



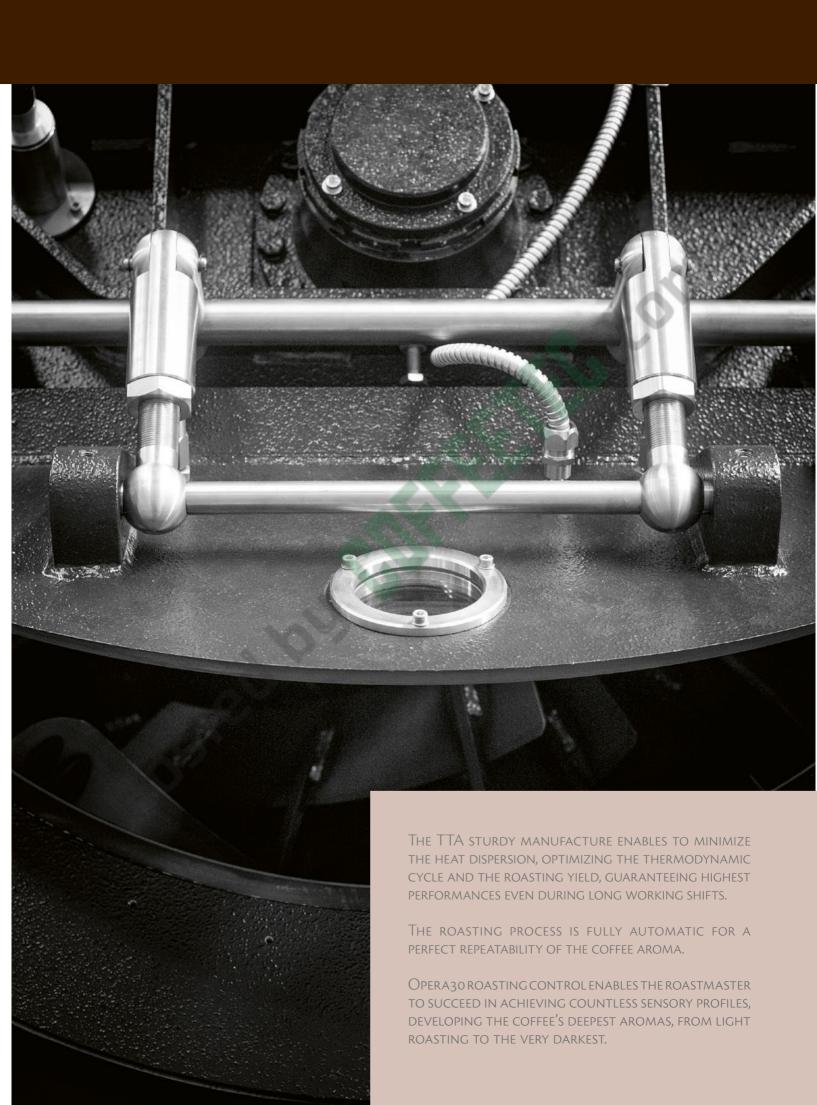
TTA AUTOMATIC TRADITIONAL ROASTERS

ELEGANCE AND TRADITION

TTA Roasters are renowned worldwide for their manufacture quality typical of the Made in Italy tradition, combined with a precise roasting control that allows to reach coffee with a dense and rich aroma. The air convection technology allows a perfect coffee roasting control, optimizing the thermal efficiency and the flavor development. Ranging from 240 up to 1600 kg per hour capacity, TTA Roasters allow to meet a wide range of customer requirements. With a compact and reliable design, this model requires a limited layout space and an easy and fast installation on site.

SINCE 1919, THE ROBUSTNESS AND RELIABILITY OF THESE ROASTERS ARE UNRIVALED.





TTA MACHINE FEATURES

THE VERY HEART OF ROASTING

The roasting chamber is made in such a way as to reach a perfect and homogenous heat supply to the coffee which takes place both by convection, through the modulation of the air flow volume, and by conduction, through contact with the insulated surface of the drum. Made with very thick material, the roasting drum guarantees the perfect and homogenous mixing of the roasting air, resulting in reliable machine performance and repeatability of roasting profiles.

We can thereby succeed in achieving countless sensory profiles, developing the coffee's deepest aromas, from light roasting to the very darkest.

