
Anta Decanter Centrifuge – Technical Brochure (EN)

Introduction: BSTM offers a specially designed two-phase decanter for the production of extra virgin olive oil. This unit is engineered to operate at desired temperatures without any rise during the process while achieving maximum yield, aroma, and phenol retention during extraction.

Application: The BSTM Anta Decanter series is developed for two-phase cold extraction. It separates the olive paste into solid and liquid phases at 22°C without adding any water.

Benefits:

- Carefully designed for easy disassembly, facilitating cleaning and maintenance.
- Wear-resistant components extend maintenance intervals.
- The feed position and phase flow adjustments are optimized to extend the olive paste's path inside the decanter for maximum efficiency.
- The design is user-friendly and easy to adjust.
- Desired differential speed can be achieved by changing pulleys.

Working Principle: The Anta Decanter operates based on the principle of centrifugal force, which separates the olive paste into oil and solid residues without the need for added water. The paste is fed into the machine through a variable-speed dynamic inlet pipe, allowing for optimal acceleration and uniform distribution within the rotating drum. The high-speed rotation generates a powerful centrifugal force that drives the separation process.

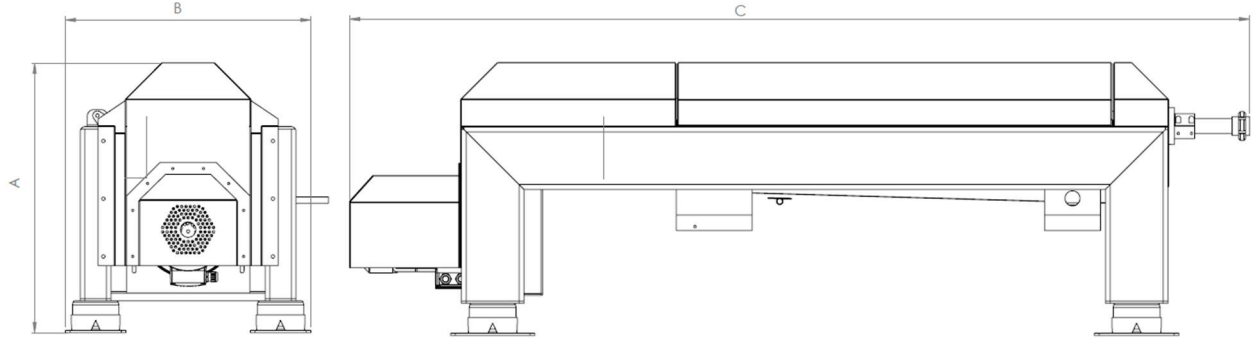
Inside the decanter, a screw conveyor transports the solid phase (pomace) outward while the oil and vegetation water are directed toward separate outlets. The differential speed between the drum and the screw is finely adjustable through motor speed and pulley configuration, enabling precise control of retention time and separation efficiency.

This system allows operators to adjust the clarity of the olive oil by managing feed rate and differential settings. As a result, producers can adapt the decanter's performance to various olive varieties and processing conditions without sacrificing oil quality.

Design: The Anta Decanter is meticulously engineered to deliver high performance, easy maintenance, and adaptability. It features a modular construction that facilitates access to internal components, making cleaning and service operations quick and efficient. The screw conveyor is designed for effortless removal, reducing downtime during maintenance.

The unit's single-motor drive system ensures energy efficiency and simplifies control. Depending on the type of olive and desired oil characteristics, the decanter can be equipped with alternative screw geometries and differential setups, giving producers the flexibility to optimize for yield, clarity, or polyphenol content.

Additionally, all product-contact surfaces are made of food-grade stainless steel, ensuring hygiene and corrosion resistance even in intensive working conditions. The compact footprint and robust chassis make it suitable for integration into both small-scale and industrial production lines.

Technical Drawings:**Technical Specifications:**

Model	Motor Power	Drum Diameter	Drum Length	Drum Speed	G Force	A (mm)	B (mm)	C (mm)
Anta 300	3 kW	131 mm	498 mm	5500 rpm	2215g	450	450	1500
Anta 450	3,8 kW	150 mm	550 mm	5150 rpm	2181g	550	500	1700
Anta 900	5,5 kW	203 mm	620 mm	4450 rpm	2247g	700	650	2160
Anta 1500	7,5 kW	252 mm	990 mm	4000 rpm	2254g	875	800	2700