Laboratory Gas Burner & Sterilizer

WLD-TEC GmbH

Content

Innovative products, multiple solutions

Many years of international experience have made the WLD-TEC GmbH a global well respected manufacturer of spot heating systems for laboratory and industry use.

For every standard and special application, the WLD-TEC GmbH offers the optimum stationary or mobile safety laboratory gas burners as well as electrical annealing systems without an open flame.

The devices are sturdy and durable, with maximum integrated safety and extensive optional accessories.

WLD-TEC GmbH is your gas burner specialist since 1994, with research, development and production from a single source - quality made in Germany.

Fuego SCS

SCS

Safety Laboratory Gas Burner

Innovative technology that thinks with you!

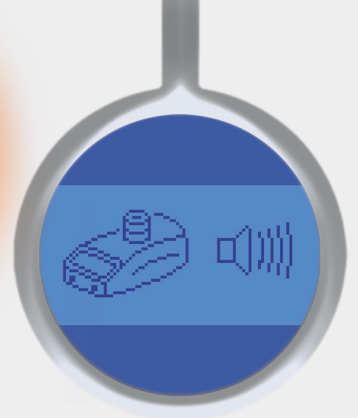**The *Fuego SCS* - Series.**

Graphical installation instructions

Zero-pressure shut-off

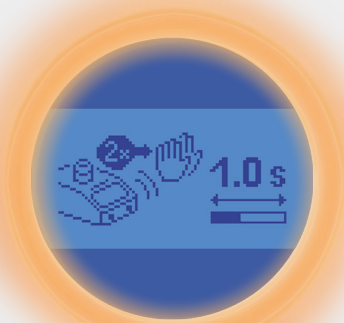**Gas consumption display**

Acoustic signals as operating aids

User-friendly stainless steel knobs

Animated, high-contrast graphic display

Individually adjustable Single or DoubleClick IR motion sensor

Automatic unit cut-off

Cooling reminder for inoculation loops

Temperature regulation for heating media

$\mathcal{F}$uego$^{\text{scs}\,\copyright}$ - A step ahead!

The innovative *Fuego SCS* - Series provides maximum safety and highest convenience for all flame-related applications in the laboratory.

Simply safe to operate
Depending on the model, the *Fuego SCS* - Series can be operated with touch-free IR-Sensor, button function or foot pedal.

Modern design
The unique shape is eye-catching*. The low casing makes comfortable working possible; the streamlined design reduces the disturbance of the air current in a clean room workbench to a minimum. With the new DualKnob for adjusting gas and air flow, the flame can be precisely regulated. The removable burner head can simply be dismantled into its individual components for in-depth cleaning.
Clogging is no longer a problem. Spilled liquids flow out through an integrated drain, and solid substances can be effortlessly removed by opening the burner shaft.

Universal
The *Fuego SCS* - Series can be operated with stationary natural gas and propane / butane gas supplies, cartridge gas or gas cylinders.

Top-off-the-Line safety
The Safety Control System SCS$^{\copyright}$ means state-of-the-art safety technology which constantly analyzes potential hazards and, if necessary, initiates safety measures, such as an interruption of the gas supply. In addition to the ignition and flame control functions and the overheating protection, the new safety package also features continuous burner head control (BHC). BHC unfailingly detects burner head clogging by liquids or solid substances and ensures the correct assembly of the burner head.
Exceptional passive safety features: A residual heat display protects against burns. The automatic unit cut-off function prevents unintentional ignition of the flame when the burner has not been ignited for a longer period.

Environment-conscious
Excellent energy efficiency in accordance with the most recent standards reduces gas and power consumption. This increases the burning time when gas cartridges are used.

Take-back guarantee
All old WLD-TEC laboratory gas burners which have been taken out of service will be taken back and disposed of in an environmentally compatible manner.

Robust
Fabricated entirely of stainless steel - from the controls to the gas connection - and with displays which are protected by heat-resistant glass, the *Fuego SCS* - Series withstands even extreme laboratory conditions.

The *Fuego SCS* - Series:
Ideal for use on cleanroom workbenches and in laboratories.

