

EN
Instruction manual



gasprofi 1 micro
school edition

The safe choice



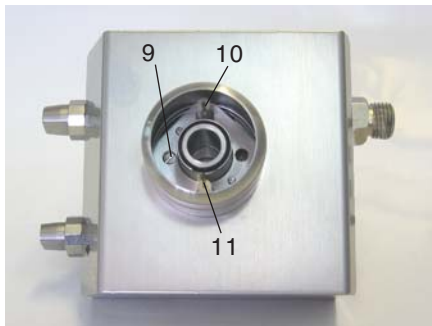
DIN 30665, part 1





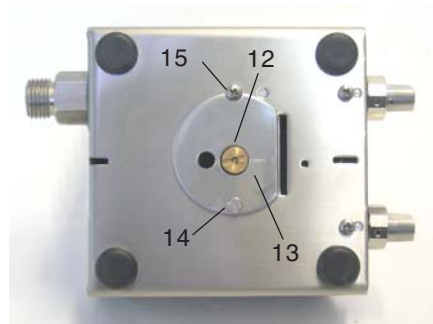
- 1 - Function knob
- 2 - Air adjustment
- 3 - Green LED
- 4 - Burner head
- 5 - Flame orifice

- 6 - Connector for foot pedal
- 7 - Power connector for 9 V DC
- 8 - Gas inlet R 1/4" L



- 9 - Burner head screw
- 10 - Monitor electrode
- 11 - Ignition electrode

- 12 - Active nozzle
- 13 - Cover of the burner shaft
- 14 - Retaining screw for cover of the burner shaft
- 15 - Position screw for the cover



Read these instructions carefully to familiarize yourself with the product. Please retain these operating instruction for future reference.

Use: Safety laboratory gasburners for heating and flame sterilizing. Ideal for use in cleanroom workbenches and the laboratory.

**WARNING: DO NOT LEAVE THE ACTIVATED LABORATORY
GAS BURNER UNATTENDED!**

SAFETY PRECAUTIONS:

- On unpacking the unit, check for possible transportation damages. Do not operate the unit if damages are visible.
- After use or for any longer period of time without attendance, turn the main gas supply off and turn off the gas burner at the function knob (1).
- Pay attention to your relevant rules for using liquid gas.
- Only use DVGW safety tubings with thread or tubing connectors. Check the condition of the tube/hose frequently. Depending upon type of tube/hose, hose clamps are required.
- All gas connections must be adequately tightened with two wrenches. Ensure gas proofness with a suitable test fluid / equipment. DO NOT seal the swivel nut with Teflon tape etc.
- Keep hands or other parts of the body away from the burner orifice (5).
- Do not operate the unit near flammable liquids or hazardous materials.
- Unattended operation of the unit is not permissible.
- Always work in a well-ventilated area.
- Note that the burner orifice (4,5) remains hot after the flame has been extinguished. Do not touch. Can cause burns.
- Allow sufficient time for flame orifice (5) to cool down prior to cleaning, disinfecting, servicing or transport. Ensure that the unit and the gas supply are turned off.
- Because of the connectors at the back of the unit the backside should not be sterilized with a flame.
- Allow sufficient time for burner head (4) to cool down prior to disassembling.
- Operate the unit with assembled burner head (4) only.
- After cleaning the burner head (4) allow sufficient time to dry before assembling again.
- Keep substances away from the flame orifice (5).
- Before mounting a nozzle check the O-Ring (24). Replace the sealing if damaged or worn.



The range: gasprofi 1 micro school edition

Art.-No. 6.007.000

with button function

2 operating modes for button (function knob) and foot pedal (optional)

Removable burner head

Nozzle for natural gas

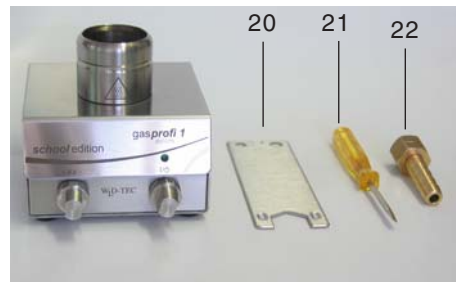
Wrench 17 mm (20) for gas connection

Screwdriver (21) for burner head and cover of the burner shaft

Tubing connector with swivel nut (22)

Switching power supply (global)

Instruction manual and 2-year warranty



1. Setup Procedure:

The unit is shipped with the nozzle for natural gas ("N") installed.

