15 commercial coffee roaster was designed to provide the latest technology for those who appreciate quality and deserve the best.

The Ghibli R-15 is much more than a rotating "barrel on flames". Loyal to our endless pursuit of excellence, the Ghibli R-15 was created using the most advanced product design software, from beginning to end.

#### This has aided us in optimizing essential parameters, such as:

/ Advanced thermodynamic characterization.

/ Robust and accurate drum housing, ensuring that the drum will spin "in-line" for the entire life of the product.

/ Drum proportion - achieving an optimal ratio between heat conduction and heat convection.

/ In-drum agitation designed for perfect beans stirring, greater heat conduction between metal and beans, chaff separation and the immediate evacuation of the beans from the drum into the cooling group.

/ Perfect heat dispersion - as a result of an intensively researched ceramic combustion chamber, optimally located against the drum, spreading heat equally throughout the drum, as opposed to the more common setup of heat being directly applied to the drum at a single point.

#### **Unique Roasting Software**

Ghibli R-15 features unique roasting software developed exclusively by Coffee-Tech Engineering, enabling the user to predefine and program personal roast profiles. By recording the desired heating curves, endless roast profiles can be applied, again and again, with the greatest accuracy.

### A New Generation of Roasting Drums

An extensive, in-depth research and development process has resulted in three distinctive tailor-made drum models for the Ghibli line:



#### **Ghibli Standard Drum**

This solid mild steel drum has been designed to produce an extensive aromatic range and high sugar levels during roasting. This results in a superb roast for most styles, including blends roasted for espresso.

### Ghibli Infra-Red Drum

This drum is designed to produce a stronger taste with higher levels of caramelized sugars and excels in rapid roasting times. Two separate layers of perforated mild steel ensure an improved grip between the surface and the beans, advanced agitation and the creation of a larger contact surface between the beans and the heating source. Infra-red radiation is applied to the beans via the perforations.

#### **Ghibli Thermodynamic Drum**

This is the most advanced drum in today's industry. Built from two layers of mild steel with a middle layer of pure copper, it has extremely high thermal absorption and conduction characteristics. In contrast to standard drums, in which roasting is performed by direct, limited contact between the beans and the drum, the Ghibli Thermodynamic Drum displays a unique method of refined conduction applied to a wider contact surface between beans and drum. Heat is generated via a copper layer creating a 1.4mm gap between the heat and the beans, removing any risk of burn marks. This drum excels in producing an evenlyroasted batch of superb beans.

### **Clean, Efficient and Safe Heating System**

Coffee-Tech's entire Ghibli line features a highly efficient turbo gas burner. This clean heat source provides maximum gas burning efficiency with minimum levels of carbon monoxide emission. Safe, economical and stable, it features many unique parameters for control and calibration, described in detail in our user manual.



Control panel  $\rightarrow$ 



### **Comprehensive Set of Features**

At Coffee-Tech Engineering, we pay special attention to the less than obvious details, such as the compact, efficient structure of the roaster, batch cooling time, drum evacuation time, the size of the monitoring control lens and drum-gate, an additional lens in the green beans hopper and more. At the end of the cycle, the entire roasted batch is transferred to the cooling group in a matter of seconds. This external group is made of 100% stainless steel with special food-grade material agitation blades which efficiently shuffle the beans over the cooling mesh. Aided by a high capacity blower, an entire batch is cooled in less than four minutes. The features above are often ignored details and their impact is tangible in the finished brew. At Coffee-Tech Engineering, every setting and modification is tested in our laboratory to ensure we accomplish this goal.

Thanks to the cutting-edge technology of the machine, the roasting process achieves excellent levels of sugar, aromatic oil and a wide aromatic range. These virtues are achieved without burning the "woody" substance of the beans.

# The Perfect Roasting System

Determining a high level of conductive heat has proved the best method for producing a rich cup and this is where we differ from other manufactures. Since conduction is complicated and presents several unresolved issues, many have abandoned it in favour of convective heat. At Coffee-Tech Engineering we have chosen to invest in extensive research in order to solve these issues. In doing so, we are proud to offer a machine that truly reflects our beliefs and understanding of coffee roasting. The Ghibli R-15 roasts continuously, while cooling takes place outside the drum, making it possible to roast up to 60 kg of beans per hour. The Ghibli R-15 is user-friendly, ergonomic, quiet, compact and safe. Each function has an individual motor and heat protection.

We take pride in the Ghibli R-15's high - end craftsmanship. This is a result of CAD design and the use of high quality materials, components and precise manufacturing tools assembled and completed by Coffee-Tech Engineering's passionate artisans.

The Ghibli R-15 is available with various heating methods, from natural gas and LPG, to traditional wood and charcoal heating, according to the customer's preference. As a high-end roaster, the Ghibli R-15 will ensure reliable operation together with consistent, superb results for many years to come.

# **Technical Specifications**

# Batch Capacity:

3-15 Kg (6.6-33 Lbs)

# **Roasting Cycle:**

11-17 minutes± Up to 4 batches per hour

# **Electrical Specifications:**

50/60 Hz. 2500 W 230V Single-phase/380V 3 phases

## **Heating Method:**

Gas: L.P.G. /Natural Gas (40k-116k BTU/h)

# **Chaff Evacuation:**

Cyclone type chaff collector with booster blower - for clean in-house roasting

### **Drum Operation:**

Direct drive individual heavy-duty gear motor 1/2hp digital variable drum speed control included

### **Cooling Agitation:**

Direct drive individual heavy-duty gear motor 1/3hp.

### **Cooling Blower:**

High capacity cooling blower, cooling time is about 1-2 minutes

#### **Drum Venting:**

Individual blower 1/3hp digital variable speed control included

#### **Bearings:**

Four main bearings, two (F&R) precision dry bearing with zero tolerance for centering the drum and two high temperatures, self-aligned bearings

#### Body:

Full precision metal work, top quality material and hardware, galvanized steel, carbon steel and stainless steel

#### **Dimensions (cm):**

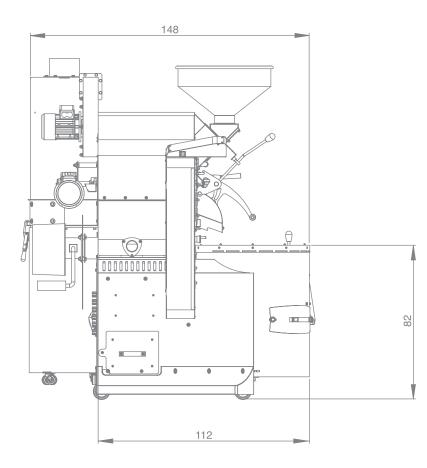
114 (w) X 148(d) X 180 (h) Cm 45(w) X 58(d) X 71(h) Inch (With cyclone)

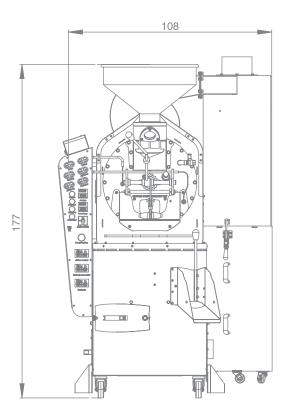
#### Weight:

400 kg Machine

#### Also Available:

Traditional wood / Charcoal heating conversion / Automatic software





# **Heating Technology**









Conduction

Convection

Ceramic Chamber



# **General Features**



Consumption

Low Energy









Multi Point Temp





Automatic



Smoke Free





**Full Modulation** 



Thermodynamic Drum