* registered design (EM 000 599 899)
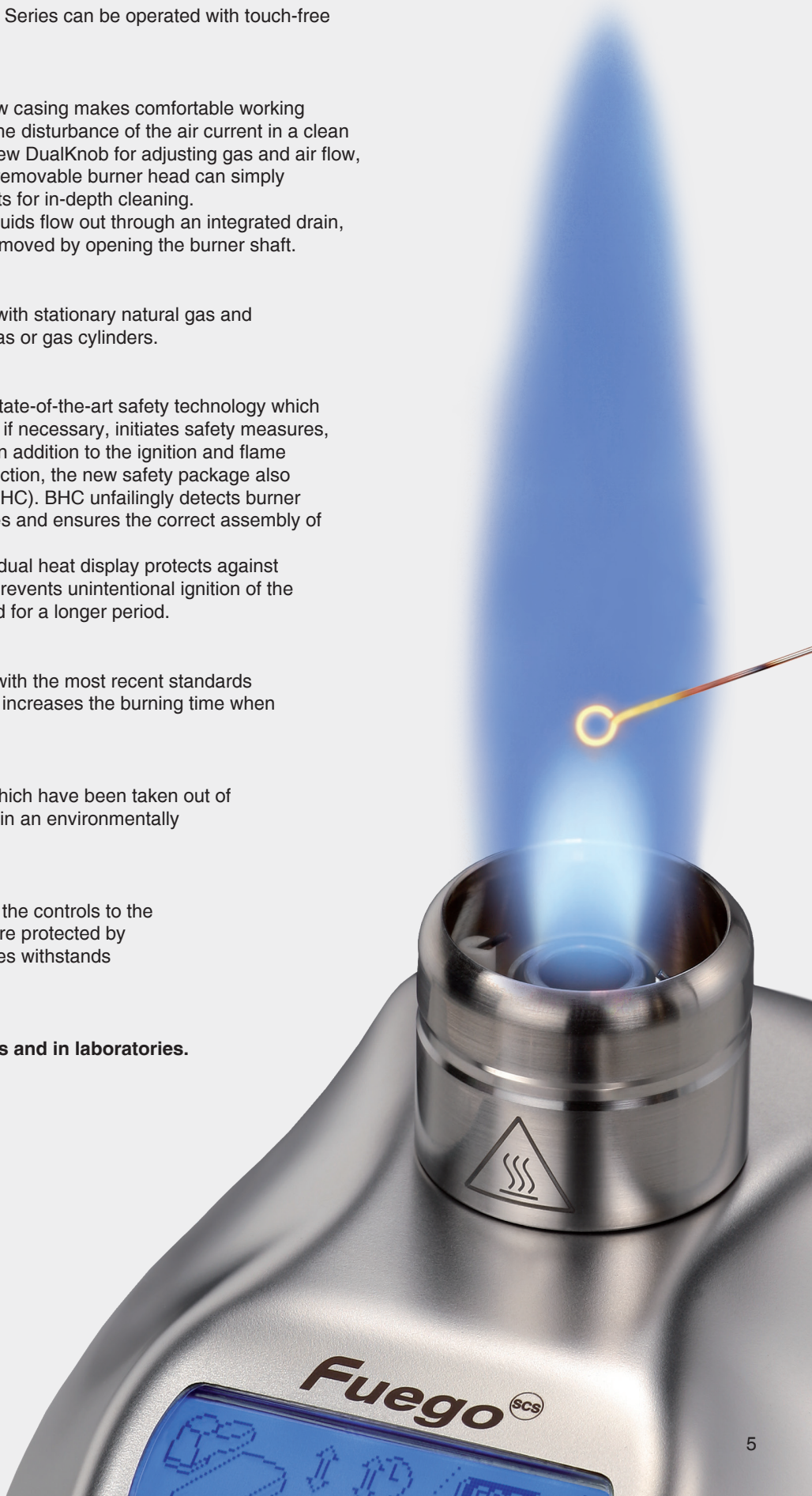
Fuego SCS basic

More than standard

The *Fuego SCS basic* can be safely operated by means of the supplied foot pedal or the button function. Different programs are available: a flexible start-stop function or the conventional foot pedal control for short-time applications. In addition, the flame can be started and stopped by briefly pressing on the function knob.

