

Reliable 24/7 wastewater sampling with automatic cleaning

The EFCON Autoclean Sampler is based on the proven Efcconomy cabinet, adapted for fully automated wastewater sampling. This version combines representative sample collection with automatic emptying and cleaning of the containers. As a result, a fresh, accurate sample is always available without the need for daily manual handling.

Key features

- ✔ Fully automated sample collection, emptying and cleaning
- ✔ Reduced need for operator presence on-site
- ✔ Ideal for permanent monitoring or billing purposes
- ✔ Durable dual-wall thermoplastic enclosure
- ✔ Excellent insulation (2–5 °C cooled zone)
- ✔ Optional tropical cooling setup



Complies EN 16479 and EN ISO 5667 standards

Enclosure type:

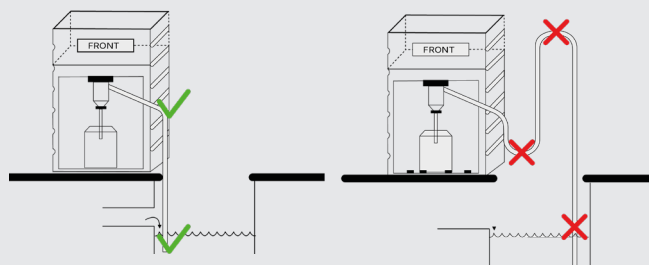
Power supply:	230VAC / 2,5A
Enclosure:	>30% recycled LDPE white/green marble Efccon patented dual wall PUR isolated
Dimensions (HxWxD):	±1300 × 600 × 600 mm
Weight:	±75 kg
Protection class:	IP54 / 23
Ambient temperature:	-20...+40°C
Refrigerated zone:	2...5°C (acc. EN16479, ISO5667-3 and NEN6600-1)
Electrical connections:	Terminal strip inside IP54 compartment
Container configurations:	2 × 10L (Efcconomy) 3 × 17L (Industrial) (self-cleaning, self-emptying)
Zone:	Not in explosion hazardous environment
Warranty on enclosure:	5 years
Cleaning cycle:	Automatic container drain and rinse after programmed sampling cycle
Option:	Only autodrain or autodrain + autoclean

Installation instructions:

Mount the inlet of the suction hose on a fixed representative turbulent point to sample homogeneous, non-foaming wastewater. Ensure the suction hose is always emerged in the wastewater/medium.

Sample Medium

- ✔ Free of solid parts
- ✔ Temperature: +0,1°C / +40°C
- ✔ Non foaming
- ✔ Minimal conductivity: 50µS only in case of Vacuum
- ✔ Free of air inclusion



Jazz controller:

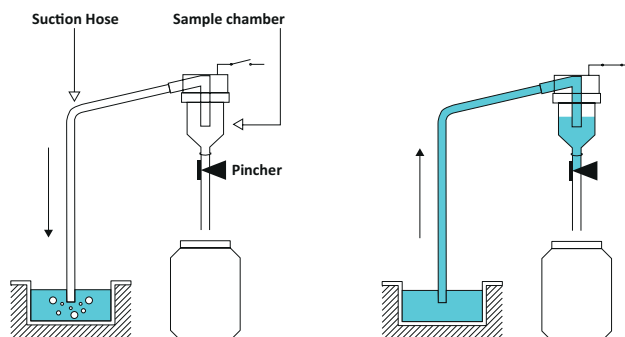
Display:	2 lines, 16 characters, 16 keys Totalizer 3000000,0 m3 (auto reset)
I/O hardware:	8 digital inputs, 4 analog inputs
Quick buttons:	Manual sample, next container, reset
Inputs:	Flow Pulse, flow current 4-20mA, 2x programmable digital input
Outputs:	2x programmable relay output
Sample interval:	Volume, Time or Batch
Interval range:	0,1...2500,0 m3/sample 2...2500 minutes/sample
Max Error samples:	0...999
Sample volume:	20...250ml
Vacuum settings:	Purge, Suction & dose time 1...99 sec.
Turn time:	Clock time (RTC) or time interval
Container config:	1...24 containers, 0,1...99 liter
Password settings:	Yes
Flow signal:	Pulse / Current / pulse + current
Pulse range:	0,1...1000m3
Current range:	1...3600 m3/h
Input options:	PRG on/off, Start PRG, Stop PRG, take sample, next container & start cool unit
Output options:	General alarm, sample alarm, sampling active, sample OK, sample error, 1m3 pulse, 0,1m3 pulse, containers full
Communication:	Modbus RTU optional

Vision controller:

Display:	8 lines, 128x64 2,4" display, 20 keys
Settings:	Basic functions almost the same as the Jazz with extra options. Better HMI and used in customized applications
Sample settings:	Interval by day of the week
Distributor settings:	Selectable day of the week
Pump controller:	Optional (for ILS samplers only) 4-20mA level sensor input 1 or 2 pump controller with alternating function High/low level & overflow setting
Logging:	2000 log lines for daily/cycle totalizer 2000 log lines for time interval logging Data logging to micro SD-card Optional: Extra analytical values
Calendar sampling:	Program sampler to sample Full 1 year on specified calendar days.
Open channel flow measurement:	Optional: Bubbler or ultrasonic open channel flow measurement: Straight weir Venturi Formula 1: $Q=C \times (R)h^3 \times 3600$ Formula 2: $Q=C \times h_e \times 3600$ Data table over 24 points
Communication:	Optional: Ethernet, modbus & profibus
Software:	Free supporting software from Unitronics

Operational principle:

The Autoclean Sampler is typically configured with a vacuum sampling system as standard, but an inline (ILS) setup is available upon request. Unlike standard systems, the Autoclean is equipped with an automated drain and rinse cycle that activates after a predefined period. This ensures that containers are emptied and cleaned automatically, preventing overflow and guaranteeing that a fresh, representative sample is always available. Sampling continues uninterrupted, even when containers would otherwise be full.

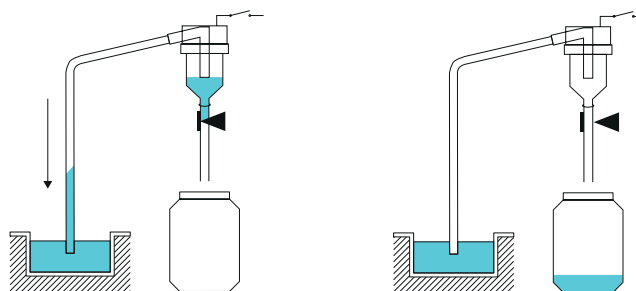


1. Purge:

The air pump starts and generates pressure in the sample chamber. Air bubbles will escape from the end (inlet) of the suction hose. This is a sign that the 'old' wastewater has left the suction hose.

2. Suction:

Suction: the air pump creates a vacuum in the sample chamber. The medium is sucked up through the suction hose until it reaches the level pen again.



3. Dose:

The level pins detect the medium. After this, the pump creates pressure and doses the volume into the flask. The excess medium is blown back through the suction hose.

4. Drain:

The pinch opens and the sample falls into the container. After a few seconds, the air pump stops and the cycle is complete.

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