

The Altum Vacuum Malaxer, with BSTM's patented technology, boosts extraction efficiency: +10% yield, +30% polyphenols, +60% oleocanthal. Designed for precision and consistency, it ensures premium olive oil with superior taste and health benefits.



Altum Vacuum Malaxer Unit

Application: The BSTM Altum Vacuum Malaxation Unit utilizes our patented high-vacuum technology, fully automated for ease of use. By applying vacuum conditions during malaxation, olive cells are broken down more effectively, and enzymatic activity is significantly enhanced. Independent testing has shown up to 10% higher yield ratio, 30% more polyphenol content, and an impressive 60% increase in oleocanthal levels compared to conventional systems. In addition, the double-jacketed body maintains the olive paste at the desired temperature, securing consistency and protecting delicate aromas.

Benefits:

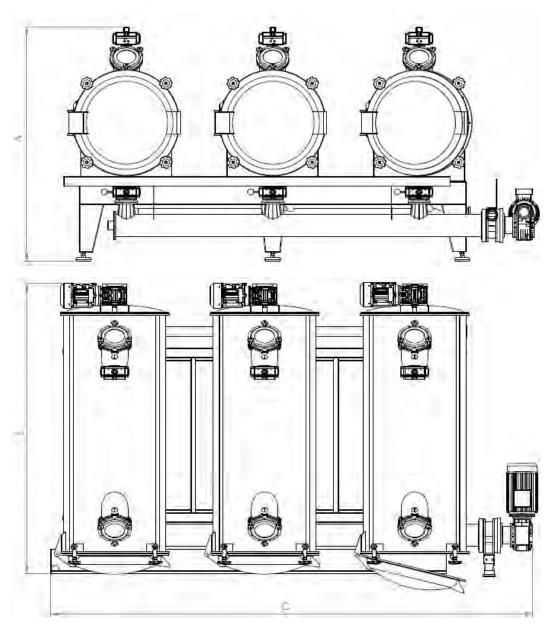
- **Double-jacketed design:** Keeps the paste at optimal temperature throughout the process.
- **Easy-to-clean surfaces:** Simplifies maintenance and ensures hygienic operation.
- Patented vacuum technology: Delivers substantial improvements in oil yield, polyphenols, and oleocanthal.
- Horizontal, dead-zone-free design:
 Guarantees uniform vacuum exposure across all olive cells.
- **Higher oil quality:** Achieves superior nutritional value, richer flavor, and longer shelf life.

Design: The BSTM Altum Malaxation Unit features a horizontal, dead-zone-free design that ensures every olive cell is fully exposed to vacuum conditions. Unlike vertical malaxers, where vacuum efficiency is limited to the upper layers, the Altum's structure guarantees complete and uniform contact. This not only maximizes vacuum performance but also makes cleaning faster and more practical. Each unit is equipped with a dedicated motor for paste mixing and is specifically engineered to operate under high-vacuum conditions patented by BSTM. All contact surfaces are manufactured from high-grade stainless steel, ensuring durability, hygiene, and long service life.

Working Principle: Operating under high vacuum with specially designed blades, the Altum achieves higher oil yield, richer aroma, and greater polyphenol retention. Its automation system allows the process to run seamlessly, making olive cells at 22 °C react as if they were processed under hot extraction conditions. This pressure differential ruptures more membranes, boosting extraction efficiency. Since volatile compounds begin to evaporate at 22°C and are fully lost by 35°C, the controlled vacuum prevents aroma loss and preserves natural freshness. With BSTM Altum Malaxers, a delicate process becomes a simple and reliable solution.



Technical Drawings:



Technical Specifications:

Model	Motor Power	Capacity	A (mm)	B (mm)	C (mm)
Altum 300	1,5 kW	310 kg	1400	1800	1900
Altum 450	2,2 kW	450 kg	1510	1820	3025