



Brand	V-TAI
Description	Conveyor & Rack Dishwasher Singel Tank
Model	VT-AE-T1D
Origin	China



(The Picture of the machine is for reference only)

Applicable venues: hotels, guesthouses, small

Product function: washing bowls, saucers, cups, trays, knives and forks and other tableware.

Washing capacity: 225 baskets/hour Parameters

Parameters:

- Machine dimension: 1150*695*1650mm
- Maximum washing: 450
- Maximum water consumption: 2L
- Tank heating power: 9KW
- Rinsing heating power: 27KW
- Wash pump power: 1.5KW
- Transmission Motor power: 0.2kw
- Total power: 37.7KW
- Voltage: 380V/3N 50HZ

Machine Description

This industrial-grade warewashing machine is engineered for high-throughput and efficiency, incorporating several advanced features for optimal performance, energy conservation, and ease of maintenance.

Key Features:

1. **Precise Temperature Control:** The machine is equipped with an accurate thermostatic control system, ensuring consistent and reliable washing and rinsing temperatures.
2. **Innovative Wastewater Heat Recovery System:** A unique and highly efficient wastewater heat recovery technology is integrated into the system. This technology recovers heat from the outgoing wastewater, which does not exceed 38 degrees Celsius, and preheats the incoming water by up to 20 degrees Celsius. This significantly reduces energy consumption and contributes to lower emissions.
3. **Integrated Heat Recovery Unit:** The heat recovery system is built directly into the wash chamber. This design maximizes heat recovery efficiency while minimizing the machine's footprint and simplifying cleaning procedures.
4. **Comprehensive Rodent Protection:** The entire machine is equipped with a robust rodent protection system to ensure operational reliability and prevent damage.
5. **Automated Operation:** The machine features automatic water level control and an automatic timed shutdown function for efficient and unattended operation.
6. **Hygienic Stainless Steel Construction:** All components that come into contact with water are manufactured from high-quality stainless steel, ensuring durability, corrosion resistance, and hygiene.
7. **High-Performance Wash Arm Design:** The machine utilizes a uniquely designed stainless steel wash arm that delivers powerful and comprehensive cleaning action. Its optimized range and angle ensure excellent wash quality across all items.

Operational Specifications:

- **Wash Temperatures:** Main wash: 55°C to 70°C \pm 3%; Rinse: 82°C to 90°C \pm 3%.
- **Direction of Travel:** Configurable for either left-to-right or right-to-left operation.
- **Maximum Washing Capacity:** 225 racks per hour / 5625 dishes per hour, suitable for establishments with 300-500 covers.
- **Hot Water Inlet Connection:** 3/4" inch. Water replenishment utilizes a progressive cascade system, feeding from the final rinse section towards the pre-wash section.

Advanced System Design:

- The final rinse water follows a counter-current flow principle, cascading from the final rinse zone towards the wash tank, maximizing heat and detergent utilization.
- The main structural components of the machine are constructed from SUS304 stainless

steel with a thickness of 1.5 mm. Inspection doors are made of SUS304 stainless steel with a thickness of 1.0 mm. All major components, including the machine body, water tanks, upper and lower wash arms, rinse arms, motor pumps, and impellers, are made of stainless steel.

- The top-mounted electrical control box design minimizes the risk of damage from kitchen moisture.

Equipped Features and Functions:

- (1) Built-in inlet water pressure gauge.
- (2) Electrical control box includes motor under-phase and thermal overload protection switches.
- (3) All inspection doors are equipped with safety interlock switches that automatically cut off power when opened during operation.
- (4) Each water tank is equipped with a float-type magnetic sensor for automatic detection of the tank heater operation or power cutoff, and each tank also includes a high-level overflow pipe.
- (5) The first wash tank features an automatic water replenishment control system for maintaining optimal water levels or replenishing water in case of shortage.
- (6) Temperature control switches are sourced from international brands with CE certification and feature an external LED temperature display.
- (7) The wash arms and nozzles are constructed from a single piece of stainless steel, utilizing a special stamping process. The die-cast rhombic wide-angle fan-shaped spray orifices are designed to deliver a water pressure exceeding 3 kg at a 30-degree spray angle. This configuration ensures comprehensive coverage of all items being washed. The wash arm assembly is designed for easy tool-free removal, and the front end features a detachable end cap for convenient cleaning and maintenance.
- (8) Each water tank is equipped with stainless steel filters, debris baskets, drain rods, and pump suction inlet screens, all of which can be accessed and removed from the front of the machine.
- (9) The wash pump body and impeller are made of stainless steel and feature a removable stainless steel anti-clogging screen at the pump inlet to prevent debris from being drawn in.
- (10) Solenoid valves are sourced from MTX brand and are CE certified.
- (11) Built-in fuse-less circuit breaker for power protection.
- (12) Major electrical components, including magnetic switches, start/stop switches, and relays, are sourced from the international brand Schneider (France) and are CE certified.
- (13) Water curtains are installed at the inlets and outlets of each tank and equipment section to prevent water splash.
- (14) A removable debris collection tray is located at the inlet end, and a cleaning port

is provided at the outlet end for easy maintenance.

- (15) The equipment utilizes a door magnetic float switch control system, enabling a dual energy-saving design for both the wash and rinse cycles.
- (16) The machine employs a stable and advanced anti-electromagnetic interference electromechanical control system that complies with the European Union CE EMC Directive for precise control of all equipment operations.
- (17) An indicator light illuminates when the equipment has completed water filling and heating and is in standby mode.

Installation connection requirements		
1. Inlet water	Interface pipe diameter	G 3/4"
	Inlet pressure	0.15-0.5MPa
	Inlet water temperature	10°C - 40°C
	Water consumption	420L / H
2. Water tank drainage	Interface pipe diameter	G2"
3. Power connection	Power supply parameters	380V / 50HZ / 3N
	Total power	37.7 KW
	Electric current	57 A
	Minimum cross section	16mm ²

Note:

1. An independent power supply all-pole disconnection device and a water source switch manual valve must be installed, which are used to cut off the power supply and water source of the machine respectively;
2. The power supply, inlet pipe, drain pipe, steam pipe and ventilation pipe connected to the machine must meet the relevant national standards;
3. The external pipe connected to the machine Field installation;

[Copyright and Confidentiality Notice]

All intellectual property rights pertaining to this document and its accompanying materials are protected by law. Reproduction or use in any form is strictly prohibited without the express authorization of the rights holder.

This document may contain trade secrets, proprietary information, and legally protected content, and is intended for lawful use only by the designated recipient.