

# A great coffee

Coffee is the result of a delicate balance between raw material and technology. To achieve precise and consistent roasting, each piece of machinery must be designed with components that guarantee hygiene, durability and optimal thermal performance. In this context, stainless steel has established itself as the essential ally of industrial roasters.



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During roasting, green beans are transformed into an aromatic and complex product. This process requires precise thermal control and strict hygienic conditions. Drum roasters made of stainless steel, allow uniform heat transmission and avoid contamination that could alter the final notes of the coffee. In addition, their surface makes it easy to clean and reduces residue accumulation, which is essential for maintaining a consistent and repeated roast profile. In this application, mainly 300 series stainless steel is used, especially AISI 304, which is noted for its excellent resistance to corrosion and high temperatures.



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Hoppers, where beans are stored and distributed before and after roasting, are also benefiting from stainless steel because of their high mechanical strength and ability to preserve the original characteristics of the coffee. Continuous contact with raw material requires equipment that does not generate migrations or undesired chemical reactions. AISI 304/AISI 304L are the most common for these pieces, thanks to their austenitic structure that combines chromium and nickel, guaranteeing durability and food safety.

Another critical point in the roasting line is the cooling tray. After reaching temperatures above 200°C, the coffee needs fast cooling to stop the chemical reaction and fix the aromas. Stainless steel trays, also usually made of AISI 304 austenitic steel, offer excellent resistance to thermal variations without deformation. Its good thermal conductivity facilitates cooling, and its smooth surface helps maintain a consistently high level of hygiene.

Every element designed in stainless steel reflects the commitment to achieve the highest quality coffee, taking care of taste as well as safety and cleanliness. You can learn more about stainless steel in the coffee world in our magazine article “The barista’s precision [ </sites/cedinox/.content/cedrevista/cedrevista-00008.xml> ]”.