Fuego SCS basic RF

Wireless operation

Wireless and safe flame sterilization! The "RF" model allows operation via radio foot pedal without a disturbing cable. Otherwise the *Fuego SCS basic RF* has the same functions and safety systems as the standard model *Fuego SCS basic*. The radio foot pedal is included in the range of delivery.

Fuego SCS

Versatile

The *Fuego SCS* can be operated with the touch-free IR-Sensor, button function or foot pedal (optional). For all options, different programs exist that have been developed on the basis of practical experience: flexible start-stop functions, continuous application for up to 2 hours or programs for short flame sterilization - exact to the second.

More convenience

The animated and high-contrast graphic display can be easily read under all lighting conditions due to the blue background illumination. The self-explanatory, language-less symbol menu facilitates a rapid selection of all functions. The display is not in your line of sight? Acoustic signals additionally aid the user.

Innovative - The DoubleClick IR-Sensor

When activated, this additional safety function ensures that the burner can only be ignited by activating the DoubleClick IR-Sensor twice. The detection range and the time interval of the DoubleClick can be individually adjusted. As a result, unintentional ignition or ignition due to dropping or falling objects is virtually impossible, this increases safety considerably.

Precisely adjusted

With the new temperature regulation system and an optional temperature sensor, the laboratory gas burner becomes a temperature-control station.

Pressureless

The zero-pressure shut-down provides additional safety at the end of work. With it the residual pressure is released from the connection hose and the gas hose's service life is increased.

Gas exhausted?

No new cartridge at hand? The new gas consumption display reminds you to have a fresh gas cartridge on hand in a timely manner.

Flexible and individual

The *Fuego SCS* has to 2 user accounts and saves all safety settings, burning times and other parameters for individual and flexible use.

Cooled down

The precisely adjustable, exact to the second, cooling time reminder aids you in exactly complying with the required cooling period for inoculation loops.

Properly connected!

Graphic installation and operating instructions at the first switch-on facilitate the initial start-up.
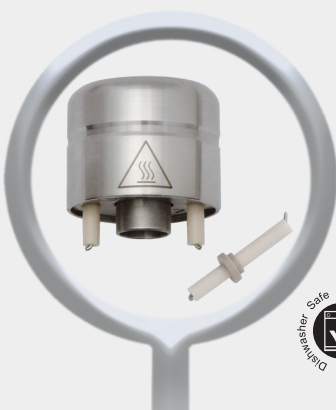
Fuego SCS pro

Battery performance

The exclusive *Fuego SCS pro* provides maximum flexibility. Wireless operation using state-of-the-art rechargeable battery technology guarantees independent operation. Two standard rechargeable batteries allow up to 9 hours of continuous operation. This corresponds to approximately 2000 inoculation loop flaming operations. The *Fuego SCS pro* has an integrated fast charging function and can be recharged in just 3 hours. The range of functions is identical to those of the *Fuego SCS*.

	Fuego SCS basic	Fuego SCS basic RF	Fuego SCS	Fuego SCS pro
Programs:				
Button function	✔	✔	✔	✔
Pedal Standard	✔	✔	✔	✔
Pedal Start-Stop	✔	✔	✔	✔
Sensor Auto-Off			✔	✔
Sensor Start-Stop			✔	✔
Temperature regulation			✔	✔
Safety Control System SCS©	✔	✔	✔	✔
with acoustic signals			✔	✔
Residual heat display	✔	✔	✔	✔
Animated graphic display			✔	✔
Foot pedal included	✔	✔ (radio)		
Single- or DoubleClick IR-Sensor			✔	✔
Battery operation with tilt sensor				✔
Cooling reminder			✔	✔
Zero-pressure shut-down			✔	✔
Gas consumption display			✔	✔
2 user accounts			✔	✔
Gas inlet filter	✔	✔	✔	✔
Removable & decomposable burner head	✔	✔	✔	✔
Housing, burner head, gas connection & controls made of stainless steel	✔	✔	✔	✔
DVGW approved	✔	✔	✔	✔
Art.-No.	8.201.000	8.203.000-RF	8.200.000	8.204.000

Removable & decomposable burner head, dishwasher-safe, autoclavable, made completely of stainless steel and ceramics

