

TO-Clean is a revolutionary canister cleaning system developed by Wasson-ECE Instrumentation.

The TO-Clean canister cleaner allows for fully automated canister cleaning.



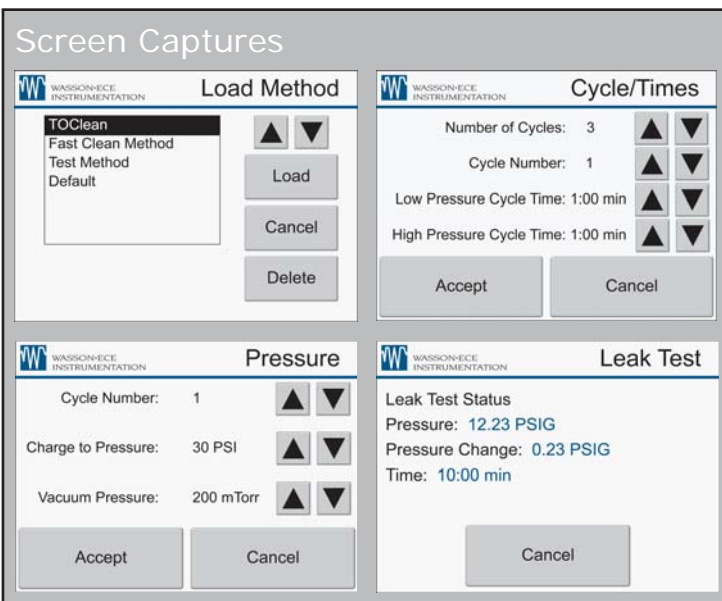
The TO-14/15 compliant TO-Clean system was designed to take the guess work out of canister cleaning. The twelve 6-liter canister capacity will increase your lab's efficiency. The system is fully automated, allowing the user to start a cleaning cycle and walk away. Using the touch screen controller, up to fifteen custom methods can be defined and loaded as needed. The system also comes with an automated leak check method to ensure system performance. This provides a high performance system that is easy to use as well as consistent.

## Product Features

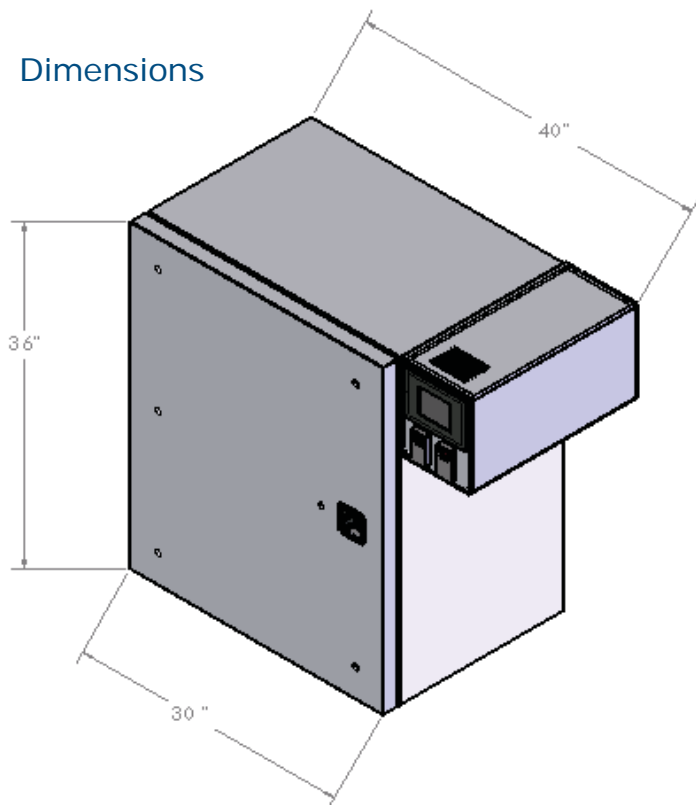
- Method TO-14/15 compliant
- 12 canister capacity, expandable to 24 canisters
- Embedded touch screen controller
- Automated system leak test
- Electronic valve control
- Custom-built trays for different canister sizes
- User defined methods
- Save up to fifteen methods
- Isothermal oven
- Edwards RV-8 vacuum pump capable of 0.05 mTorr
- Stainless steel manifold
- Electronic pressure transducers with digital readout
- Cold trap
- Humidifier

## Embedded Touch-Screen Controller

An on-board touch screen embedded controller makes system operation as easy as pressing start. The controller allows the user to save up to fifteen different methods. The user can define each method including: number of cycles, pressure, and soak times. Once the method has been defined, it is saved and is accessible for later use.



## Dimensions



## Includes

- Touch screen controller
- Edwards RV-8 vacuum pump
- Isothermal oven
- Canister tray
- 1/2" stainless steel manifold
- 1/4" stainless steel flex tubing for canister attachment
- Connective tubing
- Valving
- Assembly
- Documentation
- Power cords
- Dewar
- Stainless steel U-tube Vacuum trap
- Stainless steel U-tube pressure trap

