

MODULAR ROASTERS

COFFEE PROCESSING SOLUTIONS



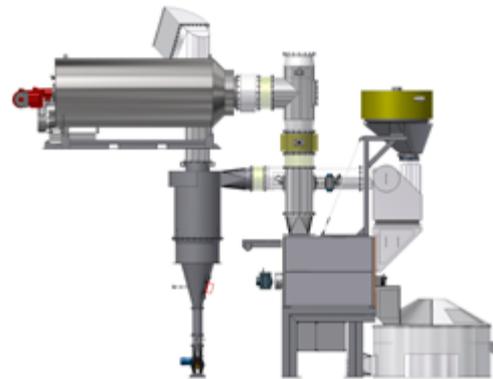
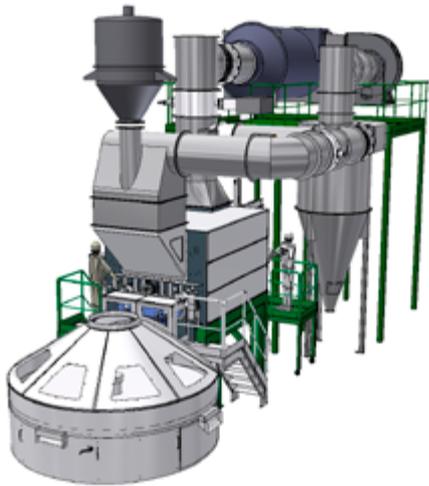
MODULAR ROASTERS

TMR ROASTER has a modular architecture with an external heat generating unit. Therefore, the roasting process takes place totally by forced indirect hot air convection. The modular architecture allows a greater production, thanks to the recirculation system of heat adopted.

This configuration allows more flexibility in terms of layout installation and roasting profiles settable. At the same time it allows to obtain an unlimited variability of sensorial coffee profiles.

TMR model covers a wide range of capacities for medium/large companies. It has been specially designed for industrial productions that require high profitability and repeatability of the roasting processes during the various working stages.

TMR model is equipped with Air Recirculation System that allows to have only one burner that acts also as thermal after-burner or catalyzer pre-heater.



HIGH PROFITABILITY AND REPRODUCIBILITY

TMR roasting process ensures consistent degree of roast and roasting time, in order to reach the best possible bean quality consistency, despite of any affecting external conditions like production start-stop-restart, green coffee quality, coffee moisture, change of coffee lot.

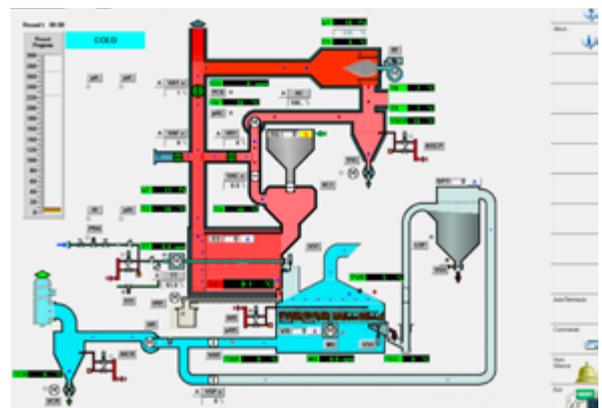
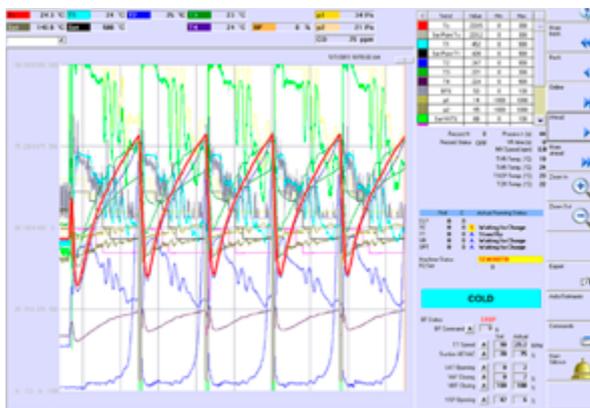
If the product temperature follows always the same profile, batch by batch, then the result will be consistent over the entire batch series.

This is the reason why TMR is suitable for frequent recipe changes with a guaranteed repeatability. TMR gives the possibility to create innovative roasting profiles for new flavour characteristics and physical bean properties.

FORCED AIR CONVECTION

Heat is transferred to the beans by an hot air flow generated by an external unit. Therefore, air passes through a cyclone that removes the chaffs released by the beans during the roasting process. Then, the air is conveyed into the roasting drum by forced convection system.

This method avoids any kind of beans damages during the roasting or an overheating of the roasting drum and gives a uniform roasting color even in case of different green coffee bean sizes.



PRE-DRAWING PROFILES SYSTEM

The roasting curves are previously drawn by setting the time and bean temperature as independent variables. It is possible thanks to a software called I.R.C. (Integrated Roasting Control) that allows to keep a consistent quality of the product right from the first batch, when the machine is cold, up to the last roasting cycle.