Burner shaft can be opened at the flick of a wrist for cleaning purposes

Tilt adjustment

Holding device for inoculation loop holders

The range:

Fuego SCS basic   **Art.-No. 8.201.000**

with button function
Stainless steel foot pedal
3 standard programs for foot pedal and button (function knob)

Fuego SCS basic RF   **Art.-No. 8.203.000-RF**

with button function
Wireless radio foot pedal (stainless steel, battery operated), 2 Mignon (AA) batteries
3 standard programs for foot pedal and button (function knob)
only available in EU countries

Fuego SCS   **Art.-No. 8.200.000**

with IR-Sensor, button and graphic display
6 standard programs for IR-Sensor, foot pedal,
button (function knob) and temperature regulation
DoubleClick IR-Sensor (connectable)
Adjustable IR-Sensor reaction distance and DoubleClick time
Stainless steel foot pedal optional e.g.: **Art.-No. 6.000.402**

Fuego SCS pro   **Art.-No. 8.204.000**

with IR-Sensor, button and graphic display
6 standard programs for IR-Sensor, foot pedal,
button (function knob) and temperature regulation
DoubleClick IR-Sensor (connectable)
Adjustable IR-Sensor reaction distance and DoubleClick time
Tilt sensor with gas safety cut off (>90°), battery compartment
2 Mignon(AA) rechargeable batteries, int. fast charge function
Stainless steel foot pedal optional e.g.: **Art.-No. 6.000.402**

Range of delivery for all models:

Safety Control System (SCS)
Burner Head Control (BHC) and residual heat display
Removable and decomposable burner head
Tilt mechanism, right / left
Holding device for 3 WLD-TEC inoculation loop holders
Nozzles for natural gas, propane / butane gas
Turbo flame
Removable cover of burner shaft for cleaning purposes
Multi-wrench for gas connection
Screwdriver for burner head and cover of burner shaft
Tubing connector with swivel nut
Switching power supply (global, level 6)
Instruction manual and 2-year warranty
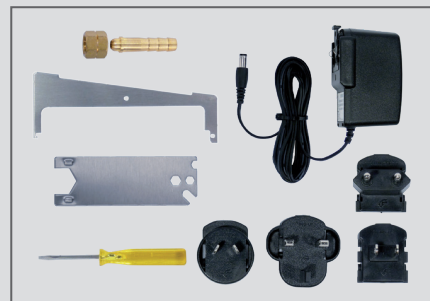
Assorted accessories available
(see page 18-19)

Autoloop Pro
fully automatic carrousel
for flame sterilizing inoculation loops
(see page 13-16)
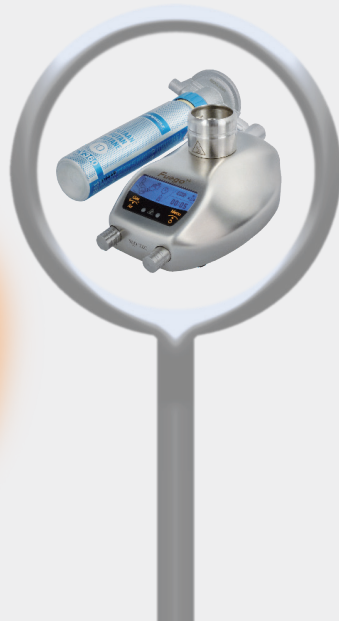
Technical Data:

Technology	Microprocessor, illuminated graphic display with acoustic signals as operating aids [2,3]
Programs	
IR-Sensor [2,3]:	Start-Stop with timer, 1 sec - 2 h
	Auto-Off with timer, 0 sec - 2 h
Foot pedal:	Standard (flame during pressed foot pedal)
	Start-Stop with timer
	Fuego SCS basic / Fuego SCS basic RF: 1 h
	Fuego SCS / Fuego SCS pro: 1 sec - 2 h
Button:	Start-Stop with timer
	Fuego SCS basic / Fuego SCS basic RF: 1 h
	Fuego SCS / Fuego SCS pro: 1 sec - 2 h
Temperature regulation [2,3]:	with timer, 1 sec - 2 h
	temperature range from +35 °C to +350 °C

