

Solar

2 kg automatic shop roaster

Imagine you can afford to hire a **professional Roastmaster** to work at your café, daily... With **Solar**, it is no longer a dream- **it's a reality.**

Years of experience and continuous investments in R&D have led to the development of the Solar - the most advanced shop roaster in the world: a fully automated roaster that cycles 2kg of beans at the push of a button.

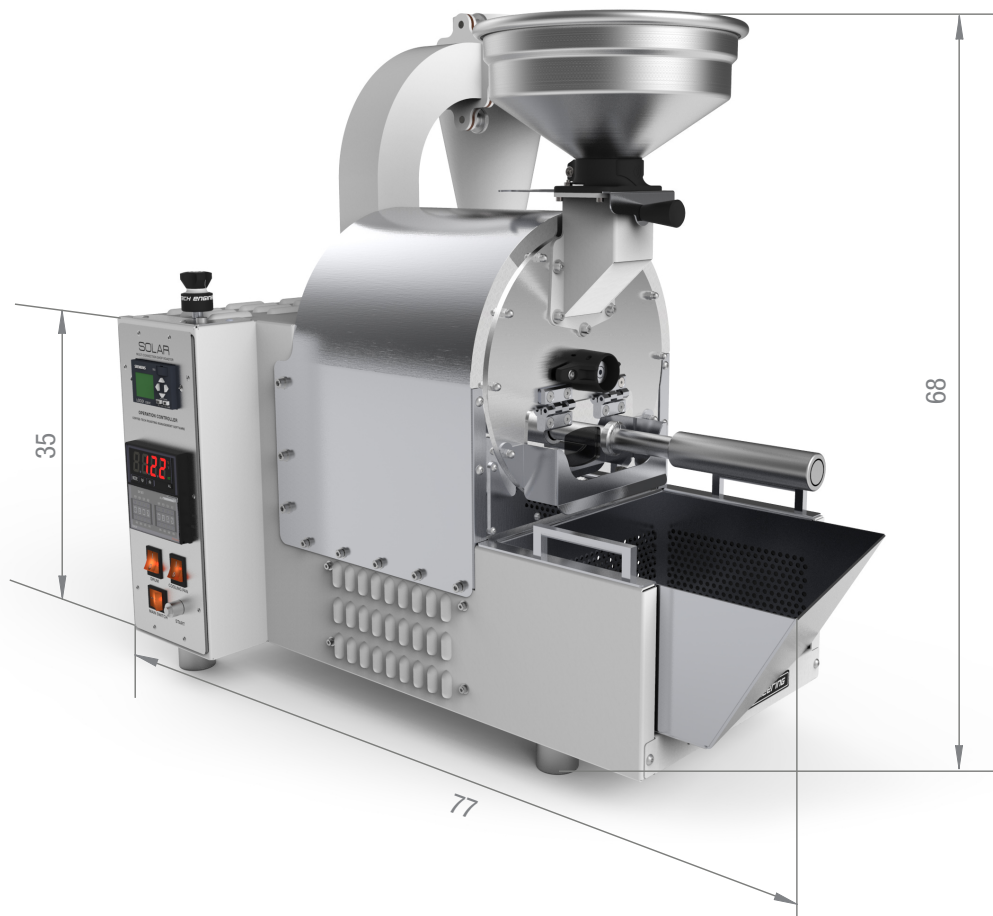
The Solar roaster features a number of technological breakthroughs and its computerized control and advanced structural design mean this machine is absolutely service-free.

With the user in mind, we built the Solar to require no complicated maintenance, let alone costly services by the manufacturer. Requiring only simple cleaning and user level procedures, Solar has been built to work hard and to last. Every part that requires periodical cleaning is attached with thumb-nuts for quick and easy release.

Smart and Simple Automated Roasting Process

Solar uses remarkably accurate, dual-temperature monitoring. This feature is coupled with built-in roasting management software, which allows the user to modify the roasting process.

Combining two different roasting methods - air-bed convection and rotating drum conduction - the Solar roaster draws on the strong points of each one. It is the only shop roaster in the world to use positive convective pressure - "pushing" hot air through the roasting chamber - as opposed to other roasters that use negative pressure, which sucks hot air through the beans. The difference is seen in the cup.



