



# GEMMA 8<sup>®</sup>

INDUCTION



the first range  
of roasting  
machines with an  
induction system

Sweet Coffee's  
roasting machines  
a completely  
green solution

cut down  
energy consumption  
by more  
than 60% - no CO<sub>2</sub>

PATENT n° 22211884.6



### Roasting machine equipped with induction heating

Induction heating is achieved through a coil placed outside the container cylinder of the roasting chamber, induced currents in the drum created by the Joule effect power heat in the drum itself, which in turn transfers heat to the rotating drum by radiation and convection

Heating of the rotating drum is deliberately indirect to avoid overheating of the rotating drum called the coil conformed in such a way as to allow the entry of a flow of air from below for the extraction of volatile products that are produced during the roasting process and escape from above

An insulating layer is placed on the outside of the container drum to the protection of the induction coil

Power control over the coil is achieved by referring to the temperature of the air inside the drum rotating and detected utilizing a thermocouple placed inside the rotating drum and placing a limit on the maximum temperature of the outer cylinder detected through the thermocouple

The airflow is regulated utilizing a regulating valve of the exhaust airflow

It is controlled according to the error of the temperature inside referred to as the thermocouple



## technical specifications

### Model



<b>Capacity</b>	<i>Kg</i>	6-8
<b>Control unit</b>	<i>mod.</i>	Gefran 3850 T
<b>Drum diameter</b>	<i>mm</i>	340
<b>Drum length</b>	<i>mm</i>	420
<b>Calculated loading volume</b>	<i>cm<sup>3</sup></i>	19.000
<b>Roasting cycle time</b>	<i>min.</i>	15/18
<b>Roasting cycles</b>	<i>h</i>	4
<b>Maximum load capacity</b>	<i>gr</i>	10.000
<b>Maximum drum rotation speed</b>	<i>r/min.</i>	78
<b>Maximum driving torque of drum shaft</b>	<i>Nm</i>	2,4
<b>Maximum drive torque of the cooler shaft</b>	<i>Nm</i>	2
<b>Displayed zones</b>	<i>n°</i>	4
<b>Thermoregulated zones</b>	<i>n°</i>	2
<b>Total heater power</b>	<i>Watt</i>	12.000
<b>Air requirement for cooling</b>	<i>cm<sup>3</sup></i>	93
<b>Oil content</b>	<i>l</i>	No
<b>Cooler motor group power</b>	<i>Watt</i>	1.000
<b>Drum motor group power</b>	<i>Watt</i>	750
<b>Toasting cycle average power</b>	<i>Watt</i>	1.700/2.200
<b>Total installed power</b>	<i>Watt</i>	13.750
<b>Power supply 3F+N+Earth</b>	<i>Volt</i>	400
<b>Power Supply (Current)</b>	<i>A</i>	20
<b>Total net weight</b>	<i>Kg</i>	350
<b>Maximum overall dimensions (LxHxP)</b>	<i>mm</i>	1.800 x 1.820 x 1.100



### Coffee Star Induction s.r.l.

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### PARTNER



## GEFRAN