

Ghibli R15

3-15 kg / 6.5-33 lb.
Commercial Coffee Roaster



As a high-end roaster, the **Ghibli R15** will ensure reliable operation together with consistent, **superb results for many years to come**

The Ghibli R15 commercial coffee roaster was designed to provide the latest technology for those who appreciate quality and deserve the best. The Ghibli R15 is much more than a rotating "barrel on flames". Loyal to our endless pursuit of excellence, the Ghibli R15 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 bean 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 R15 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:

The Next-Gen Vortex TO4 Roasting Drum

In Ghibli R15, airstream blasts in spiral motion into the drum and through the coffee beans, requiring smaller amount of air to enter the roaster for a full effect.

The longer spiral path across the drum and through the coffee bed is unlike the olden traditional roaster mechanisms, which had a perforated back plate allowing huge amounts of air into the drum in a short, straight path. With our roaster, the beans are not stripped away from their coffee goodness, while the energy is also used to maintain the heat right next to the exhaust without working on the coffee itself. This innovative approach ensures a unique added-value offering for cost-effectiveness, energy optimization, and enhanced flavor.

Lab tests have already shown a huge improvement in the coffee's solids content and density, with amazing improvements in gas consumption, roasting time, fume emission.

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 evenly-roasted 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.

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 bean 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

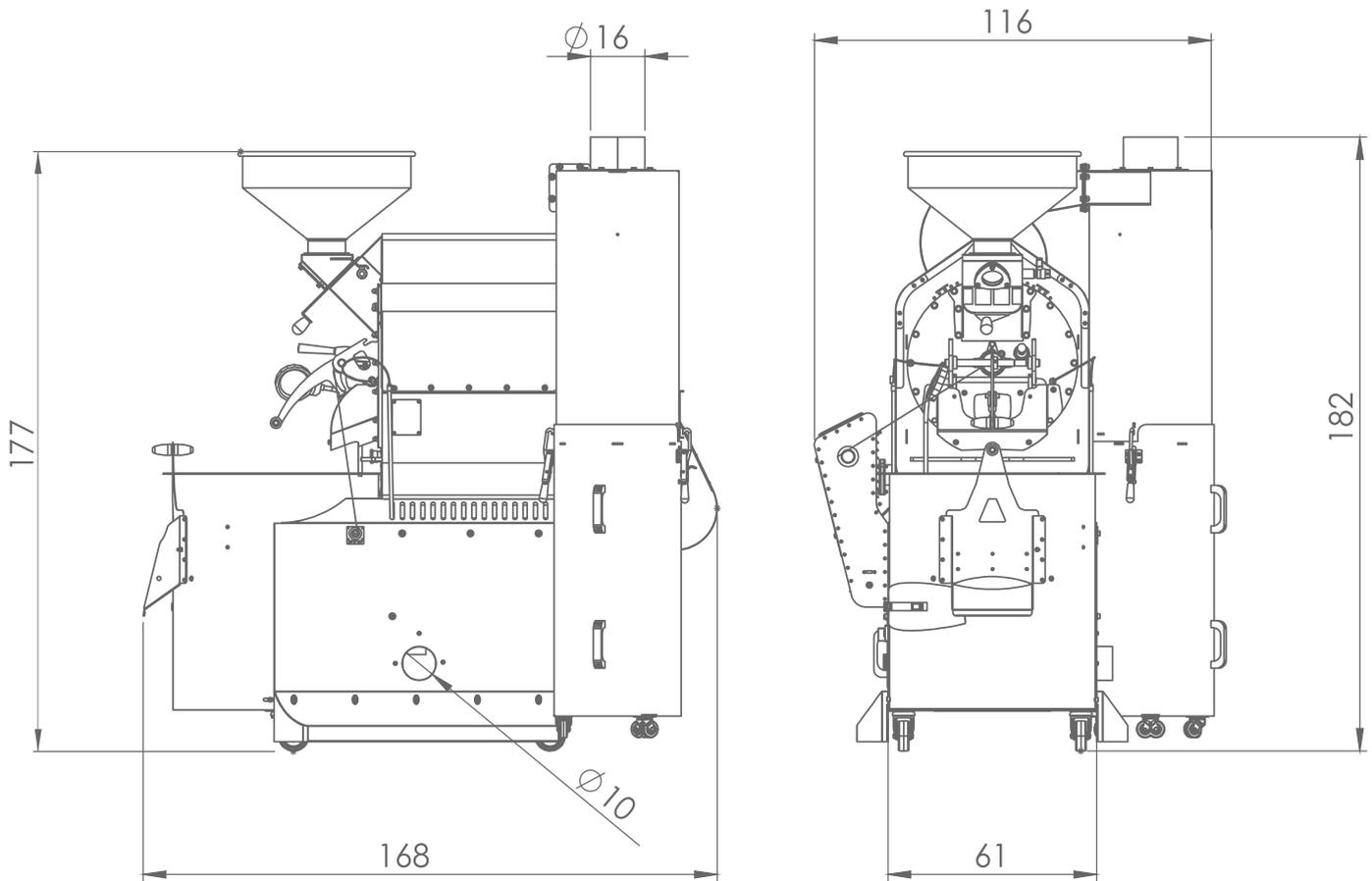
impact is tangible in the finished brew. At Coffee-Tech Engineering, every setting and modification is tested in our laboratory to ensure we accomplish this goal. Thanks to the cutting-edge technology of the machine, the roasting process achieves excellent levels of sugar, aromatic oil and a wide aromatic range. These virtues are achieved without burning the "woody" substance of the bean.