Conducting and radiating heat in four different ways allows for individual “heat treatment” of all types of beans during roasting, regardless of their size, density or levels of humidity. Solar has the unique ability to roast pre-mixed green coffee to the highest quality. This means you can roast your own house blend in a single batch, no matter how complex it may be. The surface of the drum in the Solar is perforated rather than smooth. This means the beans nestle against the holes, resulting in a better grip and agitation. This way, the beans have a much larger contact area with the drum and better heat treatment compared to solid, unperforated drums. We find this structure to be a much smarter way of applying heat to the problematic substance of coffee beans which come in different types, sizes, humidity and specs.

With this technology at your disposal, the flaws of traditional roasters, such as burn spots caused by excessive conducted heat or matte brown beans caused by over-convective heat, are a thing of the past. Solar successfully handles the conflicts of producing maximum yield without harming the disposable substance, the woody part of the beans. Lastly, it seals in the aromas of the coffee instead of losing them through the duct.

The automatic roasting profile, using unique roasting technology, carefully follows the natural processes of coffee roasting. The result is unparalleled accuracy and consistency for each roasted batch. Many of the machine’s best secrets are embedded in its very core and not simply added as features. The result is that anyone can roast coffee to the highest standard with no effort or advanced know-how, achieving excellent results time and again. A single button will create a roasting profile according to the user’s selection, allowing you to create any profile you can think of. The Solar roasting management software remembers it for you and repeats it accurately. This provides a constant optimization curve towards an unprecedented level of quality.

Superb Smoke Reduction

Solar boasts a significant reduction in the amount of smoke released during roasting, without using filters, which tend to clog and degrade. The Solar implements a chaff separation system which is 100% efficient. Combined with Avirnaki, Coffee-Tech Engineering’s revolutionary smoke elimination system, Solar requires no ventilation system and is practically smoke free.

Compact, Robust Design

Solar features top quality parts and a heavy gauge steel body, meeting the highest manufacturing standards. Solar was designed and built to serve you for many years and roast numerous batches. Not only are you free from the hassle of routine maintenance, smoke, complex setup and operation, but Solar’s small footprint and compact design means you can work in a limited space. Solar means everyone can roast without having to reinvent the wheel each and every day. The Solar shop roaster is

marketed worldwide and has been adopted by many trendsetting cafes and professional coffee shops as the ultimate roasting machine. Using an automatic machine is the only way to roast in store while maintaining efficiency in terms of time and achieving a high standard of quality. Solar is the only machine on the market that was designed from the inside out with shops in mind. The starting point of the project was a long list of market demands, restrictions and technological challenges that required solutions. Thanks to the concepts and technology that have guided us in designing Solar, it is the ultimate machine for a wide range of customers. For beginners taking their first steps in roasting, quality-minded micro roasters, busy shops selling fresh coffee, chains with employed operators or those who need another roaster for limited production to run alongside their main commercial line - Solar is the perfect choice.



Control panel



Large pyrex lens for easy moanitoring

Technical Specifications

Materials:

100% metal structure

Quality and safety compliance:

CE , RoHS, EMC

Noise Level:

Remarkably silent

Batch Capacity:

2 kg of green coffee (4.4 lb)

Roasting Cycle:

16-18 minutes for a 2 kg full capacity batch

Electrical Specifications:

220-240 V 50/60 Hz. 3300 W single phase

Motor:

Direct drive heavy duty gear motor 1/8 hp, Ac

Heating Source:

Electrical; specially made high temperature metal infrared heating elements (3X1000 W)

Heating Method:

Infrared radiation, convective air, conduction, thermosiphon heat exchange

Roasting Method:

Rotating drum with limited fluid bed

Cooling:

Cooling in-drum and outer cooling group

Process Quality Control:

Large pyrex lens for easy monitoring of roasting progress. Digital double temperature controller for heat control allows determining temperature range for roasting

Chaff Collector Type:

Detachable 100% efficient centrifugal cyclone. Made of welded heavy gauge steel, with quick release thumb nuts for thorough cleaning

Exhaust:

Single duct, 4" standard diameter. Machine's exhaust is attached with quick release thumb nuts for easy cleaning

Maintenance:

Emptying and periodical cleaning of the chaff collector and exhaust tubing only, chaff blower does not need any cleaning

Safety:

