
ALTUM Vacuum Olive Malaxer Unit – Technical Brochure (EN)

Introduction: Malaxation machines are units where the olive paste is kneaded. With the help of mixing blades, the cells are broken down to improve oil yield. These are mixing tanks that facilitate the coalescence of oil droplets, making the separation of phases in the decanter easier.

Application: The BSTM Altum Vacuum Malaxation Unit uses our patented high-vacuum technology applied through automated systems. This technology enhances cell breakdown and enzymatic activity, achieving up to **10% increase in yield ratio, 30% increase in polyphenol content, and 60% increase in oleocanthal levels**. The double-jacketed structure keeps the olive paste at the desired temperature.

Benefits:

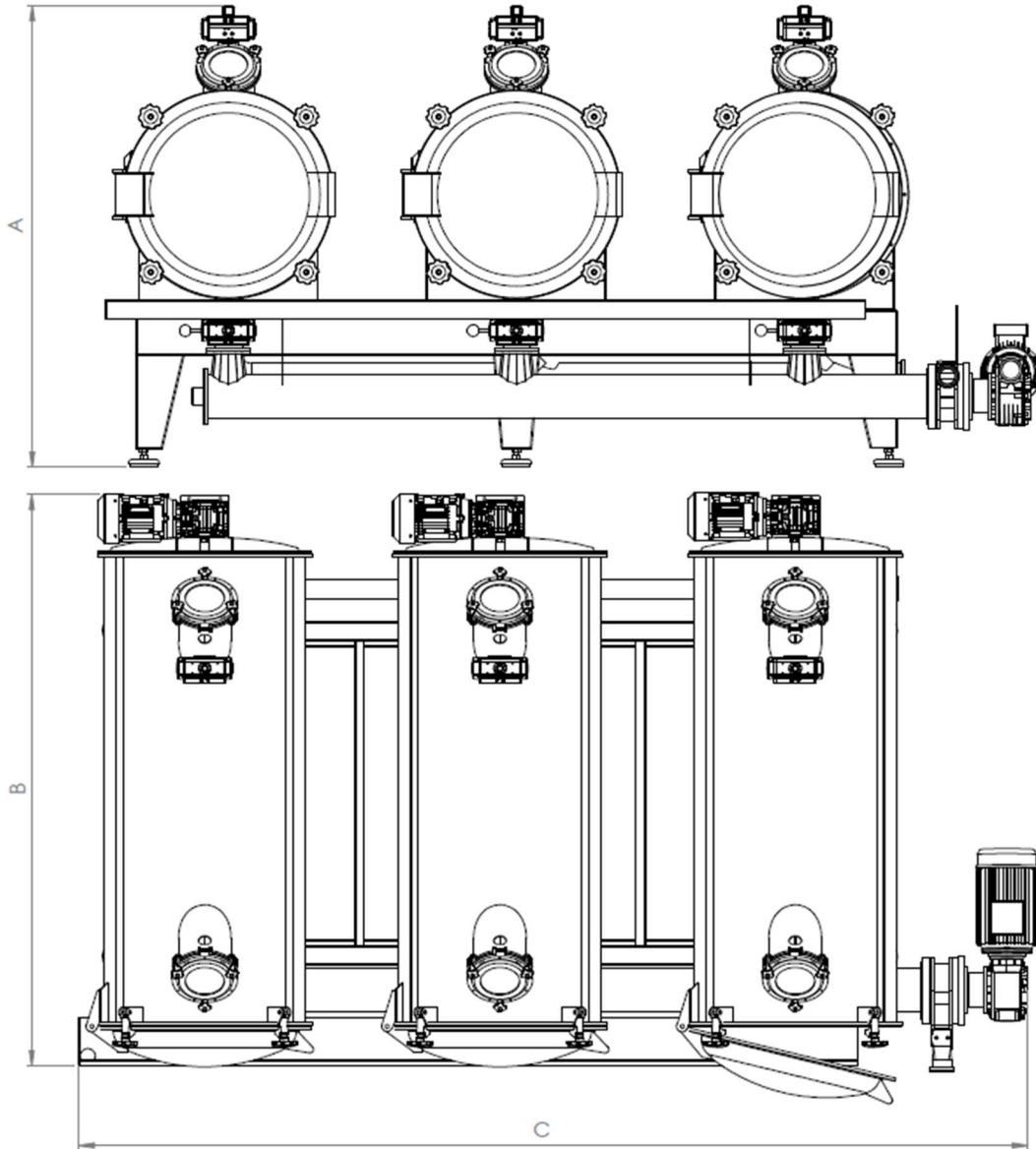
- Thanks to the double-jacketed design, the paste can be maintained at the ideal temperature.
- Features an easy-to-clean design.
- High vacuum technology, which can be easily applied, provides significant gains in oil yield and phenolic content.
- Its horizontal and dead-zone-free design ensures all olive cells are exposed to vacuum contact.

Design: In the BSTM Altum Malaxation Unit, a horizontal design is preferred to ensure that all olive cells encounter the vacuum. In vertical malaxers, vacuum efficiency is limited to the upper sections; hence, such a design is avoided. The dead-zone-free horizontal body ensures comprehensive vacuum exposure and simplifies cleaning.

Each malaxation unit is equipped with a motor responsible for mixing the olive paste. The BSTM Altum Malaxation Units are specifically designed to operate under high vacuum and this technology is patented by our company. All surfaces in contact with olive paste are made of stainless steel.

Working Principle:

Under high vacuum and with specially designed blades, maximum efficiency and polyphenol content are achieved. The automation system allows the high vacuum technology to operate automatically, making olive cells feel as if they are processed at 60°C while remaining at 22°C. The pressure differential between the interior and exterior of the cells breaks more membranes, improving oil extraction and polyphenol yield. Volatile oils begin to evaporate at 22°C and completely evaporate by 35°C. With BSTM Altum Malaxers, complex processes have been simplified and made easy to use.

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