

SPECIALTY ROASTERS

SOFT ROASTING SOLUTIONS



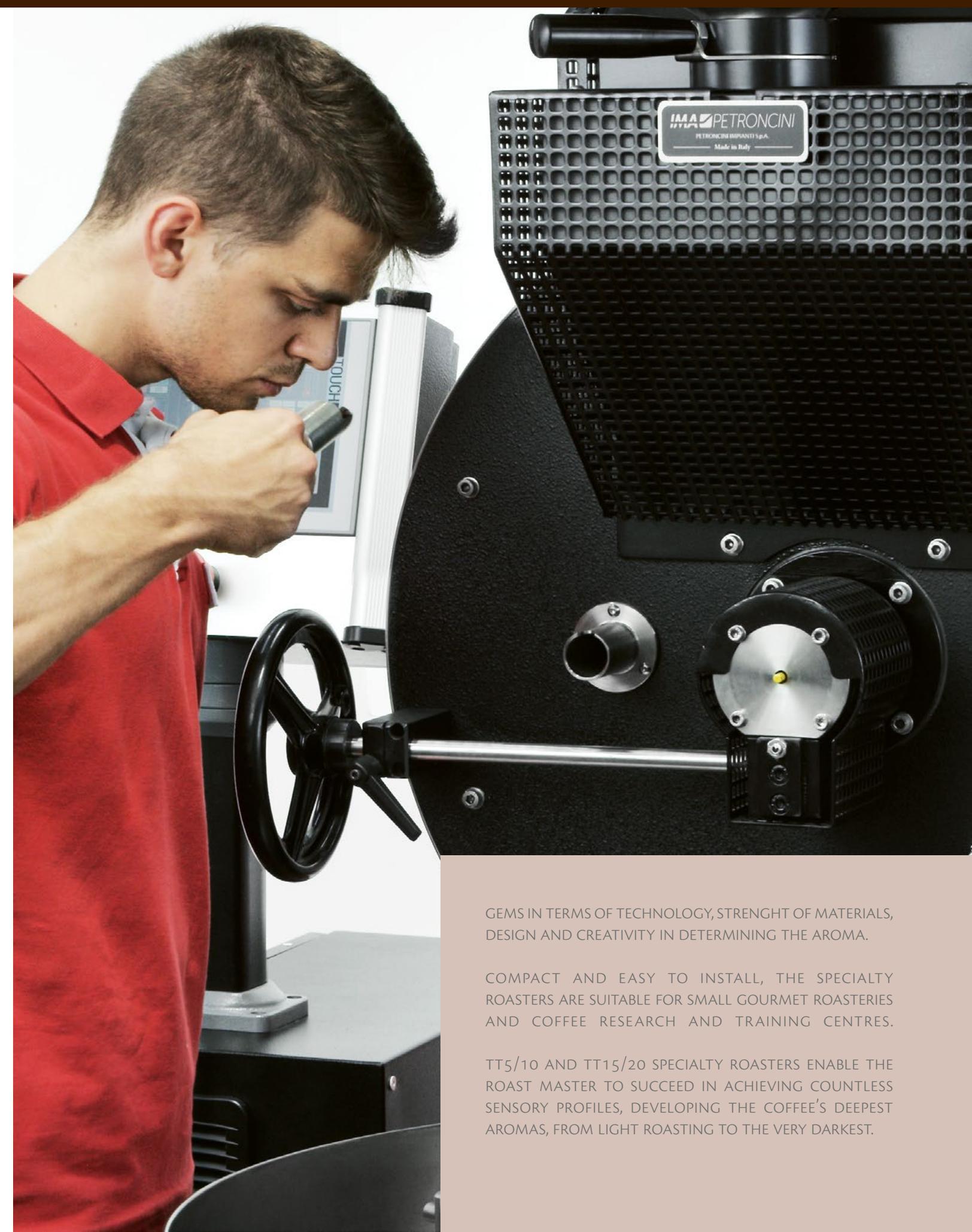
SPECIALTY ROASTERS

THE LONG-LASTING CLASSIC STYLE

Since the early 1920s, sound experience and ongoing research into optimising the roasting process were tangible elements in the evolution of the **Petroncini small roasters**, sold all over the world. The innovation applied to these machines over the years has in no way affected the quality of the materials and the **robustness of the original product**, but instead has set out to put the **master roaster** at the centre of the process, making him increasingly aware of the technology and giving him all the tools necessary to **personalise his quality roasting profile** in the way he prefers. Thus, the new Petroncini machine concept faithfully respects the essentials of the company's long-standing tradition as a coffee roaster manufacturer, but leaves the master roaster full control over the roasting process.



