



USER MANUAL

VeroFoam

FOAMING TENDENCY ANALYZER

The foaming of lubricating oils in service, especially when conditions are turbulent or at high speed, can result in starvation due to lubrication deficiency, cavitation, overflow, and oxidation. Tendencies to foam are determined by stirring air into the oil at controlled temperatures and measuring the foam levels immediately and after settling has taken place. It also measures the time to collapse the foam to zero as an indication of stability and performance.

TABLE OF CONTENTS

2

SPECIFICATION

Includes key technical details of the device

4

ELEMENTS AND OPTIONAL ACCESSORIES

Additional parts and accessories for operation and control

8

SOFTWARE INTERFACE AND COMPATIBILITY

Details on the device's software interface and compatibility

TECHNICAL

SPECIFICATION

Model	VeroFoam - Foaming Tendency Analyzer
Methodology	ASTM D892/D6082
Applications	Foaming Tendency Analyzer for Newtonian Liquids
Device Dimensions	Width: 84 cm (33.07 inches), Depth: 39 cm (15.35 inches), Height: 63 cm (24.8 inches)
Weight	52 kg (114.64 lbs)
Connectivity	USB port for connectivity
Data Storage	Storage of calibration data, including the last calibration date for each probe
Calibration Tracking	Display of the last calibration date for individual probes
Signal Access	Access to all analog and digital signals (both inlet and outlet) for functionality verification
User Interface	Real-time display of all analytical parameters
Operation System	Windows 10
User Interface	10.1-inch capacitive touch screen
Result Storage Capacity	10000 results
Result Format	PDF
Power Supply	220 Volt 50-60 Hz
Power Consumption	1800W (Max)
Device Operating Environment	10 °C to 50 °C (50 °F to 122 °F)
Oil Bath 1	6-8 L volume (1.58-2.11 gal)
Oil Bath 2	6-8 L volume (1.58-2.11 gal)
Temperature Range	5 °C to 150 °C (41 °F to 302 °F) (With Chiller Options)
Temperature Resolution	0.1 °C (0.18 °F)
Automated Sample Capacity	4 Sample
Timing Resolution	1 Second

