
TECHNICAL GUIDE

Wawli Matrix 500

Wawli WL-500 Industrial Composter

Industrial composter | Installation, loading, operation & maintenance



AT A GLANCE

Technical overview

Industrial food-waste equipment with integrated material handling, microbial processing, automatic intelligent control and configurable deodorization for high-volume on-site operation.



CAPACITY

500 kg/day

POWER

24 kW

CYCLE

12-24 h

Current technical data

Model	Wawli WL-500 Industrial Composter
Processing capacity	500 kg/day
Dimensions	L3445 x W1874 x H1500 mm
Weight	1600 kg
Rated power	24 kW
Power supply	380 V / 50 Hz
Decomposition method	Microbial decomposition
Volume reduction	>=85%
Processing time	12-24 hours Reference cycle; not a maturity guarantee
Output	Processed organic material Further curing/testing may be required before soil use
Deodorization	Internal deodorization; optional external deodorizer
Material	Painted Q235 steel and stainless steel
Control system	Automatic intelligent control with fault alarm

BEFORE COMMISSIONING

Plan the loading zone first

- 1 Allow lifting clearance**
The work area must accommodate the full bin lifting / tipping movement and keep personnel outside the travel zone.
- 2 Provide a stable base**
Use a clean, level work area suitable for the machine mass and loading activity.
- 3 Verify the electrical design**
Rated supply: 380 V / 50 Hz, 24 kW. Verify the equipment nameplate and use qualified local electrical design.
- 4 Protect the process area**
Keep emergency-stop controls reachable and do not allow people to enter the lifting / flipping zone during loading.
- 5 Provide ventilation**
Use a ventilated industrial area. For configurations allowed outdoors, provide the required shelter and weather protection.
- 6 Keep service access**
Leave access to control, deodorization, cleaning and maintenance zones; do not obstruct vents or doors.

LOADING-ZONE RULE

During bin lifting, feeding and discharge, prevent personnel from entering the movement zone. Stop the system before clearing a jam or investigating abnormal motion.

INPUT GUIDANCE

Suitable inputs and contaminants

Use source-separated food waste. Drain excess free liquid and keep packaging, hard objects and materials that can jam or tangle the mixer out of the machine.

SUITABLE

- Vegetable scraps
- Fruit scraps
- Suitable cooked food residues
- Meat and fish residues
- Bread, rice, cereals and noodles
- Other suitable organic food waste within the model-specific guide

KEEP OUT

- Plastic, glass and metal
- Large hard bones
- Shells and hard crustacean waste
- Cigarettes and smoking waste
- Hard seeds / non-decomposable objects
- High-fibre branches or material likely to tangle the mixer
- Oversized pieces not prepared for the configured system

Capacity rule: total daily feed should not exceed 500 kg/day for this model.

OPERATING FLOW

From pre-check to automatic treatment

- 1 Inspect**
Confirm normal power, usable controls, no active alarms and no oil / water leakage.
- 2 Prepare the station**
Keep the ground clean and the lifting zone clear. Operators should use appropriate site PPE.
- 3 Discharge if required**
Perform discharge only in the approved safe operating state. Keep hands, head and tools out of the processing / discharge area.
- 4 Prepare and load**
Remove contaminants. Where the configured system has pre-processing, start it as required before lifting and tipping the feed bin.
- 5 Start treatment**
Close access points and start automatic processing. Rated daily capacity is 500 kg/day, with a typical microbial processing window of 12–24 hours.
- 6 Record and close out**
Where weighing / site records are configured, record feed data and complete housekeeping after the operating sequence.

Controls include physical operation buttons and a touchscreen. Screen labels and available functions depend on the supplied control configuration.

ROUTINE CARE

Cleaning & maintenance

Disconnect power before internal cleaning or inspection. Keep sealing surfaces, airflow paths and the working area clean.

Interval	Action
After feeding	Clean the loading / feeding surface and remove residual material from sealing areas.
Routine inspection	Check for oil or water leakage, abnormal noise, damaged wiring and blocked ventilation paths.
Air / odour path	Inspect and clean accessible filter screens, bags or air paths according to the fitted configuration.
Approx. every 10 days	Clean the rear exhaust filter bag on applicable models, adjusting the interval to operating conditions.
Loading mechanism	Keep the lifting / tipping mechanism and its travel zone clean; do not service moving parts while energized.
Consumables	Where fitted, inspect activated carbon / UV or other deodorization consumables and service them with the approved procedure.
Long shutdown	Isolate power and clean the processing chamber so residual material does not harden or deteriorate.

DO NOT

- Do not immerse or hose electrical / control areas.
- Do not inspect, disassemble or repair energized systems.
- Do not bypass alarms, interlocks or guards.

FIRST-LINE CHECKS

Troubleshooting & safety

Symptom	Check	Action
Overload / alarm	Named subsystem on touchscreen	Make the work area safe, correct the underlying cause, then reset protection only if the approved procedure allows.
Repeated stop	Fault returns after a reset	Stop operation and contact qualified service personnel.
Lifting / feed fault	Unexpected movement, jam or mechanism problem	Use emergency stop if required, isolate the system and obtain qualified service.
Unknown fault	No operator-level procedure	Do not change advanced parameters or enter manual debugging; escalate to service.

CORE SAFETY RULES

- Disconnect power before cleaning, inspection or service.
- Keep all personnel clear of the bin lifting / tipping and discharge zones while movement is possible.
- Keep gasoline, alcohol, solvents and other flammable liquids away from the equipment.
- Use qualified service personnel for electrical, drive, sensor, heating and lifting-system faults.

General technical reference only. Final specifications and configuration follow the confirmed order, equipment nameplate and supplied documentation.