

STEAM BOILER

USER MANUAL



DOCUMENT VERSION LOG

The table below lists previous versions of this User Manual and states the major changes between versions.

This version list is introduced in December 2016.

Version #	Version date	Major changes from previous versions
1	1 th December 2016	Complete revision and new layout.

INTRODUCTION:

MANUFACTURER: Keofitt A/S
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TYPE: Steam Boiler
YEAR OF INTRODUCTION: 2016
YEAR OF REVISED DESIGN: 2016
LAST UPDATED: 2016

The English version of this Manual is the governing version and it is the only authorized version. Consequently, KEOFITT cannot be held liable for other versions including translations of this Manual.

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1. PORTABLE STEAM CLEANING UNIT FOR CLEANING SAMPLE VALVES

The KEOFITT Steam Boiler is a simple and rugged, portable device designed to provide steam at hand in sampling locations where a fixed steam supply is not available.

The Steam Boiler is used for steaming sampling valves as a means of cleaning and disinfecting the sampling valve prior to extracting the sample. This ensures the sample taken is free of any critical level of microorganisms (see IMPORTANT below) and is representative of the greater contents of the product being sampled.



IMPORTANT

- Microorganisms have different lethality depending on temperature and exposure time
- The steam produced in the Steam Boiler is not pressurized, so the steam temperature is only around 100 °C (212 °F)
- Make sure that the type and level of critical microorganisms in your application are such that steam at 100 °C (212 °F) will suffice. Part of the cleaning and disinfection is obtained through the flushing effect of the flow of steam, which removes the microorganism but not necessarily kills it.

The unit is gas fired and holds 400 ml of water.

Water Capacity:	approx. 400 ml
Dimensions:	approx. 150 mm Dia. x 200 mm H
Weight:	approx. 2.5 kg
Materials of construction:	all wetted parts of stainless steel, PTFE and aluminum

2. PORTABLE MICRO BURNER

The lab burner is designed with safety in mind. The stable, tip-resistant burner provides safe, stable operation. The lever-action igniter and flame adjustment knob ensure you get the controllable flame size you need within seconds. It refills quickly and easily using the fill valve built into the burner base and a standard multi-fill butane fuel cartridge.

This portable butane micro lab burner holds 30 grams of butane when fully refueled, which burns for 35-60 minutes, depending on flame intensity. The output of this laboratory burner reaches 2500 BTU hour and it boils a 250 ml beaker of water in about five minutes. It generates a flame temperature of up to 2200 F or 1200 C.



- Fuel: butane
- Fuel capacity: 30 grams/50 ml
- Maximum burn rate: up to 0.9 grams/minute
- Burn time: about 35 minutes at maximum burn, 60 minutes at half-burn
- Maximum heat output: about 2500 Btu/hour (0.75 kW)
- Maximum temperature: about 1200 °C/2200 °F
- Ignition: Push-button Piezo
- Unit size: 125 mm (L) x 80 mm (W) x 75 mm (H);; 4.9" (L) x 3.1" (W) x 3" (H)
- Unit weight (empty): 400 grams
- CE certified

3. HOW TO USE

FILL FUEL

Place the unit either on its side or upside down, making note to see if any water is inside, as this will drain out if the outlet is submerged. Use a suitable butane cartridge to fill, following the instructions for filling. After filling it is best to wait for any excess fumes to dissipate that can occur during filling.

FILL THE VESSEL WITH WATER

Open the plug on top, and fill with approximately 100 to 400 ml water, and replace the plug.

LIGHT THE BURNER

Turn the gas control knob on, and listen for the gas, press the opposing ignition switch to light the burner, adjust the flame height and intensity to boil. Bring the water to a boil, taking care to keep the end of the hose away from anything the steam/condensate could harm. After steam has been started, you can turn the unit off with the burner gas control knob and take to your sample point.

STEAMING THE VALVE

Hook the handle over the valve and connect the hose to the top port of the valve. Consult the KEOFITT Sampling Valve Manual for full instructions on steaming and sampling. Start the burner and bring the water back up to steam, which should only take a few moments depending on the time since the tank was heated. Steam the valve one minute and disconnect hose with quick-coupling.

SAMPLING

Place a sanitized rubber or stainless plug over the top port and the collection vessel/bag to the bottom port and operate the valve according to the manual to take the sample. After sampling, the valve should be flushed, filled with a disinfectant and capped to keep the valve in a clean and sealed condition protected from the environment until the next sample procedure.







CAUTION

AS A GAS HEATING DEVICE IT IS IMPERATIVE TO OPERATE IN A SUFFICIENTLY VENTILATED AREA, USING GLOVES, PROTECTIVE GLASSES AND PROPER ATTIRE. TAKING ALL NECESSARY PRECAUTIONS.

See illustrations on next page.

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1.	FILL BUTANE INTO BURNER PORT.	
2.	REMOVE TOP FILL PLUG. FILL WATER INTO STEAMER FILL PORT – 100 TO 400 mL. REPLACE PLUG.	
3.	TURN GAS CONTROL ON, USE TO TURN BURNER ON AND OFF AND CONTROL FLAME HEIGHT AND INTENSITY	
4.	PRESS IGNITER LEVER TO LIGHT BURNER PRELIMINARY	

Keofitt reserves the right to change technical data without notice!

For complete set of updated data sheets and manuals for Keofitt products please refer to our web page www.keofitt.dk

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