Safety features	
Safety Control System (SCS) with gas safety cut off:	ignition and flame control
	temperature monitor
Burner Head Control (BHC):	burner head clogging and assembly monitor
	tilt sensor (>90°)[3]
Automatic unit switch off:	Fuego SCS basic / Fuego SCS basic RF: 4 h
	Fuego SCS / Fuego SCS pro: 1 min - 2 h
Residual heat display:	indicates a hot burner head
Zero-Pressure shut-off [2,3]:	end of work procedure to lower the pressure in the supply hose

Comfort functions [2,3]	cooling reminder, user account selection, gas consumption display for gas cartridges, graphical installation and operating instructions

Gas supply and consumption	
Gas connection:	1/4" left hand thread with gas filter
Gas types:	Natural gas E/LL,18 - 25 mbar, liquid gas 47.5 - 57.5 mbar, II$_{2ELL3B/P}$
Connected load:	95 l/h natural gas (LL), 70 g/h liquid gas
Continuous cartridge operation: (approx.)	Campingaz: CV 360 - 40 min, C 206 - 170 min, CP 250 - 210 min, CV 470 - 370 min, CG 1750 - 150 min, CV 300 - 200 min
	Guilbert: Express 444 / 445 - 50 min
	Coleman: C 250 - 160 min, C 500 - 320 min

Temperatures	
Flame temperature:	liquid gas: 1350 °C / natural gas (E): 1300 °C
Temperature threshold level:	liquid gas: 1.0 kW
	natural gas (E): 1.0 kW, natural gas (LL): 0.90 kW

Electrical	
Switching power supply (global):	100-240V / 50/60Hz / max. 0.3 A; 9 V DC / 1.3 A Level 6 (stand-by max. 0.1 W)
Power consumption:	2 VA (stand-by max. 0.1 VA)
IR-Sensor detection range [2,3]:	5 - 50 mm, adjustable
DoubleClick IR-Sensor [2,3]:	time range 0.5 - 2.5 sec (adjust. / disengageable)

Technical Data Battery Operation[3]	
Type rechargeable battery:	NiMH, 2.4 V (2 x Mignon(AA), 1.2 V, 2600 mAh)
Operating time:	up to 9 hours continuous operation
Charging time:	90% / 3 hours
Charging current:	700 mA

Radio Frequency System [1]	
Safety standard:	WLD-TEC safety radio protocol
Range:	2 - 5 m
Frequency:	2.4 GHz
Channels:	253
Batteries foot pedal:	2 x AA (Mignon)
Life time batteries (foot pedal):	approx. 2000 hours (operation 8 hours per day: > 1 year)

Mechanical	
Casing and operating controls:	stainless steel / glass, UV and solvent resistant flame-sterilizable
Burner head:	removable and decomposable, stainless steel / ceramic
Cover of burner shaft:	Ø 23 mm, with drains
Measurements (w x h x d):	103 x 49 x 130 mm
Weight:	700 g

Licenses	
DIN-DVGW Reg.-No.:	NG-2211AS0167
CE:	EN 61326-1, EN 61010-1, EN 61010-2-010, EN 301489[1], EN 300440-1[1], EN 300440-2[1]
EU guidelines:	2014/30/EU, 2014/35/EU, 2011/65/EU, 2014/53/EU (RED)[1]

[1] only Fuego SCS basic RF, [2] only Fuego SCS, [3] only Fuego SCS pro

SCS

2 Jahre Garantie / 2-Year Warranty

Energy Saving! / Energiesparend! EuP

DVGW GS geprüfte Sicherheit

made in Germany

CE

gas*profi 1* (scs)
micro

gas**profi 1** (scs)
micro

Button
Standard

Air
+ Gas -

Sensor

BHC / ⚠
StartStop

Mode
I/⏻

W**L**D-TEC

(SCS)
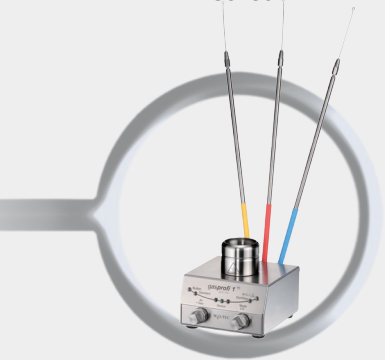
Safety Laboratory
Gas Burner

The smallest professional among the laboratory gas burners!