The nozzle must be changed if other gas (propane / butane) is to be used.

Nozzle "P" for propane / butane gas is optional. Art.-No.: 8.000.018

Replacement procedure: Remove the active Nozzle "N" for natural gas (23) with a coin or the edge of the wrench (20) by turning it counterclockwise and exchange the nozzles. Tighten the replaced nozzle in clockwise direction.



ATTENTION: Before mounting a nozzle check the O-Ring (24).

Replace the sealing if damaged or worn (Art.-No. 8.000.010).

Now you are ready to connect the gas supply to the gas inlet (8).

The correct pressure for natural gas is within the range of 18 - 25 mbar, for propane/butane gas 28 - 57 mbar.

Only use DVGW or other gas approved safety tubings with thread or tubing connectors (22). Check the condition of the tube/hose frequently. Depending upon type of tube/hose, hose clamps are required.



All gas connections must be adequately tightened with the wrench (20) (SW 17mm, included). Ensure gas proofness with a suitable test fluid / equipment. Do not seal up the included tubing connector (22) and swivel nut with Teflon tape etc.

A DVGW-proven or other gas approved pressure regulator (50mbar) must be used for liquid gas.

Pay attention to your relevant rules for using liquid gas.

1.1 Foot pedal connection:

Insert the connection cable of the foot pedal into the socket (6) at the back of the unit.

The foot pedal is optional:

Stainless steel foot pedal:

Art.-No.: 6.000.402

Foot pedal mini / plastic:

Art.-No.: 6.000.403

Benchtop switch:

Art.-No.: 6.000.405

Wireless foot pedal (EU countries only): Art.-No.: 8.000.404-RF



1.2 Electrical connection:

Insert the power cord into the socket **(7)** on the back panel of the unit, or into the socket of the foot pedal. The default supply must be connected to a voltage source of 100 - 240 V / 50/60 Hz.

2. Operation: Flame regulation

The flame can be varied in intensity by turning the the air adjustments **(2)** to suit all requirements.

Attention: When operating the unit for the first time or after changing the nozzle, turn the air adjustment knob **(2)** 3-4 revolutions to the left.

2.1 Operation: On-Off switch, operating mode

Switch the unit on by a short push on the function knob **(1)**. It can be turned off by a long push (2 seconds +) on the function knob.

2.2 Operation: Application programs

- BUTTON StartStop:

The flame is ignited by operation of the function knob **(1)**. The flame is extinguished after renewed actuation of the function knob **(1)**. Additionally the flame is automatically extinguished when the burning timer has expired after 60 min.

- PEDAL Standard:

The flame is ignited by operation of the foot pedal **(optional, see paragraph 1.1)**. The foot pedal remains depressed for the duration of use. The flame is extinguished upon release of the pedal.

2.3 Operation: Switch-off

The unit can be turned off by pushing the function knob **(1)** for more than 2 seconds.

3. Safety functions:

Automatic unit switch off: The unit switches itself off automatically after 4 hours if the flame has not been lit in this period.

4. Error displays:

- Ignition failure: Green LED blinks 2x

This signal appears and indicates a malfunction if the flame fails to ignite after 7 seconds. In case of ignition failure check the burner head **(4)** for possible clogging, check the correct input pressure of the gas supply and verify that the correct nozzle is installed.

In case of this malfunction the gas supply will be shut off automatically.

Nozzle N: natural gas, 18-25 mbar

Nozzle P: propane-/ butane gas, 47-57 mbar (Nozzle optional)

- Flame failure: Green LED blinks 3x

This signal indicates a malfunction if the flame is extinguished by external factors and fails to reignite within 5 sec. In case of flame failure check the burner head **(4)** for possible clogging and verify the correct input pressure of the gas supply.

In case of this malfunction the gas supply will be shut off automatically.