TT 15/20



GEMS IN TERMS OF TECHNOLOGY, STRENGTH OF MATERIALS, DESIGN AND CREATIVITY IN DETERMINING THE AROMA.

COMPACT AND EASY TO INSTALL, THE SPECIALTY ROASTERS ARE SUITABLE FOR SMALL GOURMET ROASTERIES AND COFFEE RESEARCH AND TRAINING CENTRES.

TT5/10 AND TT15/20 SPECIALTY ROASTERS ENABLE THE ROAST MASTER TO SUCCEED IN ACHIEVING COUNTLESS SENSORY PROFILES, DEVELOPING THE COFFEE'S DEEPEST AROMAS, FROM LIGHT ROASTING TO THE VERY DARKEST.

THE ROASTING PROCESS

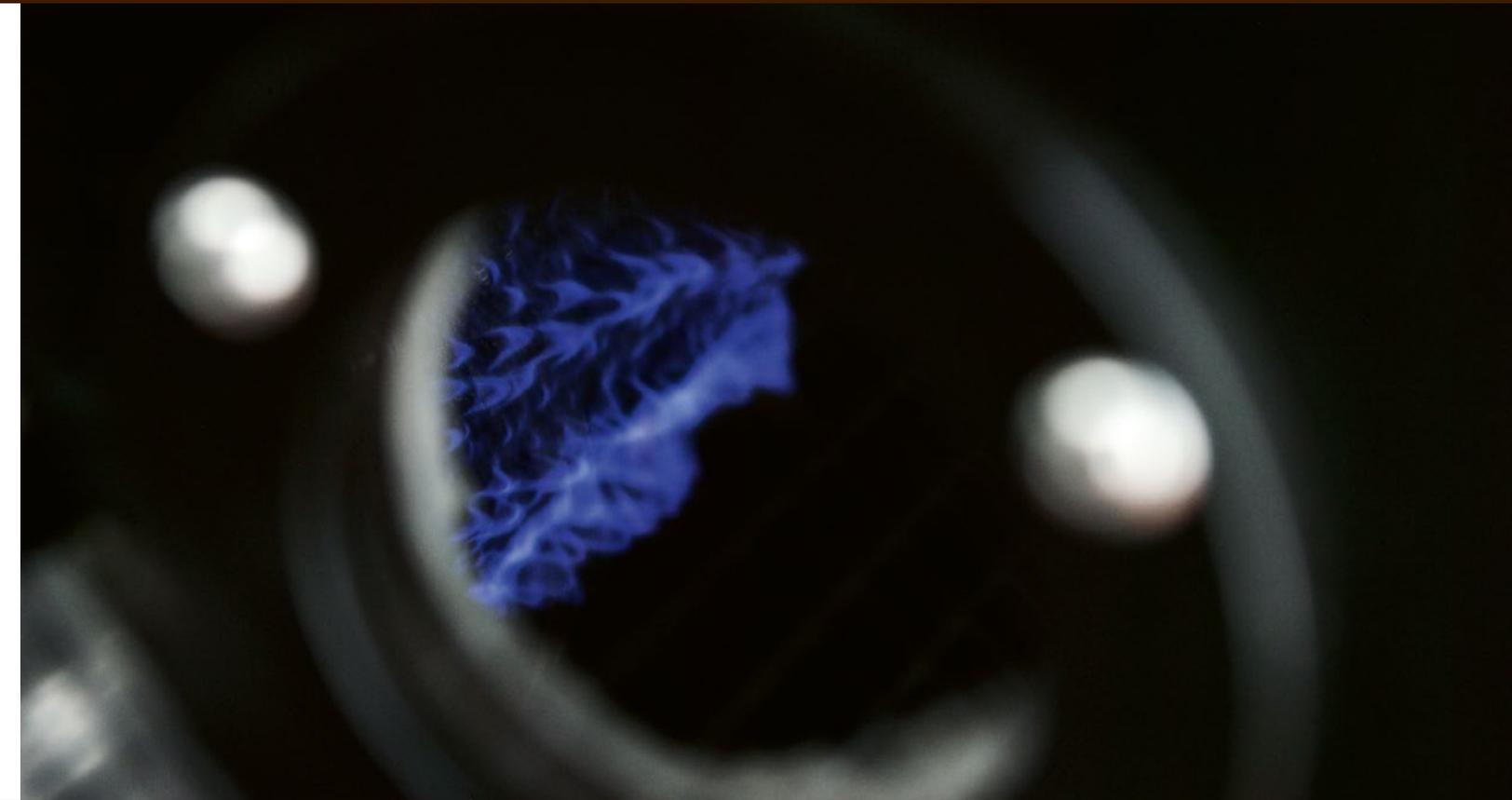
A STRENGTH MACHINE FOR THE PERFECT ROASTING UNIFORMITY

The company's milestones, even in this past century's highly technological evolution, have always paid attention to the choice of materials used and their improved product engineering. 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. The drum flywheels are in cast iron, a material that is not subject to instability at high temperatures and the walls are in ferritic steel.

The **differentiated inclination** of the drum paddles allows to obtain a perfect blending of the product and an **optimum heat exchange**. The rotating drum is covered with an **insulated wall**, which ensures a minimal thermal dispersion and a **perfect roasting uniformity**. 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.

Thanks to heat control, roasting air volume and the drum rotation speed, this roasting machine can in fact let you vary the method of transferring heat to the bean, achieving a **perfect balance between convection and conduction**, according to the desired end product. We can thus succeed in achieving countless sensory profiles, developing the coffee's deepest aromas, from light roasting to the very darkest, obtaining excellent final results in terms of **repeatability, consistency and uniformity**.





THE “SOFT” ROASTING