ELEMENTS AND
**OPTIONAL
ACCESSORIES**

ELEMENTS AND OPTIONAL ACCESSORIES

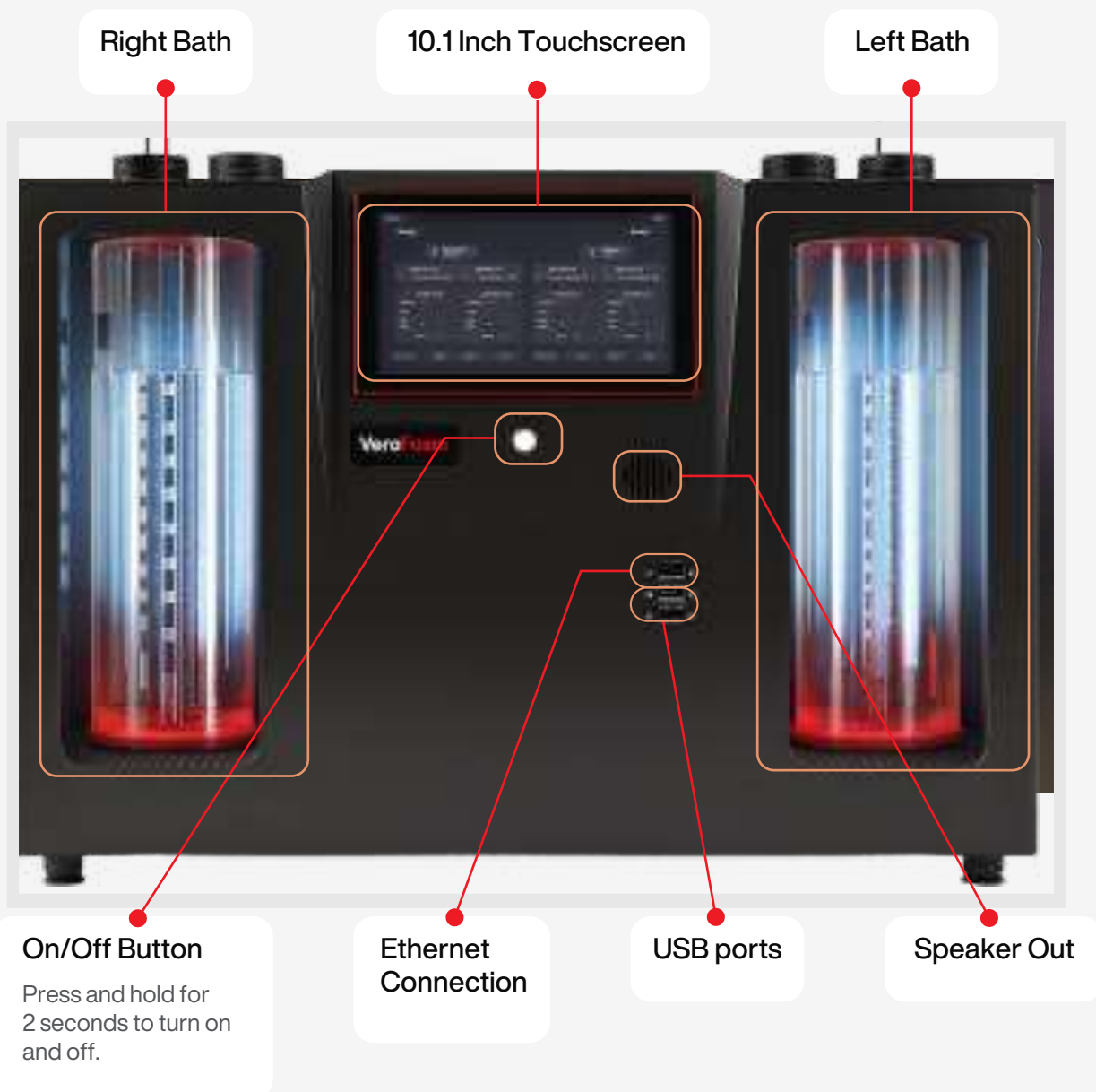


Figure 1: Front Panel



ELEMENTS AND OPTIONAL ACCESSORIES

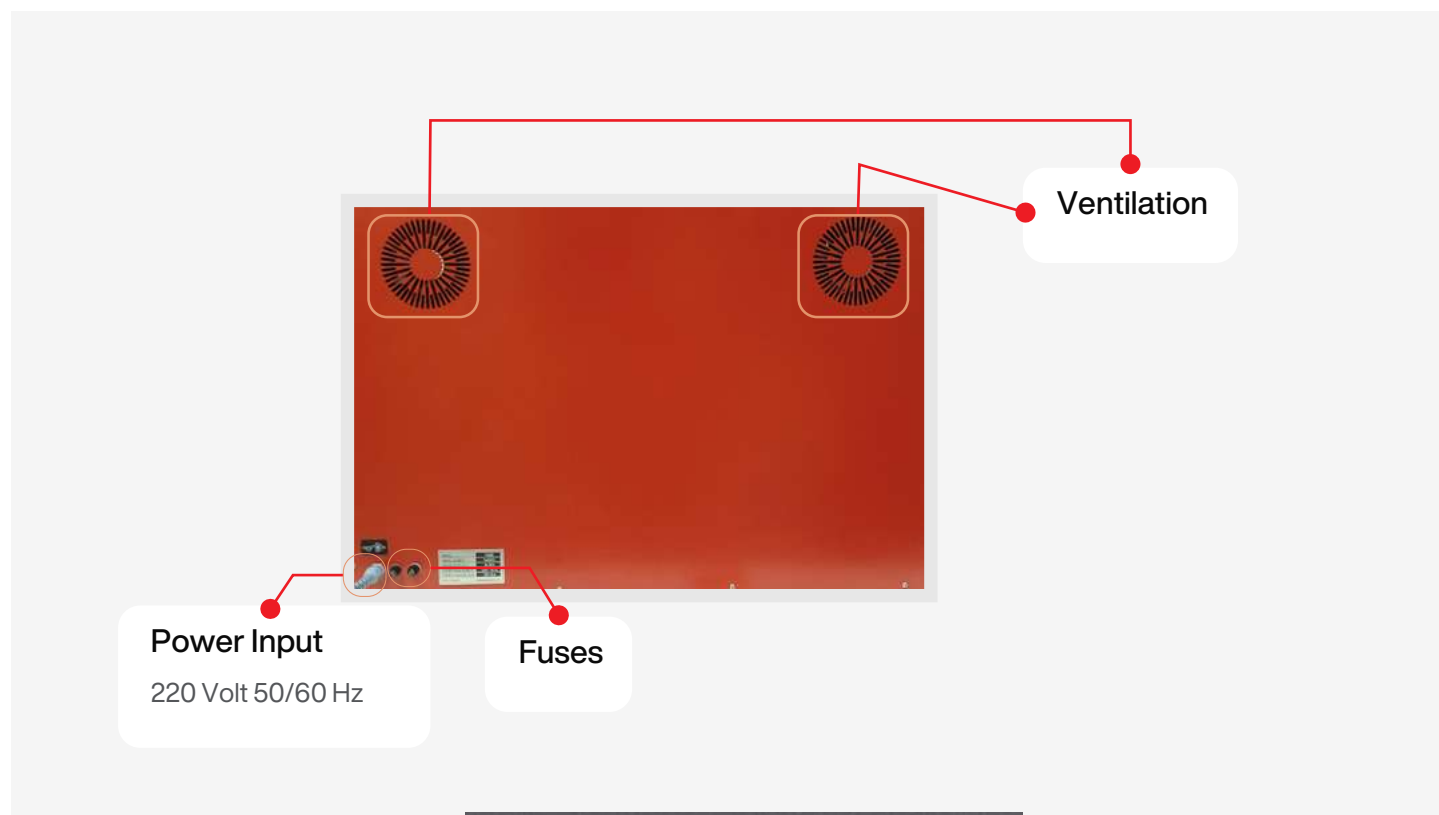


Figure 2: Rear Panel



Figure 3: Right Panel

ELEMENTS AND OPTIONAL ACCESSORIES



Dry Air

Device air inlet designed to supply dry air at a pressure of 2–3 bar (29–44 psi).

Bath Oil Discharge

Drain outlet for removing and replacing the oil. The oil bath has a capacity of 6–8 liters (1.58–2.11 gallons).

Caution: Do not drain the oil if it is at high temperatures.

Bath Cooling

Coolant inlets and outlets are provided for rapid cooling of the bath oil.

