

PRODUCT DATA SHEET

PROBATONE 12



Type of system:	Shop roaster (batch capacity of 12 kg)
Kind of system:	Drum roaster
Field of application:	Roasted coffee

THE ESSENTIAL ADVANTAGES OF THE PROBATONE 12 AT A GLANCE:

- Homogeneous roasting of the coffee bean with Probat-specific product-air ratio and special shovel mechanism.
- Quick, gentle cooling of the roasted coffee by a large cooling sieve and even distribution with food-safe plastic scrapers
- Cleaning brush underneath the cooling sieve removes bean particles and chaff
- Classic, nostalgic design by many components made of high-quality cast iron
- Reduced cycle time by simultaneous roasting and cooling with separate ventilators
- Efficient drive concept by separate motors for drum drive, cooling sieve stirring arm, as well as, roaster and cooler fan
- Greater flexibility during roasting by adjustable gas regulation
- Efficient heating by proven burner technology
- Simplified cleaning by removable lateral walls
- Separate roasting cyclone for an effective chaff separation
- Accurate operation with digital time and temperature display
- Hand-crank for emptying the roasting drum in the event of a power outage. Alternatively, a supplied adapter makes it possible to attach a cordless screwdriver to simplify discharging.



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MODE OF FUNCTIONING:

With its classic, nostalgic design, the PROBATONE 12 serves for batch-by-batch production of high-quality coffee. An excellent roasting quality as well as a planable, efficient roasting result are surely the pre-conditions for a successful coffee roaster. The Probatone 12 is the perfect partner, among other things, due to the possibility of producing replicable, consistent roasting results.

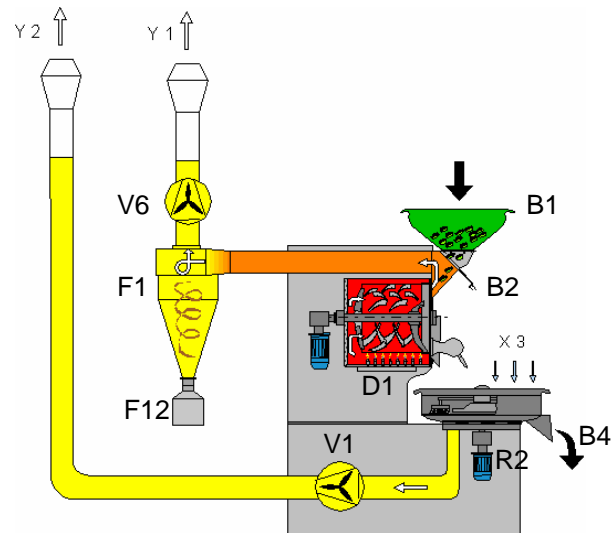
A batch of green coffee, max. 12 kg, is weighed and placed into the filling hopper (B1). When the temperature has reached approx. 210°C, the slide gate (B2), is opened and the coffee is filled into the roasting drum. After filling, the slide gate has to be closed.

The roasting process is monitored by viewing the coffee through the sight glass and taking samples with the sampler. The burner (D1), located underneath the roasting drum, can be increased and decreased depending on desired degree of roast and roasting time. The product temperature is measured continuously and displayed digitally on the operating panel.

An even heat transfer, as well as, a very gentle and efficient mixing of the coffee is achieved by the special shovel mechanism in the roasting drum.

The cooling of the coffee is carried out by the cooling ventilator (V1) which draws ambient air (X3) through the roasted product and sieve. In doing so,

the roasting product is efficiently cooled.



The stirring mechanism (R2) serves to evenly distribute the coffee and to simplify the emptying.

After the coffee has been cooled, it is emptied via the discharge door (B4) into a provided bin. During the cooling cycle, a further batch can be filled and roasted once the desired filling temperature has been reached.

The exhaust gases and chaff created during roasting are transported via the roaster fan (V6) to the roasting cyclone (F1). Here, the chaff and dust is separated from the roasting air by means of centrifugal force and gravity. A chaff collecting bin (F12) arranged under the roasting cyclone collects the chaff.