Moreover, the roasting time between one batch and the next one of the same product, is 2/3 sec max.

These features guarantee exactly the same final color, moisture and taste, day by day, during production.

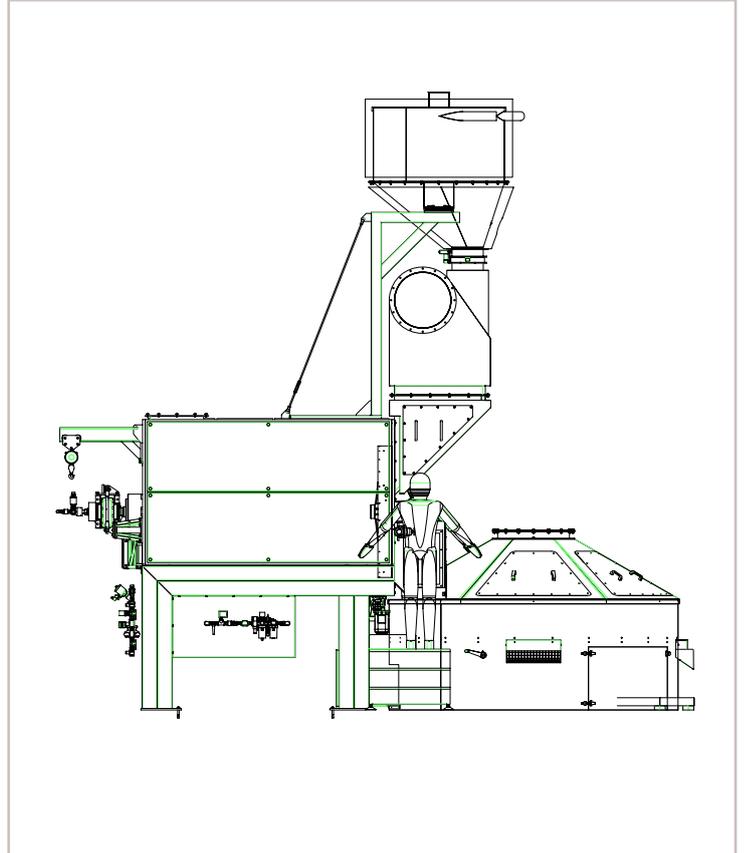
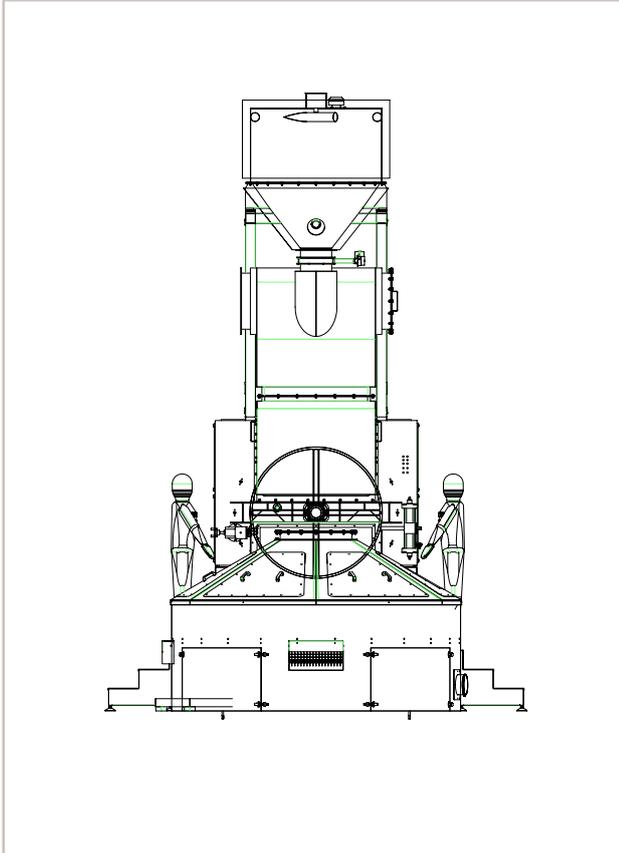
HEAT RECOVERY SYSTEM

Petroncini Heat Recovery System cleans all the exhaust air before to be recirculated again into the roasting drum. The heat generator acts also as a thermal afterburners or catalyzer pre-heater. It has substantial benefits on energy savings and limited impact on the environment in terms of CO² emission and VOC.

The Recycling System does not have any influence on the coffee quality and the desired sensorial profile of the final product. Furthermore, it helps in keeping clean the roasting drum and pipes, reducing maintenance.

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TECHNICAL DATA



	TMR 250	TMR 400	TMR 720
Length (mm)	4600	5800	7300
Width (mm)	2600	3050	3900
Height (mm)	4600	4900	6000
Batch size (kg)	250	400	720
Capacity (kg/h)	up to 1250	up to 2000	up to 3600
Roasting Time (min)	8 - 20	8 - 20	8 - 20

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