The *Gasprofi 1 SCS micro* - Series.
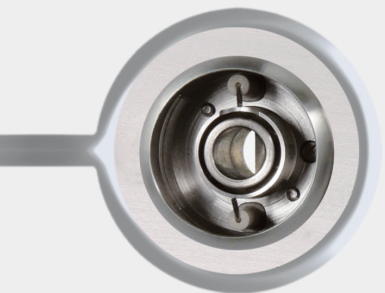
Button function

DoubleClick IR-Sensor

Holding device for inoculation loop holders

Burner shaft can be opened at the flick of a wrist for cleaning purposes

Removable & decomposable burner head, autoclavable, completely made of stainless steel and ceramics

Gasprofi 1 SCS micro - **Series: Safety and comfort in the smallest possible space. Optimal for all flame-related applications in the laboratory.**

Simply safe to operate
Depending on the model, the *Gasprofi 1 SCS micro* - Series can be operated with touch free IR-Sensor, button function or foot pedal. With the DualKnob for adjusting gas and air flow, the flame can be precisely regulated.

More room to work
The *Gasprofi 1 SCS micro* - Series is extremely space-saving. This allows nearly effortless work as a result of its extraordinarily low working height.

Outstanding safety
The Safety Control System SCS© demonstrates state-of-the-art safety technology which constantly analyzes potential hazards and, if necessary, initiates safety measures, such as an interruption of the gas supply.

Robust
All external components are made of stainless steel; this guarantees the greatest possible working sterility. The removable burner head can simply be dismantled into its individual components for in-depth cleaning.
Clogging is no longer a problem. Spilled liquids flow out through an integrated drain, and solid substances can be easily removed by opening the burner shaft.

Universal
The *Gasprofi 1 SCS micro* - Series can be operated with stationary natural gas and propane / butane gas supplies, cartridge gas or gas cylinders.

Environment-conscious
Excellent energy efficiency in accordance with the most recent standards reduces gas and power consumption. This increases the burning time when gas cartridges are used.

Gasprofi 1 SCS micro - **Series: Ideal for use in cleanroom workbenches and laboratories.**

gasprofi 1 ^{scs} school edition
micro

For optimal safety in modern schools
Bunsen burners were standard equipment in schools for many years but they were
the cause of many accidents and fires. *Gasprofi 1 SCS micro school edition* changes
all this! A safe gas burner for sterilizing, heating and other flame related applications.

Excellent safety due to the Safety Control System SCS ©
The flame is re-ignited automatically if it goes out inadvertently. For example,
if the flame is extinguished due to over-boiling of liquids and cannot be re-ignited,
the burner automatically shuts the gas supply off for safety.

Easy operation
Switch flame on and off at the touch of a button. Optionally, the *Gasprofi 1 SCS
micro school edition* can also be operated by a foot pedal* or an external
DoubleClick IR-Sensor*.

*optional

	gasprofi 1 scs micro school edition	gasprofi 1 scs micro
Programs:		
Button function	✓	✓
Pedal Standard	✓	✓
Pedal Start-Stop		✓
Sensor Auto-Off & Start-Stop		✓
Safety Control System SCS©	✓	✓
Residual heat display		✓
Burner Head Control BHC		✓
Foot pedal included		✓
DoubleClick IR-Sensor		✓
Gas inlet filter	✓	✓
Removable & decomposable burner head	✓	✓
Housing, burner head, gas connection & controls made of stainless steel	✓	✓
DVGW approved	✓	✓
Art.-No.	**6.007.000**	**6.004.000**

gasprofi 1 ^{scs}
micro

Multi-Use
The *Gasprofi 1 SCS micro* can be operated with touch free IR-Sensor, button function or
foot pedal. For all options, different programs exist that have been developed from practical
experience: flexible start-stop functions, continuous application for up to 60 minutes or
programs for short flame sterilization – exact to the second.

Innovative - The DoubleClick IR-Sensor
This safety function ensures that the burner can only be ignited by activating the DoubleClick
IR-Sensor twice. As a result, unintentional ignition or ignition due to dropping or falling objects
is virtually impossible, increasing safety considerably.