Gentle drying and caramelisation of the coffee sugars are carried out by the indirect hot-air roasting, therefore developing the coffee’s deepest aromas. The Specialty Roasters thus offer a gentle roasting, **taking care of the raw materials** so as to achieve high quality and homogeneous product, avoiding direct contact between heat source and the roasting chamber.

The heating cycle adopted thus allows Specialty Roasters to offer a **“soft” roasting** that means **controlling the heat distribution** to the beans, reducing uncontrollable thermal inertia as much as possible, so as to achieve the highest quality aromatic coffees.

AN EFFECTIVE COOLING PHASE

The SPECIALTY Roasters are actually equipped with two **independent suction systems**, one for roasting and one for cooling, so that the two phases can be carried out simultaneously and in full capacity between one batch and another. The cooling phase is very important and an **active part of the roasting process**, as it is the true completion of the roasting. Too often this phase is underestimated, yet it is fundamental to preserve the final quality of the roasted coffee. Effective cooling must quickly stop the thermal inertia caused by gases and by self-burning inside the beans. The **cooling chamber is in stainless steel**, perfect for processing food at low temperatures.

MAIN FEATURES

- CLASSIC DESIGN AND COMPACT LAYOUT
- ROASTING DRUM WITH CAST IRON FLYWHEELS
- THICK INSULATION FOR THERMAL EFFICIENCY
- SUITABLE AND SAFE FOR EXTREMELY DARK ROAST
- ROASTING AND COOLING PHASES WITH INDEPENDENT SUCTION SYSTEMS FOR REDUCING THE CYCLE’S TIME
- RAPID AND UNIFORM COOLING IN A STAINLESS STEEL TANK
- SINGLE PHASE POWER
- COUNTINUOUSLY ADJUSTABLE BURNER POWER
- MODULATION OF THE AIRFLOW AND DRUM SPEED ROTATION
- EFFECTIVE CHAFF SEPARATION

THE ROASTING CONTROL



SPECIALTY Roasters are equipped with high-performance **technological components**, which allow for full control of the roasting process.