- Overtemperature: Green LED blinks 4x

This signal indicates a malfunction if the interior temperature has exceeded 70 °C. At a normal room temperature with normal air circulation the unit is suited for continuous operation.

In case of overtemperature increase the air ventilation or change the operation site.

In case of this malfunction the gas supply will be shut off automatically.

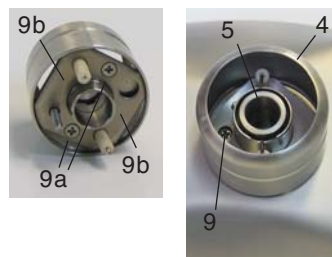
5. Cleaning and sterilizing:

Allow sufficient time for burner orifice (4, 5) to cool down before disassembling or cleaning the burner head. Check the unit is disconnected and that the gas supply is turned off at the mains. The burner can be cleaned with customary commercial disinfectants. Additionally, it is possible to remove the burner head and to clean it separately. The stainless steel and glass construction allow 100% UV-radiation sterilization and short time surface flame sterilization.

Attention: Because of the connectors at the back of the unit the backside should not be sterilized with a flame.

5.1 Burner head disassembly and cleaning:

Allow sufficient time for burner orifice (4, 5) to cool down before disassembling or cleaning the burner head. Check the unit is turned off, that the gas supply is turned off at the mains. Clean the burner head with customary commercial disinfectants, sterilize it in an autoclave or wash it in a dishwasher. To remove the burner head proceed as follows: Unscrew the burner head screw (9) completely with the included screwdriver. Turn approx. 8 revolutions to the left.

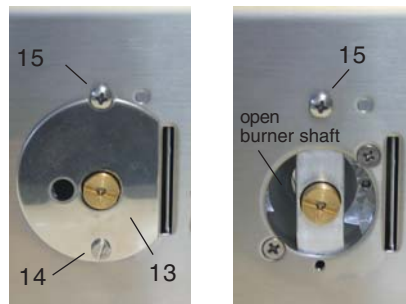


Now remove the burner head from the device by pulling it upwards. Reinstallation is performed in the reverse sequence.

The dismantled burner head can be even dismantled into the individual components for in-depth cleaning: Unscrew both screws (9a) and take off the base plate (9b) of the burner head which was fixed by the two screws (9a). After the base plate is removed both electrodes can be pulled out for separate cleaning. Reinstallation is performed in the reverse sequence.

5.2 Burner shaft cleaning:

Unscrew the screw (14) completely with the included screwdriver. Take off the cover (13) of the burner shaft. Now the burner shaft can be cleaned or solid substances which have fallen into the unit can be removed. Reinstallation is performed in the reverse sequence. Take care that the notch of the cover fits to the screw (15).




6. Turbo flame:

If the cover of the burner shaft (13) is removed the flame is extremely firm and consistent. To take off the cover of the burner shaft unscrew the screw (14) completely with the included screwdriver. With an open burner shaft the intensity of the flame cannot be adjusted by the air knob (2) any longer. During the use of the turbo flame most of the needed air is taken inside through the open burner shaft. Remounting the cover of burner shaft. (see paragraph 5.2)

7. Warranty:

All WLD-TEC gas burners are covered under our two-year manufacturer warranty against any manufacture defects in material and workmanship. The WLD-TEC warranty guarantees all gas burners under normal usage conditions and does not cover any damages as a direct result of user misuse or/and abuse. The warranty is void upon any unauthorized servicing, disassembly or modifications.

