

## FREE-STANDING WASTE DISPOSAL UNIT

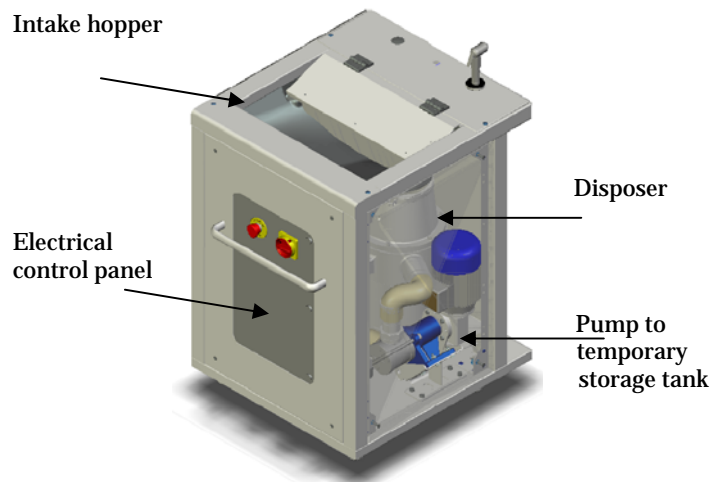
The free standing disposal unit is a machine which grinds food waste produced in commercial kitchens with the following targets:

- ❑ To minimize the labour cost in the food management and waste collection and improve the efficiency of the internal organization
- ❑ To be in compliance with HACCP rules.
- ❑ To perform a real separate collection of the organic fraction.

The unit is made up by a stainless steel cabinet containing a commercial food waste disposer fitted with a proper design "intake hopper" to feed food waste inside the disposer and an electrical control panel which runs the whole unit by means of a suitable PLC working software which informs the operator about any possible failures or malfunctions of the unit.

To ensure safety inside the disposer's upper housing, there are no blades but a turntable (rotor) with impact bars which shatter food waste, conveyed by centrifugal force, towards a grinding ring located at the outside edge of the rotor.

All the free-standing units are fitted with a passive safety system, specified by the particular design of the intake hopper which prevents the access to the moving parts of the disposer while in use, and an active safety device which stops the disposers in case of accidental opening of the cabinet's lid.



**Continuous feed cycle unit:  
Free Standing Unit**



**Continuous feed cycle unit:  
Mini Free Standing Unit**



**Continuous feed cycle unit:  
Free Standing for 2 Operators**



## WORKING PRINCIPLE

The free-standing waste disposal units have been designed for disposing of food waste produced in restaurants, hotels, hospitals and catering users.

In such a commercial kitchens there is the possibility to install, depending on the needs, one or more free-standing units' models in the different preparation areas and/or clean-up area.

The units are in connection with each other and, remotely, with the de-watering area, normally located outside the kitchen, by means of a dedicated drainage line.

The wastewater (a mix of ground food waste and water) coming from each disposers, is then pushed by elastic impeller pumps, located inside each cabinets, towards the storage tank through the dedicated drainage line.

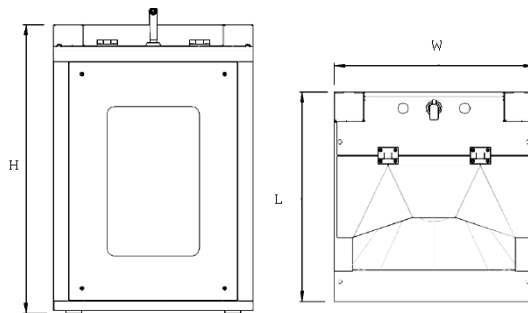
The pressure level sensors record the pressure differences inside the tank and, interacting with the PLC control panel of the de-watering area, by mean of a pump, forward the stored wastewater to the de-watering unit which will perform the hydro-extracting, separating the liquid from the ground waste.

Through the de-watering process of the wastewater, we get reductions in weight, volume and fermentability of the food waste.

While the watery component goes into the sewage system, the solid component (food waste), drastically reduced in weight (about 50%) and volume (about 80%) can be easily stored and recycled for a possible re-use.

## Overall dimension and technical features

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|---|---|--|
| <p>Continuous feed cycle unit:<br/>Free Standing Unit</p> <p>Width (W) : 650 mm<br/>Height (H) : 900 mm<br/>Length (L) : 700 mm</p> <p>Weight : 155 kg.</p> | <p>Continuous feed cycle unit:<br/>Mini Free Standing Unit</p> <p>Width (W): 450 mm<br/>Height (H): 900 mm<br/>Length (L): 700 mm</p> <p>Weight : 145 kg.</p> | <p>Continuous feed cycle unit:<br/>Free Standing for 2 Operators</p> <p>Width (W) : 555 mm<br/>Height (H): 900 mm<br/>Length (L): 900 mm</p> <p>Weight : 160 kg.</p> |
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**Disposer 2,2 kW – Pump with geared motor 0,75 kW**

**Electrical connection: Power supply :** 3 phase 400V – 50Hz **Power input :** 2.95 kw **Socket :** 3P+Earth – 16 Amp (4 wires)

**Water connection: cold water:**  $\frac{3}{4}$  o  $\frac{1}{2}$  - 2.5 bar **Water consumption:** Approx. 20 litres per minute

**Capacity:** up to 150 kgs per hours / 250 -400 meals per hours

**Drain connection:** 50 mm. pipe is required

**Dedicated drainage line:** 50 mm. pipe is required

**Warranty:** 1 Year

All the working parts of the unit are in compliance with CE rules, in particular the **FREE-STANDING DISPOSAL UNITS** are complying with the following pertinent rules and technical specification:

**EC Machine Directive 2006/43/CE**

**EMC Directive 2004/108/CE** – Electromagnetic compatibility directive

Main technical standards applied: **UNI EN ISO 12100-1 - UNI EN ISO 13857 - UNI EN 954-1 - CEI EN 60204-1**