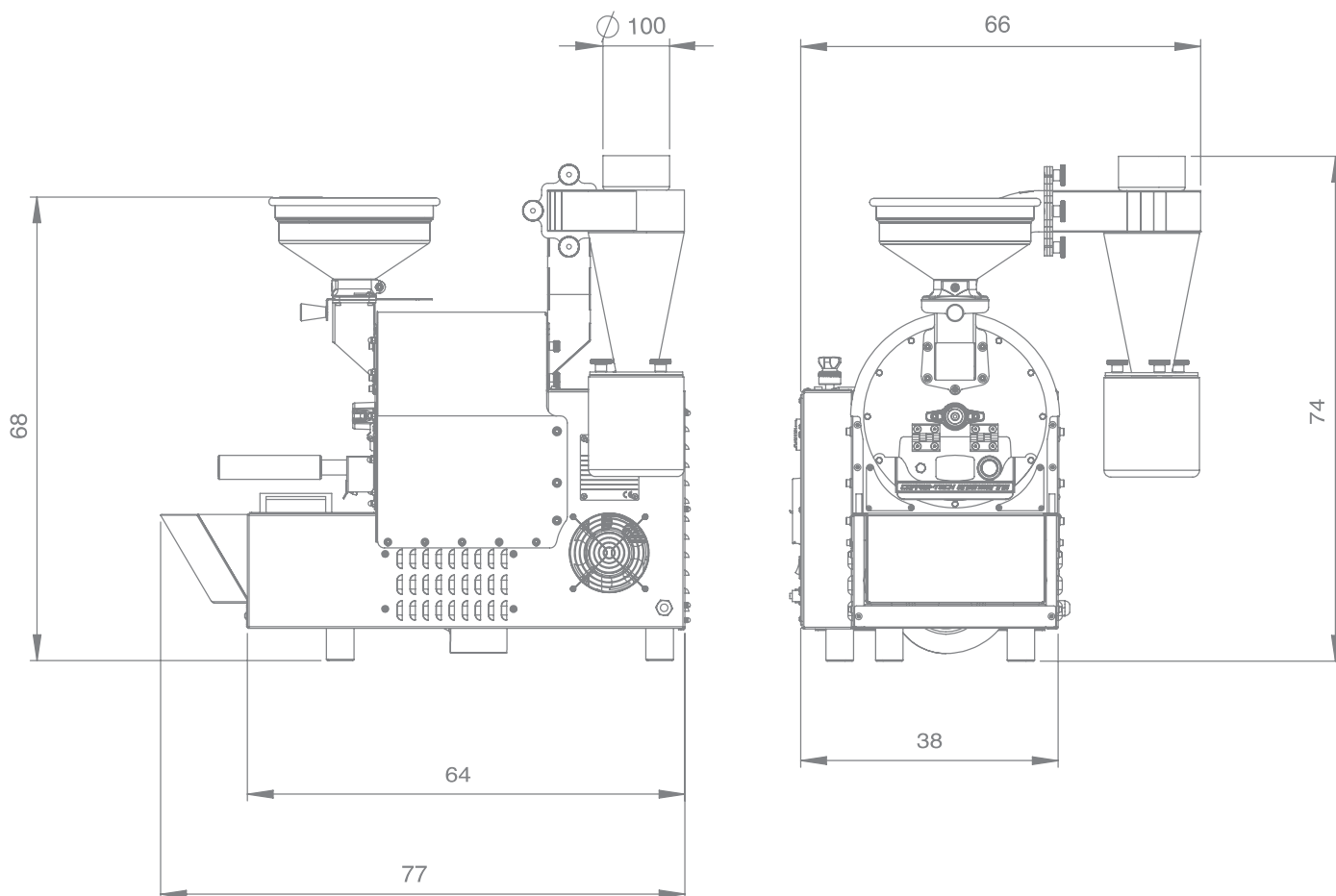
Safety drum discharger

Dimensions(cm):

57(w) X 76(d) X 73(h) cm | (23"(w) X 30"(d) X 29"(h))

Weight:

41 kg (90.4 lb)



Heating Technology



Conduction



Thermosiphon
Heat Exchange



Convection



Infrared Drum

Optional



Smoke Free



Green Product

Roasting Method



Fluid Bed
Roasting



Drum Roasting

General Features



Maintenance Free



Low Energy
Consumption



Infrared



Automatic