Figure 4: Left Panel

SOFTWARE
INTERFACE AND
COMPATIBILITY

SOFTWARE INTERFACE AND COMPATIBILITY

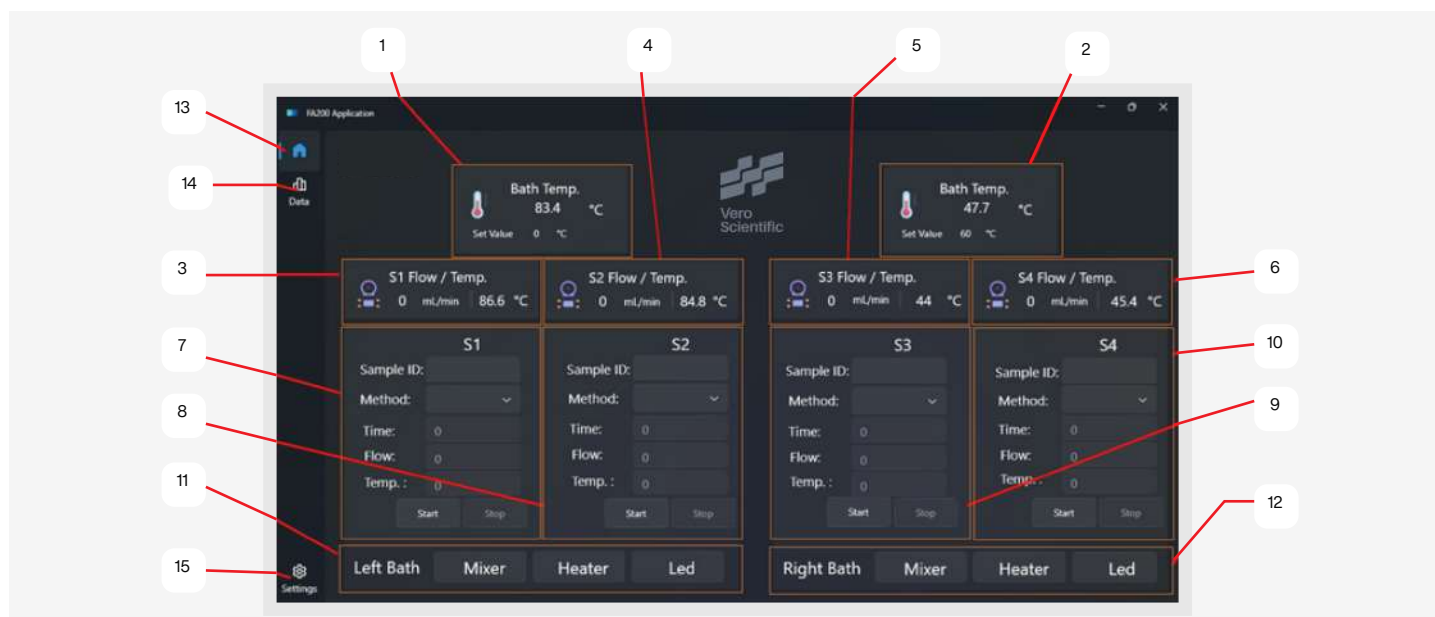


Figure 5: Main Screen

NO	DEFINITION
1	Left Bath Temperature Indicator
2	Right Bath Temperature Indicator
3	Test Slot 1 Actual Flow Controller Data and Sample Probe Data
4	Test Slot 2 Actual Flow Controller Data and Sample Probe Data
5	Test Slot 3 Actual Flow Controller Data and Sample Probe Data
6	Test Slot 4 Actual Flow Controller Data and Sample Probe Data
7	Slot 1 Test Data
8	Slot 2 Test Data
9	Slot 3 Test Data
10	Slot 4 Test Data
11	Left Bath Control Bar
12	Right Bath Control Bar
13	Home Page Button
14	History Data Button
15	Settings Menu Button

1,2 - This window displays the current bath temperature as well as the set bath temperature data.

3,4,5,6 - It shows the sample probe temperature and the instantaneous values of the flow controller during the test.

7,8,9,10 - The test data window requires the correct sample name to be entered, as this is important for locating the test results in the history. Test data will be automatically populated when the test method is selected.