Available in the Classic as well as Avantgarde version, MAESTRO is the software applied to the Specialty Roasters, giving the roast master the chance to choose either the complete **freedom of roasting** or the **pre-setting of the desired roasting profiles**.

The system enables to **save and export** the roasting data, organising them later as preferred.



PROCESS CONTROLS

- BURNER MODULATION 0 -100%
- DRUM ROTATION SPEED CONTROL
- AIR-TO-BEAN RATIO CONTROL
- TARGET TEMPERATURES SETTING WITH ALARMS (CLASSIC)
- PRE-SETTING OF THE ROASTING PROFILES (AVANTGARDE)
- 8 SETPOINTS OF ROASTING FOR EACH PROFILE (AVANTGARDE)
- 20 FREELY DEFINABLE RECIPES (AVANTGARDE)
- CRACK POINT TEMPERATURES SAVING

MAESTRO CLASSIC

MAESTRO Classic is a serie **application** on the SPECIALTY Roasters. The roast master has the complete freedom of manual roasting control, checking the **current roasting curve while monitoring the Rate-of-Rise and adjusting the parameters consequently**. It's possible to **record the first and second Crack** temperatures in just one click. All roasting data can be saved on USB drive during the process.

BENEFITS FOR THE ROAST MASTER

- USER-FRIENDLY NEW MAESTRO HMI ON BOARD
- POSSIBILITY TO REMOTE THE HMI ON EXTERNAL DEVICES
- RATE-OF-RISE MONITORING
- CURRENT ROASTING TRENDS VISUALISATION
- OVERVIEW OF ALL KEY ROASTING PARAMETERS
- ALL ROASTING DATA ARE SAVED ON USB DEVICES
- MAESTRO HMI IS CROPSTER READY
- REMOTE ASSISTANCE (AVANTGARDE)

MAESTRO AVANTGARDE

Available on demand, MAESTRO Avantgarde version enables to create and record up to **20 roasting profiles**, pre-setting the roasting temperatures and the power of the other parameters for **8 setpoints of roasting**. In this way, the roasting process will be **following the pre-set recipe**. The Avantgarde version includes the **remote assistance**.



OPTIONALS

- MAESTRO AVANTGARDE CONTROL FOR ROASTING IN AUTOMATIC MODE
- PC-BASED CONTROL FOR ARCHIVE ROAST DATA ON PC DIRECTLY
- GREEN COFFEE LOADER (TT15/20)
- DESTONER
- ODOUR FILTER
- COLOR CUSTOMISATION AND DECORATION
- REMOTE SUPPORT (AVANTGARDE CONTROL)



SPECIALTY ROASTERS ARE CROPSTER READY - PLUG & PLAY

Cropster creates software to help coffee professionals from origin to cafe get the best out of their coffees. Cropster aims to develop tools that are simple to use and affordable for everyone. Another goal is to improve workflows related to quality, consistency, planning and traceability at every stage of production.