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 R15 roasts continuously, while cooling takes place outside the drum, making it possible to roast up to 60 kg of beans per hour. The Ghibli R15 is user-friendly, ergonomic, quiet, compact and safe. Each function has an individual motor and heat protection. We take pride in the Ghibli R15'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 R15 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 R15 will ensure reliable operation together with consistent, superb results for many years to come.





Heating Technology



Conduction



Convection



Indirect Flame
[OPT]

Safety



In Drum
Extinguish



Safety
Manual Crank



Pollution Free
Ambient

Roasting Method



Drum Roasting

Control Features



RDL



Drum Speed
Control



Blower Speed
Control



Multipoint
Temp.



Touch
Screen

Built-in Features



Vortex TO4



Full Modulation



Ceramic
Chamber



Sub-Atmospheric
Combustion Chamber



Infrared
Drum (opt)



Thermodynamic
Drum (OPT)

Sustainability



Low Energy
Consumption



Low NOx

Technical Specifications

Batch Capacity

3-15 Kg (6.6-33 lb.) of green coffee

Roasting Cycle

14-17 minutes \pm 4 batches per hour

Quality and safety compliance

CE, RoHS, EMC

Drum housing

Sub atmospheric combustion chamber

Electrical Specifications

50/60 Hz, 2500kw, 230/380V

Cooling Blower

High capacity cooling blower, cooling time is \pm 3 minutes

Cooling Agitation

Individual, heavy-duty gear motor

Safety

Safety drum discharger, in drum fire extinguisher

Chaff Evacuation

Full size, high capacity cyclone chaff collector

Drum Venting

Individual blower with digital variable speed control comes standard

Bearings

Heavy duty, long intervals between required maintenance

Body

Full precision metal work, top quality materials and hardware

Dimensions

146(w) X 173(d) X 182(h) cm.
57(w) X 68(d) X 72(h) Inch.
(With cyclone)

Weight

400 kg (882 lbs.)
(Machine with cyclone)

Gas Consumption

1-1.5 kg per hour of roasting

Heating Method

Gas: L.P.G. / Natural Gas (12-34 kw) fully modulated or single stage burner

Drum Operation

Individual, heavy-duty gear motor. Digital variable drum speed control comes standard

Also available

- Wood/charcoal heating conversion
- Automated software
- Pneumatic doors
- Loading system