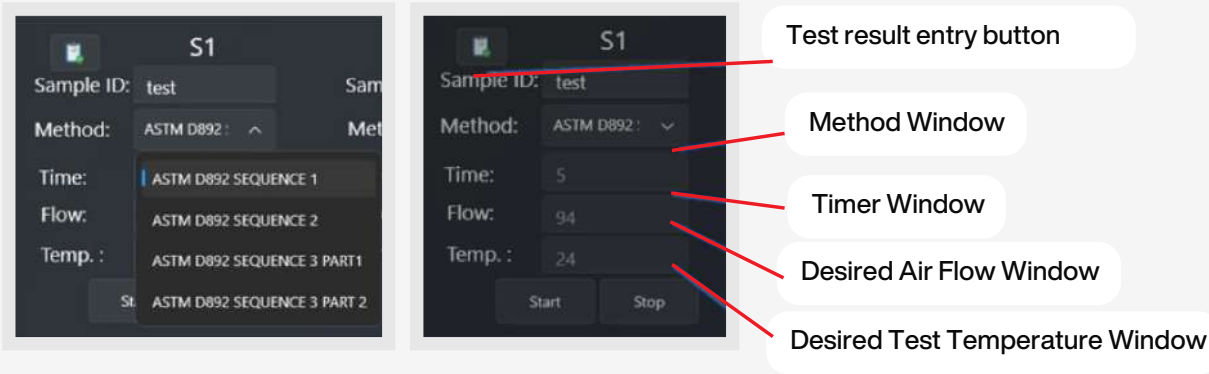


Figure 6: Selecting Methods

Testing can be performed in two of the four slots simultaneously. The test slot combinations that can be used at the same time are as follows: (slot 1 and slot 2), (slot 3 and slot 4), (slot 1 and slot 4), and (slot 2 and slot 3).

The Test Result Entry Button: In the window that opens, the amount of foam generated as a result of the blowing process, as well as the amount of foam remaining at the end of the waiting period, can be recorded (Figure 7).

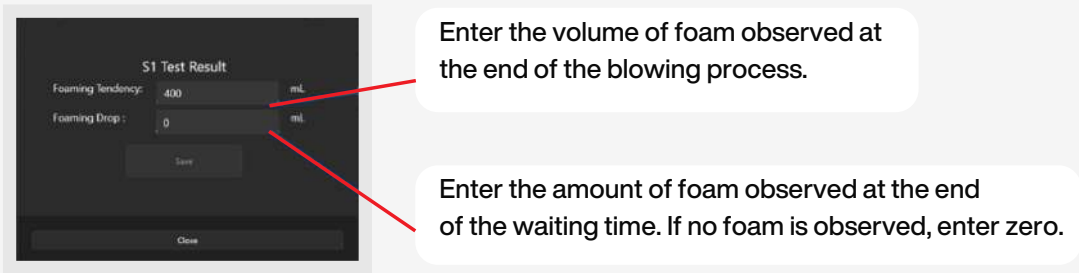


Figure 7: Test Result Entry Button

SOFTWARE INTERFACE AND COMPATIBILITY

11, 12 - Bath Control Bar: The bath's heater, mixer, and lighting can be controlled through the Bath Control Bar. By pressing the heater button, the bath temperature can be adjusted, or the heater can be switched off (Figure 8).

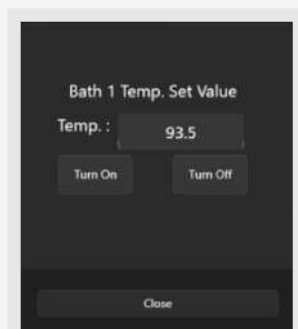


Figure 8: Heater Button

13 - Homepage: All testing procedures are initiated from the homepage.

14 - History Button: The History Button allows users to view tests performed in the past and save them as PDF reports (Figure 9).

