

Used Automatic Bottle Washer ATES Giorgia 6000 bph

Machine type:	Bottle Washer
Ref:	LV45
Model:	Giorgia 01 – 165-14-100-92-1
Year:	2012
Speed:	6000 Bottles/hour
Condition:	In Production
Containers:	Glass

Technical details

No. of Rows:	14	Heat Exchanger:	Yes
Cleaning system:	Yes	Cleaning type:	Pulp
N° soda baths:	1	Bottle entry:	Single
Safety features:	Yes	Manuals:	Yes
Width:	7723 mm	Length:	2692 mm
Height:	3360 mm	Power:	20 kW
Voltage:	400 V	Frequency:	50 Hz

Description

Technical Summary and Application Scope – ATES Giorgia 6000 bph

The ATES Giorgia 8000 bph is a continuous-motion washing and rinsing system for glass bottles, suitable for both returnable and new bottles. It is designed for stand-alone use or seamless integration into existing or new bottling lines. Built primarily from AISI 304 stainless steel with plastic baskets and continuous-motion conveying, the machine ensures robust performance with industrial-grade safety protections.

Main Technical Data

- **Type:** Industrial glass bottle washer and rinser, suitable for recycled and new bottles.
- **Nominal output capacity:** up to **6,000 bottles/hour** depending on bottle format, contamination level, and line configuration.

- **Materials:** AISI 304 stainless steel structure; plastic baskets; stainless-steel doors and inspection windows.
- **Mechanical composition:** Shelves, baskets for bottle housing, and automatic loading/unloading with push bars. Easy inspection access for maintenance.
- **Water treatment:** Hot-water washing with caustic detergent (soda) followed by multi-stage rinsing.
- **Installed electrical power:** approx. 20 kW.
- **Electrical supply:** 400 V, 3-phase, 50 Hz; auxiliaries 24 V; PLC/SCADA integration (Siemens, Omron, Allen-Bradley).
- **Water consumption:** 1.0–1.5 m³/h via 1" G (BSPP) supply, minimum 1.5 bar.
- **Drainage:** integrated rinse and tank drainage via 2" pipeline.
- **Compressed air:** 6 bar operating pressure; approx. 20 NI/h; 1/4" connection.
- **Thermal energy:** approx. 250,000 kcal/h (~291 kW) via dedicated heat exchanger, compatible with steam or hot water supply; typical wash temperature around 70 °C for caustic stage.
- **Filtration:** internal filtration plus 0.2 µm microfiltration for process water.
- **Sanitation:** cleaning and sanitization stages including pre-wash and rinse, with detergent and disinfectant dosing; thermal insulation of tanks and piping for energy efficiency.

System Architecture and Process Flow

1. Returnable bottle cycle (full washing and rinsing)

- Automatic loading into baskets via push bars.
- Pre-wash spray to remove dirt and label residues.
- Immersion in hot caustic bath to disintegrate adhesives and organic matter.
- High-pressure internal and external washing through jetting manifolds.
- Multiple recirculating rinses followed by a final rinse with clean water or potable/demineralized water.
- Continuous label and debris extraction with filtration to prevent clogging.

2. New bottle cycle (rinsing only)

- Spray pre-wash.
- Pre-treatment with detergent solution.
- Internal and external washing as required.
- Multi-stage rinsing and transfer to filling or storage.

3. Immersion and label management stage

- Pre-wash and wash for removal of labels and residues.
- Sequential immersion and spray jets with controlled dosing and temperature.
- Rinse-water recovery and recycling via collection tanks and purification filters.

Mechanical Structure and Handling

- Welded AISI 304 stainless-steel frame with inspection and maintenance doors.
- Basket housing with shelves and supports for secure handling.
- Conveyors and push-bar mechanisms for infeed and discharge.
- Multi-section stainless-steel tanks, recirculating pumps, valves, and drain circuits.
- Label removal mechanism and continuous filtration for high operational availability.

Automation, Electrical, and Control

- PLC-based control system (Siemens / Omron / Allen-Bradley or equivalent) with HMI interface.
- Configurable parameters: cycle time, temperature, water flow, chemical dosing.
- Integrated monitoring of motors and pumps with fault detection and thermal protection.
- Safety features: start/stop controls, emergency stops, interlocked safety guards.
- Compatible with SCADA/MES systems for integration with modern bottling lines.

Performance, Efficiency, and Flexibility

- Three integrated cycles for both returnable and new bottles.
- Multi-stage rinsing reduces water usage while ensuring hygienic results.
- Energy efficiency through heat exchanger, insulated tanks, and water recirculation.
- Gentle handling path minimizes bottle impact and breakage.
- Modular design allows stand-alone operation or integration into complete bottling lines.

Safety and Compliance

- Conforms to CE regulations with emergency stops and interlocked guards.
- Overload protection on moving parts.
- Easy access points for inspection and service.
- Design emphasizes operator safety, cleanability, and quick maintenance.

Summary

In summary, the Used Automatic Bottle Washer ATES Giorgia 8000 bph is an industrial-grade, continuous-motion glass bottle washer configured for rigorous cleaning performance and low operational overhead. With an integrated suite of washing, rinsing, and label removal systems, optimized utility consumption, and robust mechanical construction, this machine represents an efficient solution for the hygienic preparation of glass bottles in beverage production environments. The combination of advanced process engineering and straightforward user controls ensures consistent results across a wide range of bottle types and production conditions.