AROMA PERFECTIONIST

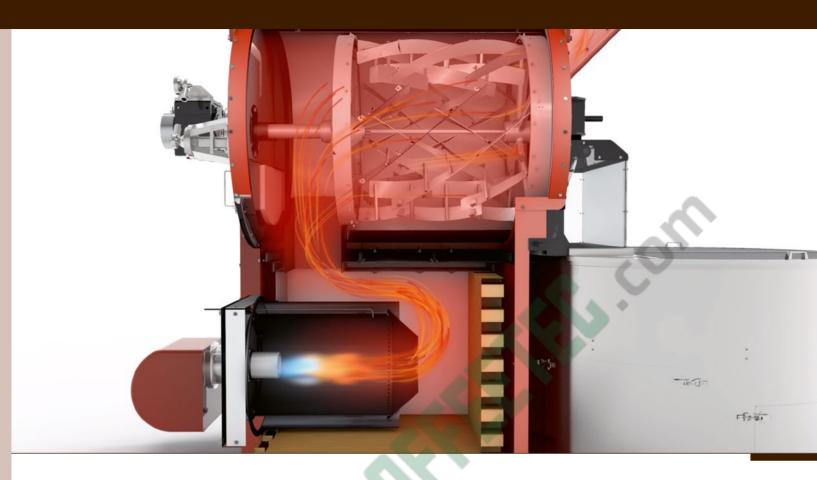
THE THERMAL ENERGY CYCLE ADOPTED BY THE TTA ROASTERS ALLOWS FOR THE GENTLE DRYING AND CARAMELISATION OF THE COFFEE SUGARS, AVOIDING DIRECT CONTACT BETWEEN HEAT SOURCE AND THE ROASTING CHAMBER.

This makes it possible to control the amount of heat transferred to the bean and reduce uncontrollable thermal inertia as much as possible. Having good thermal insulation of the external surfaces allows TTA roasters to offer a "soft" roasting, that means controlling the heat distribution to the beans, taking care of the raw materials so as to achieve the highest quality aromatic coffees.

MAIN FEATURES

- REPEATABILITY OF THE AROMA GUARANTEED
 BY THE ROASTING PROFILES MANAGEMENT
- THE ROASTING CYCLE IS FULLY AUTOMATIC
- Drum design guarantees the perfect mixing of the beans
- Double cover of the roasting drum for the maximum thermal efficiency
- POWERFULL FANS FOR THE COMPLETE
 ROASTING AIR MANAGEMENT, RESULTING IN
 ADJUSTABLE CONVECTION/CONDUCTION
 RATIO
- RAPID AND UNIFORM COOLING IN A STAINLESS STEEL TANK
- SUITABLE AND SAFE FOR EXTREMELY DARK ROAST
- EFFECTIVE CHAFF SEPARATION
- TOTAL SECURITY DURING THE PROCESS
 THANKS TO RELIABLE DEVICES INSTALLED AS A
 SERIES APPLICATIONS





ROASTING CONTROL

- OPERA 30 TRADITIONAL CONTROL AS STANDARD
- PRODUCT TEMPERATURE, AIR-TO-BEAN RATIO AND DRUM ROTATION SPEED CONTROL
- Roasting profiles pre-setting
- 30 SETPOINTS OF ROASTING FOR EACH RECIPE
- 999+ FREELY DEFINABLE RECIPES
- AUTOMATIC REPEATABILITY OF THE PROFILES
- VISUALISATION AND EXPORT OF THE ROASTING TRENDS

SAFETY AND ENVIRONMENT

- MAXIMUM SECURITY DURING THE PROCESS
- EMERGENCY WATER FOR THE ROASTER DRUM, ROASTING AND COOLING CYCLONES, COOLING TANK (TTA120, TTA240, TTA400)

- REMOTE ASSISTANCE
- ENERGY EFFICIENCY AND THERMAL INSULATION
- RELIABLE AND EFFICIENT ECO-FRIENDLY
 SYSTEMS FOR THE EMISSIONS TREATMENT

MACHINE'S OPTIONALS

- Green Coffee Loader
- Destoner
- INDIPENDENT AFTERBURNER
- CATALYTIC SYSTEM
- WATER AND BATTERY BUFFER UNITS
- CUSTOM RAL COLOR
- ROASTING CONTROL FROM THE CONTROL ROOM
- OPERA 30 ADVANCED CONTROL

TTA THE ROASTING CONTROLS



Available in two different configurations, *Traditional* and *Advanced*, **OPERA30** is the new operator interface applied to the TTA roaster model.

OPERA30 is **the ideal partner** to have the full control of the roasting process, as the recipe creation and the roasting process monitoring are optimised.

OPERA30 allows you to **customize recipes and process parameters** in a flexible and quick way, obtaining the desired sensory profiles with the guarantee of a **perfect repeatability of the product quality** over time.