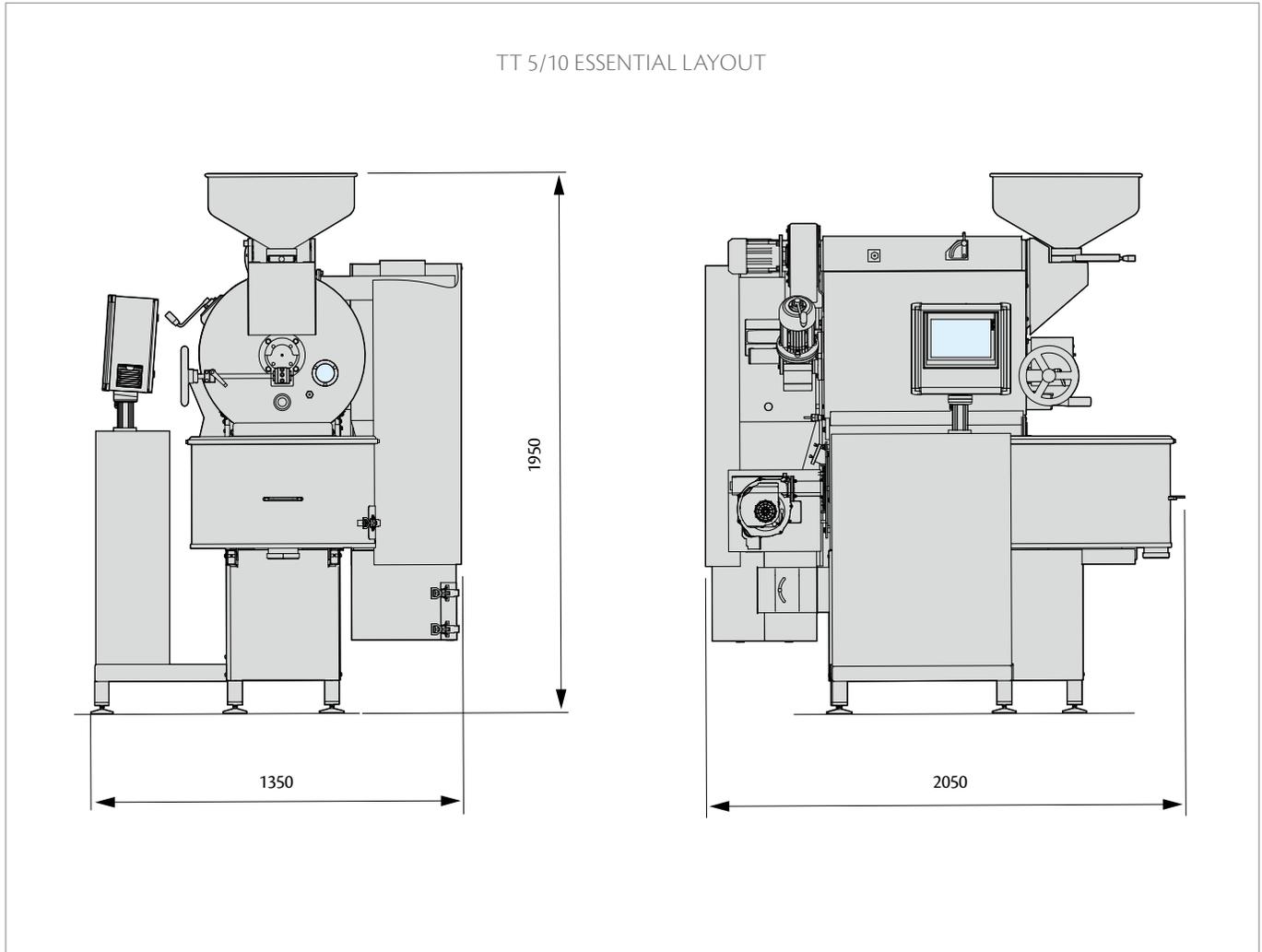


ODOR FILTER

Available on demand, the suitable solution specifically designed for eliminating odours completely also on the smallest coffee roasters. An electrically powered heat blower heats the roasting waste air to the needed conversion temperature of the catalyst.

- THE CATALYST TURNS THE SMOKE PLUMES AND ODOURS INTO HARMLESS AND ODOURLESS WASTE AIR.
- THE PURIFICATION SYSTEM CAN EASILY BE INTEGRATED INTO YOUR WASTE AIR SYSTEM.
- SUITABLE FOR DIFFERENT WASTE AIR CAPACITIES, DEPENDING ON ROASTER SIZE.

TECHNICAL DATA



| | TT 5/10 | TT 15/20 |
|---------------------|----------|----------|
| Lenght (mm) | 1550 | 2050 |
| Width (mm) | 900 | 1350 |
| Height (mm) | 1700 | 1950 |
| Batch size (kg) | 3/10 | 10/20 |
| Capacity (kg/h) | up to 35 | up to 70 |
| Roasting Time (min) | 10-20 | 10-20 |



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