

BSTM

KLARA Olive Washing Unit – Technical Brochure (EN)



Introduction: The KLARA Olive Washing Unit is designed to hygienically clean olives before processing and remove all foreign matter with high efficiency. It ensures gentle cleaning of soil, leaves, and debris from the surface of the olives without damaging the fruit.

Application: In olive oil extraction, proper cleaning of olives is essential for obtaining high-quality oil. KLARA removes dust, soil, and plant residues such as leaves and small branches, improving the taste and extending the shelf life of the final product.

Benefits:

- Air bubble cleaning: Powerful air fans generate bubbles within the water tank, ensuring all surfaces of the olives encounter the cleaning water.

- Water-saving system: A built-in filtration and recirculation system minimizes water consumption and enhances environmental friendliness.

- Gentle treatment: The washing method is delicate and does not harm the olive skin.

- Maximum safety: The feeding hopper includes a mesh design for user safety.

- Drying system: As olives are transferred on a stainless-steel wire belt, an integrated drying system removes water, ensuring the next stages remain water-free.



Design: The system includes a feeding hopper, food-grade conveyor belt, leaf separator motor, water tank, drying fan, bubble-generating fan, and a stainless steel mesh transfer belt mounted on a durable chassis.

Motors:

- 3 motors for feeding the olives (elevator + belt + hopper)

- 1 motor for the leaf separator

- 2 fan motors (1 for drying, 1 for air bubbling)

- 1 water pump for recirculation

The strong leaf-blowing motor effectively removes leaves before crushing, increasing oil clarity and yield.

Working Principle:

1. Olives are loaded into the feeding hopper.

2. They move via screw to the elevator conveyor, passing through the leaf separator.

3. In the washing tank, air bubbling ensures complete contact with water.

4. The pump moves the water and olives forward in the system.

5. Olives are transferred toward the crusher via a stainless-steel mesh belt.

6. During transfer, a drying system removes residual water.

Important: Water in later stages may cause polyphenols (valuable antioxidants) to dissolve and be lost with the pomace. Therefore, no water should remain after the washing process.



Technical Drawings:





Technical Specifications:

| Model | Motor Power | Tank Volume | Max. Hourly Capacity | A (mm) | B (mm) | C (mm) |
|------------|-------------|-------------|----------------------|--------|--------|--------|
| Klara 750 | 2,2 kW | 100 lt | 750 kg/hour | 1850 | 800 | 2000 |
| Klara 2000 | 4,4 kW | 250 lt | 2000 kg/hour | 2020 | 1010 | 4975 |