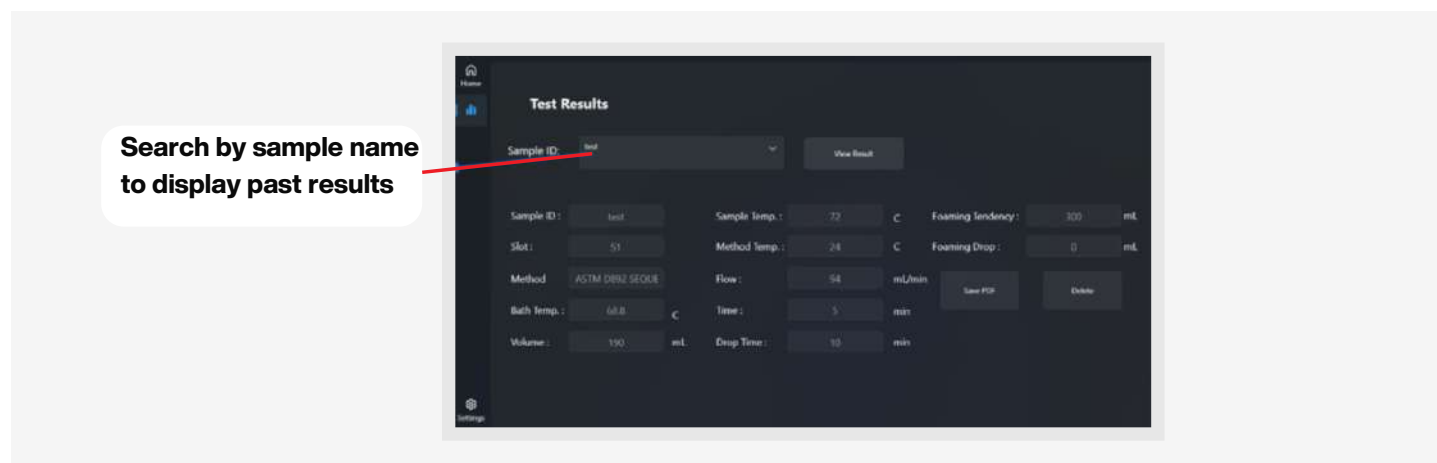


Figure 9: History Data Menu

15 - The Settings Menu enables users to calibrate the temperature and airflow controller. It also provides options to add new methods or edit and delete existing ones (Figure 10).



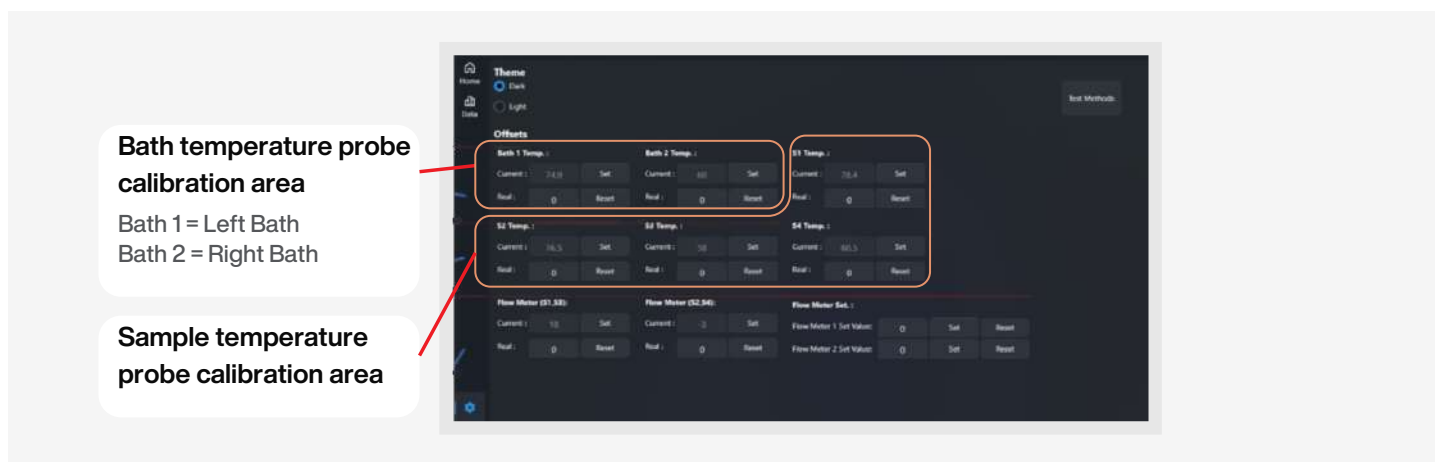


Figure 10: Settings Menu

Calibration Flow Controller

The flow controller calibration zone is utilized to adjust the flow controller to a specific flow value. To perform the calibration, the flow controller must first be set to a desired flow rate, which falls within the operating range of 0–2000 ml/min. The flow value is entered into the flow controller via the menu on the right-hand side, and the "Set" button is pressed to confirm the input.