Top-off-the-Line safety
In addition to the ignition and flame control function and the overheating protection, the Safety
Control System SCS© also features continuous burner head control (BHC). BHC unfailingly
detects burner head clogging by liquids or solid substances and ensures the correct assembly
of the burner head. Exceptional passive safety features: After prolonged use, the residual heat
display will signal that the burner head is still hot in order to protect the user from burns.

The range:

gasprofi 1 (SCS) *school* edition   **Art.-No. 6.007.000**
micro

with button function
2 standard programs
for button (function knob) and foot pedal
Safety Control System (SCS)
Stainless steel foot pedal optional e.g.: **Art.-No. 6.000.402**

gasprofi 1 (SCS)   **Art.-No. 6.004.000**
micro

with DoubleClick IR-Sensor, button function
and stainless steel foot pedal
5 standard programs for IR-Sensor,
button (function knob) and foot pedal
Adjustable IR-Sensor reaction distance
Safety Control System (SCS)
with Burner Head Control (BHC) and residual heat display
Holding device for 3 inoculation loop holders

The range for both models:

Removable and decomposable burner head
Tilt mechanism, right / left
Nozzles for natural gas, propane / butane gas
Turbo flame
Wrench 17 mm for gas connection
Screwdriver for burner head and cover of burner shaft
Tubing connector with swivel nut
Switching power supply (global, level 6)
Instruction manual and 2-year warranty

(SCS)

2 - 2 Jahre Garantie / 2-Year Warranty

EuP - Energy Saving! / Energiesparend!

DVGW GS geprüfte Sicherheit

made in Germany

CE

Technical Data:

Programs
Button: Start-Stop with timer, 60 min
Foot pedal: Standard (flame during pressed foot pedal)
                           Start-Stop with timer, 60 min [1]
IR Sensor [1]:   Start-Stop with timer, 60 min
                           Auto-Off with learn function, 1 sec - 60 min

Safety features
Safety Control System (SCS)
with gas safety cut off: ignition and flame control
                           temperature monitor
                           automatic unit switch off, 10 min / 4 h
Burner Head Control (BHC) [1]: burner head clogging
                           and assembly monitor
Residual heat display [1]: indicates a hot burner head

Gas supply and consumption
Gas connection: 1/4" left with gas filter
Gas types: natural gas E/LL,18 - 25 mbar
                           liquid gas 47.5 - 57.5 mbar, II$_{2ELL3B/P}$:
Connected load: 95 l/h natural gas (LL), 70 g/h liquid gas
Continuous cartridge operation: Campingaz: CV 360 - 40 min, C 206 - 170 min,
(approx.)   CP 250 - 210 min, CV 470 - 370 min,
                                   CG 1750 - 150 min, CV 300 - 200 min
                           Guilbert: Express 444 / 445 - 50 min
                           Coleman: C 250 - 160 min, C 500 - 320 min

Temperatures
Flame temperature: 1350 °C on liquid gas
                           1300 °C on natural gas (E)
Temperature threshold level: liquid gas: 1.0 kW
                           natural gas (E): 1.0 kW, natural gas (LL): 0.90 kW

Electrical
Power consumption: 2 VA (Stand-by max 0.1 VA)
Switching power supply (global): 100-240 V / 50/60Hz / max. 0.3 A; 9V DC / 1.3 A
                           Level 6 (Stand-by max. 0.1 W)
IR-Sensor coverage [1]:   35 - 70 mm, adjustable
DoubleClick IR-Sensor [1]: time range 1 sec

Mechanical
Casing and operating controls: stainless steel / glass, UV and solvent resistant
                           flame-sterilizable
Burner head: removable and decomposable, stainless steel
Cover of burner shaft: Ø 23 mm, with drains
Measurements (w x h x d): 85 x 49 x 86 mm
Weight: 700 g

Licenses
DIN-DVGW Reg.-No.:   NG-2211AS0167
CE: EN 61326-1, EN 61010-1, EN61010-2-010
EU guidelines: 2014/30/EU, 2014/35/EU & 2011/65/EU