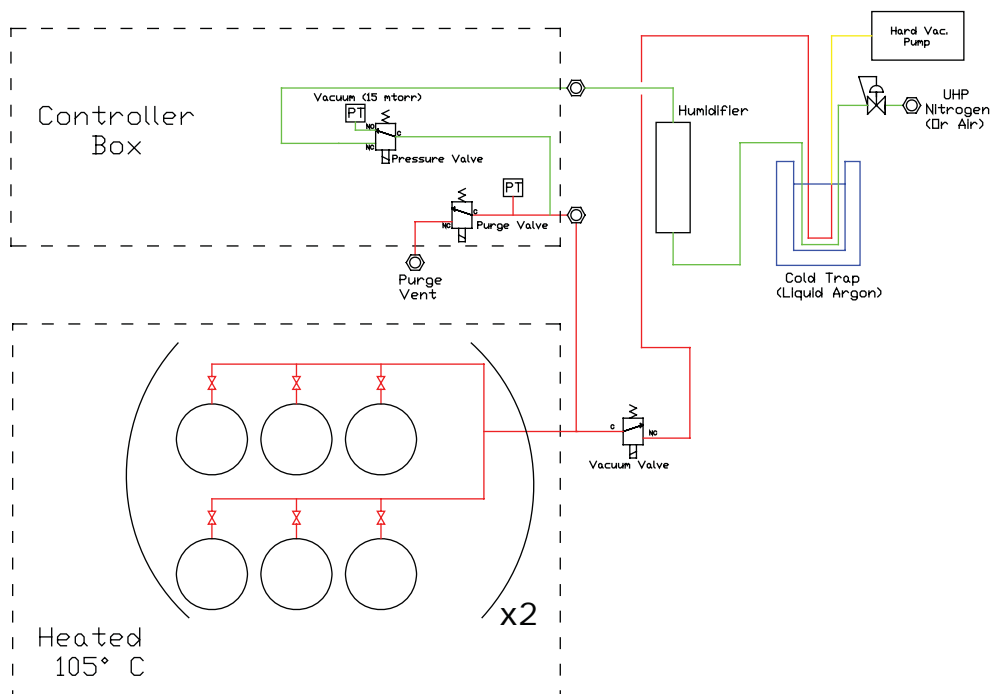
## Optional

- System stand
- Restek TO-Cans

If an oven is not needed, the system can be built with a non-heated canister rack.

## Requires

- 120V 50Hz
- International voltages are available upon request.



# TO-Clean Automated Canister Cleaner

## ***TO-Clean Revolutionary Canister Cleaning System***

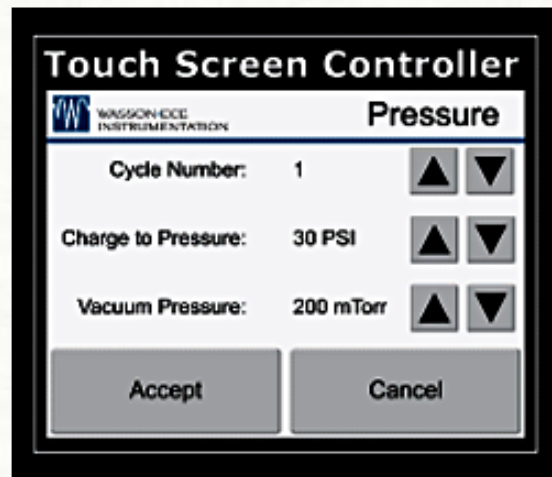
The TO-Clean canister cleaner allows for fully automated canister cleaning. The TO-14/15 compliant TO-Clean system was designed to take the guesswork out of canister cleaning. The twelve 6-litre canister capacity will increase your lab's efficiency. The system is fully automated, allowing the user to start a cleaning cycle and walk away. Using the touch screen controller, up to fifteen methods can be defined and loaded as needed. The system also comes with an automated leak check method to ensure system performance. This provides a high performance system that is easy to use as well as consistent.

### ***TO-Clean Features***

- Method TO-14/15 compliant
- 12 canister capacity, expandable to 24 canisters



- Embedded touch screen controller
- Automated system leak test
- Electronic valve control
- Custom-built trays for different canister sizes
- User defined methods
- Save up to ten methods
- Isothermal oven
- Edwards RV-8 vacuum pump capable of 0.05 mTorr
- Stainless steel manifold
- Electronic pressure transducers with digital readout
- Cold trap
- Humidifier



An on-board touch screen embedded controller makes the system operation as easy as pressing start. The controller allows the user to save up to ten different methods. The user can define each method including: Number of Cycles, Pressure, and Soak times. Once the method has been defined, it is saved and is accessible for later use.



1	2	3	4	5	6	7	8	9	0
Q	W	E	R	T	Y	U	I	O	P
A	S	D	F	G	H	J	K	L	
Z	X	C	V	B	N	M			del

Users can define and save up to ten methods with custom names using the touch-screen QWERTY keypad.

Fast Clean Method  
Test Method  
Default

Once methods have been saved, they can be loaded and used by selecting the method in the load "Load Method" window.

WASSON-ECE INSTRUMENTATION **Configuration**

**Method Name:** Default

**Canister End State**

Vacuum 
 Pressurized

In the method configuration window users can set up both cycles and pressure control for each cycle.

WASSON-ECE INSTRUMENTATION **Cycle/Times**

Number of Cycles: 3

Cycle Number: 1

Low Pressure Cycle Time: 1:00 min

High Pressure Cycle Time: 1:00 min

In Cycle/Times setup the user selects the number of cycles and low/high pressure soak times for each cycle.

WASSON-ECE INSTRUMENTATION **Pressure**

Cycle Number: 1

Charge to Pressure: 30 PSI

Vacuum Pressure: 200 mTorr

In Pressure setup the desired charge and vacuum pressure are set for each cycle.

WASSON-ECE INSTRUMENTATION **Leak Test**

**Leak Test Status**  
 Pressure: 12.23 PSIG  
 Pressure Change: 0.23 PSIG  
 Time: 10:00 min

The system also comes with a convenient leak test method. This method charges the system



and looks for a pressure change over time  
indicating the system has a leak.