Troubleshooting guide
<p>The LED does not light up Check for correct connection and specification of the power adapter. Ensure that the original power adapter is used. Specifications: 9 V / DC, 1A Polarity: + —  —</p>
<p>The foot pedal does not work Check for correct connection of the foot pedal. Ensure that the foot pedal socket and plug is not twisted or broken.</p>
<p>No Flame In case of ignition or flame failure check if the burner head is clogged. Verify the input pressure of the used gas. Ensure that the correct nozzle is installed in the unit. Nozzle N: natural gas, input pressure: 18-25 mbar Nozzle P: propane / butane gas, input pressure: 47-57 mbar (Nozzle optional)</p>
<p>Flame too soft Check the position of the air adjustment. Check if the correct nozzle is installed. Nozzle N: natural gas, 18-25 mbar Nozzle P: propane / butane gas, 47-57 mbar (Nozzle optional) Check if the drilling of the active nozzle is blocked. Unscrew the active nozzle. (see paragraph 1) If the drilling is blocked clean with a brush or compressed air.</p>
<p>No ignition spark Check if the ceramic electrodes are in good condition. In some cases the electrodes may break. To check move the ends of the electrodes. If they are not moving they should be okay. If they are moving more than 0.5 mm the electrodes are broken. The electrodes can be dismantled and changed by the user. (see paragraph 5.1)</p>
<p>The burner shuts-off due to overtemperature frequently In case of overtemperature increase the air ventilation or change the operation site.</p>
<p>Green LED blinks 2x Ignition failure (see paragraph 4)</p>
<p>Green LED blinks 3x Flame failure (see paragraph 4)</p>
<p>Green LED blinks 4x Overtemperature (see paragraph 4)</p>

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EG-KONFORMITÄTSERKLÄRUNG

Declaration of Conformity

zu den Richtlinien 2004/108/EG und 2006/95/EG

Following the Directives 2004/108/EC and 2006/95/EC

Der elektronische Laborgasbrenner der Serie:

Electronic Laboratory gas burner

Gasprofi 1 SCS micro school edition Typ / type 6.007.000

erfüllt die in den nachfolgenden Prüfgrundlagen aufgeführten Anforderungen in Verbindung mit den in Anhang A1 aufgeführten Netzgeräten.

This declaration relates is in conformity with the relevant provisions of the following standards together with the normative document A1 mains connection.

1. **Elektromagnetische Verträglichkeit**
Electromagnetic Compatibility Directive
 - 1.1 **EN 61326-1: 2006 Elektrische Betriebsmittel für Leittechnik und Laboreinsatz, EMV-Anforderungen**
EN 61326-1: 2006 Electrical equipment for measurement, control and laboratory use, EMC requirements

Störaussendung:	Elektrische Betriebsmittel der Klasse B, Gruppe 1
Generic Emission Standard:	Electrical Equipment, class B, Group 1
Störfestigkeit:	Industrielle Bereiche
Generic Immunity Standard:	Industrial areas
2. **Sicherheit elektrischer Betriebsmittel**
Security of electrical resources
EN 61010-1: 2001 Sicherheitsanforderungen an elektrische Meß-, Steuer-, Regel- und Laborgeräte. Teil1: Allgemeine Anforderungen
EN 61010-1: 2001 Safety requirements for electrical equipment for measurement, control, and laboratory use Part 1: General requirements

Göttingen den 01.07.2009

B. Wartewig
Geschäftsführer
Manufacturer

Technical data:

Technology Microprocessor

Programs

Button: Start-Stop with timer, 60 min
Foot pedal (optional): Standard (flame during pressed foot pedal)

Safety features

ignition, flame and temperature monitor
automatic unit switch off, 4h

Gas supply and consumption

Gas supply: 1/4" left + filter
Gas types: H2ELL3B/P: natural gas E/LL, 18 - 25 mbar
liquid gas, 20 - 50 mbar
Connected load: 70 g/h liquid gas
Continuous cartridge operation: CV 360 - 40 min, Express 444 - 50 min,
CG 1750 - 150 min, C 206 - 170 min,
CP 250 - 210 min, CV 470 - 370min

Temperatures

Flame temperature: 1350 °C on liquid gas
1300 °C on natural gas (E)
Temperature threshold level: 1 kW liquid gas, 1 kW natural gas

Electrical

Power consumption: 2 VA
Power connection: 100 - 240 V / 50/60 Hz / max. 0.3 A
9 V DC / 1 A

Mechanical

Casing and operating controls: stainless steel / glass, UV and solvent resistant
Burner head: removable and decomposable, stainless steel
Cover of the burner shaft: Ø 23 mm, with drains
Measurements (B x H x T): 85 x 49 x 86 mm
Weight: 700 g

Licences

DIN-DVGW Reg.-Nr.: NG-2211AS0167
CE: EN 61326-1, EN 61010-1
EEC guidelines: 2004/108/EC, 2006/95/EC

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05/08