The roasting (Y1) and cooling (Y2) air is released into the open via the chimney.

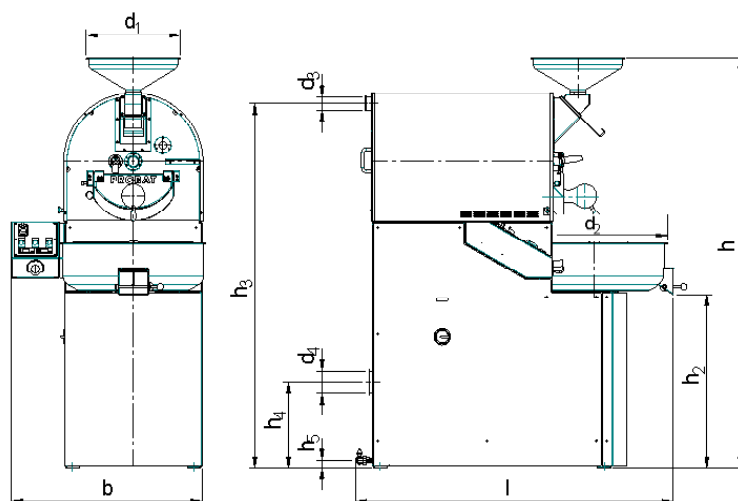
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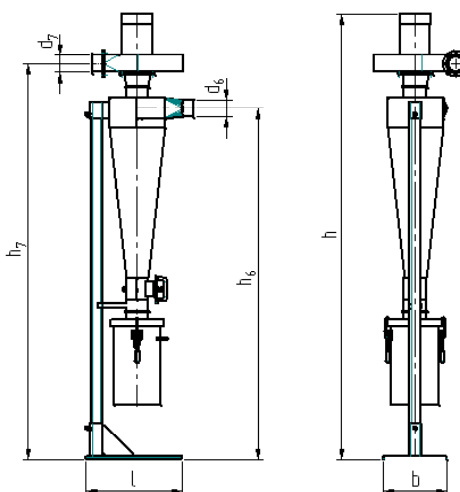
DIMENSIONS AND WEIGHT OF THE ROASTER

Dimensions in mm approx.	l	1,788
	b	1,045
	h	2,000
Filling hopper in mm approx.	Ø d ₁	600
Cooling sieve in mm approx.	Ø d ₂	874
Cooling sieve emptying in mm approx.	h ₂	737
Roasting exhaust air duct in mm approx.	Ø d ₃	NW 80
	h ₃	1,739
Cooling exhaust air duct in mm approx.	Ø d ₄	NW 120
	h ₄	425
Gas connection in mm approx.	h ₅	35
Operating weight in kg approx.	Roaster	430



DIMENSIONS AND WEIGHT OF THE ROASTING CYCLONE

Dimensions in mm approx.	l	600
	b	400
	h	2,149
Roasting exhaust air duct in mm approx.	Ø d ₆	NW 80
	h ₆	1.739
Exhaust air duct in mm approx.	Ø d ₇	NW 80
	h ₇	1.913
Operating weight in kg approx.	Cyclone	96,0



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CONNECTING AND CONSUMPTION DATA



Voltage supply			
Supply voltage (three-phase current)		400 V	
		50 Hz or 60 Hz	
Current consumption			
PROBATONE 12		< 0.5 kWh/12kg	
Nominal power			
Drum drive		0.18 kW	
Stirring mechanism drive		0.18 kW	
Roaster fan		0.45 kW	
Cooler fan		0.45 kW	
Kind of gas	Nozzle designation	Gas pressure	Nominal gas power
Natural gas	120	20 mbar	100 MJ/h (28 kW)
Propane	75	50 mbar	
Kind of gas	Calorific value H _u	Gas consumption during nominal power	
Natural gas	10.3 kWh/Nm ³	2.72 m ³ /h	
Propane	25.8 kWh/Nm ³	1.09 m ³ /h	
Exhaust air volume flow			
Roasting		210 m ³ /h norm	
Cooling		360 m ³ /h norm	