Flow Controller Outputs

- Flow Controller 1 (Air Outlet 1): Air is directed to the first output.
- Flow Controller 2 (Air Outlet 2): Air is directed to the second output.

An external airflow meter should be connected to these outputs to measure the actual flow rate. The observed value from the external airflow meter is recorded, and the calibration is finalized by entering this real value into the corresponding field in the settings menu.

SOFTWARE INTERFACE AND COMPATIBILITY

Test Methods Menu: The Test Methods Menu is used to create new methods or modify and delete existing methods. Parameters such as method name, desired airflow, airflow time, airflow collapse time, test temperature, and sample volume are specified within this menu (Figure 11).

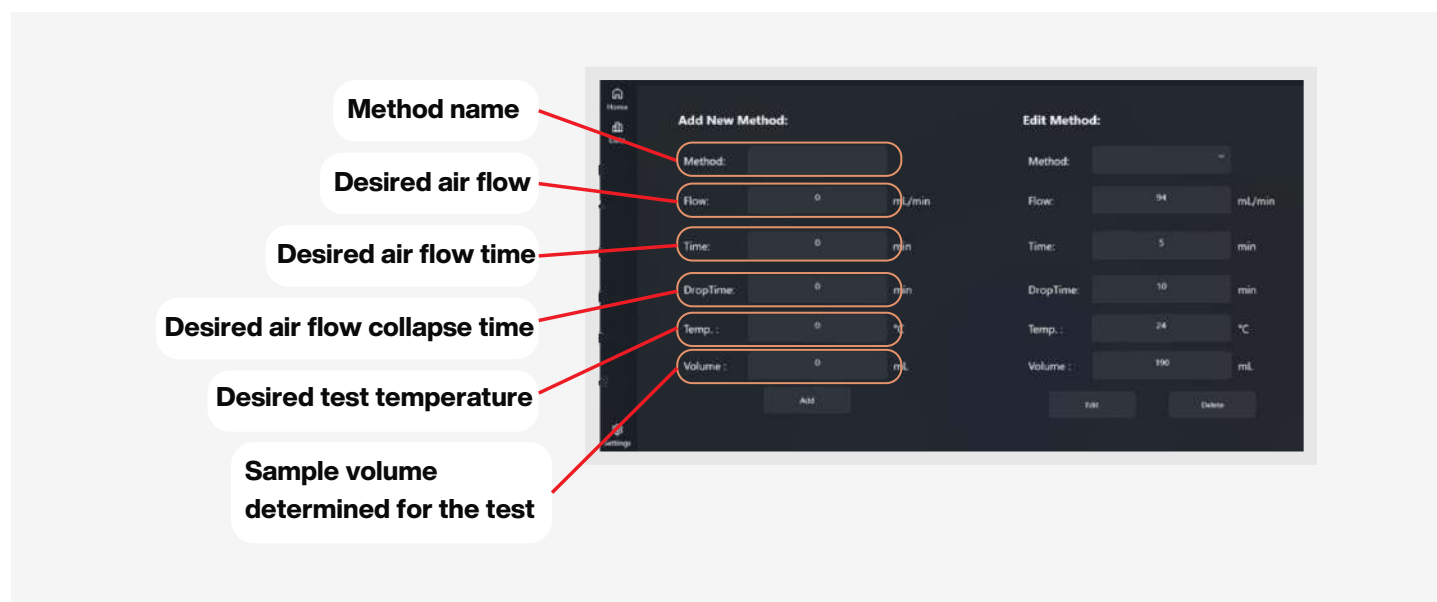


Figure 11: Method Screen

PHONE
+1 781 818 8133

EMAIL
sales@verosci.com

WEBSITE
www.verosci.com

ADDRESS
Vero Scientific LLC
867 Boylston Street
5th Floor #1409
Boston, MA 02116
United States

Copyright © 2025
Vero Scientific
All rights reserved.



As Vero Scientific, we provide advanced measurement technologies, preventive maintenance solutions, and cloud-based analytics for oil and fuel analysis. Our mission is to empower industries with precise, reliable, and sustainable solutions.