The **roasting data and profiles are saved** and available at any time within the system, and can be organized in the way you prefer thanks to the **Roasting Manager**, the new **application integrated into OPERA30.**



CONTROL FEATURES

- 30 SETPOINTS OF ROASTING FOR EACH PROFILE
- 999+ Freely Definable recipes
- Roasting temperatures control
- Drum rotation speed control
- AIR-TO-BEAN RATIO CONTROL
- Pre-defined roasting times control (advanced version)
- Water and speed control of the ouenching phase
- COOLING SPEED AND COOLING TIME CONTROL

MAIN BENEFITS FOR THE USER

- FULLY AUTOMATIC PC-BASED CONTROL
- CLEAR PRESENTATION OF THE MACHINE'S STATUS
- AUTOMATIC REPEATABILITY OF THE PROFILES SAVED
- Perfect reproducibility by eliminating the external influences (Advanced version)
- PROFILE CURVE OVERLAPPING DURING THE ROASTING
- Overview of all key roasting parameters
- ALL ROASTING DATA ARE SAVED FOR FURTHER ANALYSIS
- OPERATIONS DIRECTLY ON BOARD OR FROM THE CONTROL ROOM

OPERA30 TRADITIONAL

OPERA 30 traditional is available as standard application with the TTA roaster models. This advanced control system allows you to **set accurate roasting profiles** and carry them out in subsequent cycles automatically, with the guarantee of a **constant final product** in terms of quality and sensory profiles. The system shows the **preview of the stored roasting curves**, comparing it with the actual rate-of-rise of the product in progress. Any profile modification during the process can be **manually adapted** by changing the product temperature and process parameters.

OPERA30 ADVANCED

OPERA30 advanced is the answer to the need to obtain constant roasting results over time, especially for products like pods and capsules, eliminating external influences such as the humidity of green coffee, the quantity of the batch entering the roaster and environmental variables. Proposed as a potential upgrade, OPERA30 advanced allows you to maintain full control of the roasting time, thanks to additional systems capable to recover any deviations from the expected roasting trend, automatically modulating the air and temperature according to the time set for the recipe.





The combined solution OPERA 30 traditional + Roasting Manager is a **standard application on TTA model.** The PC-based application **Roasting Manager** lets the roast master **collect** and **archive** roasting production data and recipes over the years, summarizing data in a useful way with an attractive design. It enables to collect a **back-up** of almost **5 years** of production.

ROASTING MANAGER APP



A UNIQUE DASHBOARD FOR YOUR DATA

All the roasts and process data are organised in the same place for a quick overview and analysis.



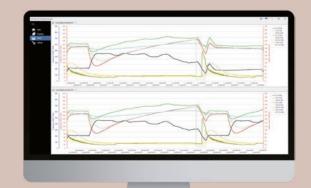
AT EVERY ROAST, ITS PROFILE

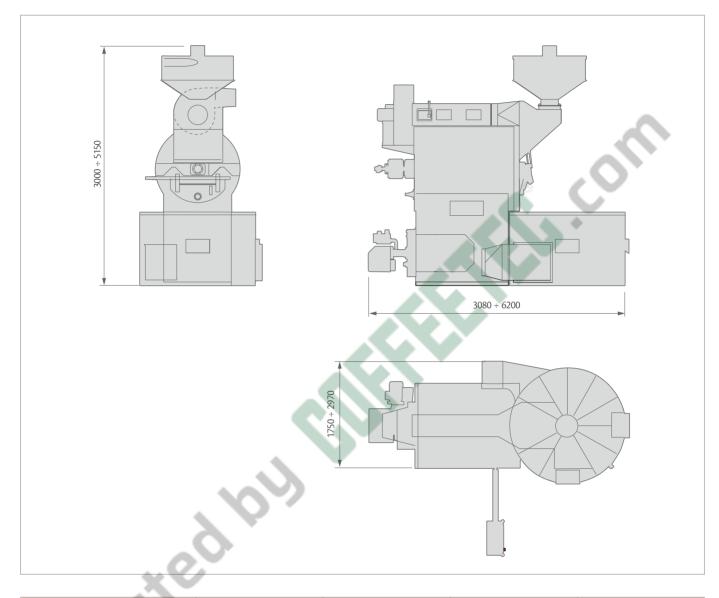
Roasting Manager can show the corresponding profile for every roast, either in a single view or compared with other roasts at the same time.



CUSTOMIZE THE DATA VIEW

You can filter all the data in the desired way: production date, recipe name, final temperature, green coffee moisture. Just with one click.





	TTA 60	TTA 120	TTA 240	TTA 400
Lenght (mm)	3080	3970	4950	6200
Width (mm)	1750	1900	2520	2970
Height (mm)	3000	3550	4950	5150
Batch size (kg)	60	120	240	400
Capacity (kg/h)	up to 240	up to 480	up to 960	up to 1600
Roasting Time (min)	12-20	12-20	12-20	12-20