[1] only Gasprofi 1 SCS micro
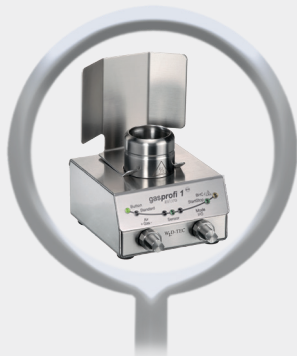
Windshield
stainless steel, for a stable flame
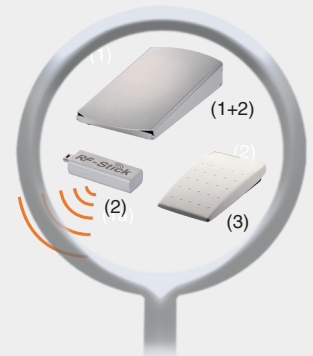under conditions of strong air flow
Art.-No. 8.000.600

Spray protector
for more safety when handling
with pathogenic material
Art.-No. 6.000.200

Autoloop Pro
fully automatic carrousel for
flame sterilizing inoculation loops
Art.-No. 6.000.400

(1) Foot pedal
stainless steel, cable length 3.0 m
Art.-No. 6.000.402

(2) Foot pedal radio set RF-Stick
only available in EU countries
Art.-No. 6.000.404-RF

(3) Foot pedal Mini
plastic, cable length 3.0 m
Art.-No. 6.000.403

Safety adapter
with integrated pressure regulator
for gas cartridges **CV 360**
Art.-No. 8.000.700

External IR - Sensor
touch-free flame activation,
stainless steel, cable length 0.4 m
Art.-No. 6.000.406

Burner head
double lengh, decomposable
and autoclavable
Art.-No. 8.100.091

**Additional accessories
see page 18-19**

12

Autoloop PRO

Carrousel for flame sterilizing inoculation loops

Autoloop PRO

The fully automatic carrousel for flame sterilizing inoculation loops.

The inoculation loop carrousel *Autoloop*PRO, which is suitable for up to 4 inoculation loops, was developed to comply with current requirements in microbiological, cellbiological and biotechnological laboratories.

Modern design
The stable housing enables comfortable and easy access to inoculation loops. Removal positions on both sides make the carrousel equally suitable for right and left handers.

More comfort
Keep all functions in view with the fully graphic display. The graphic menu control makes it easy to select all functions quickly. Flaming and cooling time can be adjusted to the second. During the flame sterilizing, the display shows the remaining flaming time. The *Autoloop*PRO rotates and controls flaming automatically.
No unintentional use of hot inoculation loops: When flaming is completed, the display shows the remaining cooling time and the removal positions of cool inoculation loops. All the suspended inoculation loops can be flamed as needed in one full rotation of the carrousel. For additional flame sterilization (e.g. of bottle necks or test tubes) a foot pedal* can be activated during the automatic operation. For this purpose the *Autoloop*PRO turns the inoculation loop out of the flame position and enables additional flame sterilization.

More safety
The nearly perpendicular position of the inoculation loop holder protects even the sleeve nut of the holder from possible contaminations. Additionally, an intelligent sensor of the *Autoloop*PRO monitors safe sterilization.

Saves energy, time and costs
Precise flame sterilization time extends the life of the inoculation loops and reduces gas consumption. Continuous working during the flaming and the cooling phases of the inoculation loops saves a great deal of time and makes it possible to work efficiently.

Robust
Fabricated entirely of stainless steel, anodized aluminium and a display, protected by heat resistant glass, the *Autoloop*PRO can withstand extreme laboratory conditions.

* foot pedal optional

Easy to use
All parameters are easy to set; quick start button for immediate start.

Mount safely
Coordinated mounts and reliable optical detectors for inoculation loop holders.

Optimal sterilization
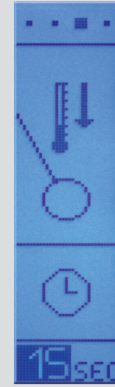Sterilization monitor for safe sterilization of inoculation loops.

Start options

Start immediately or sterilize all inoculation loops in a full rotation.
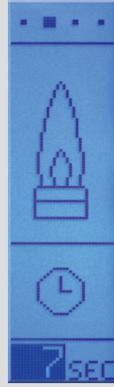
Flame time
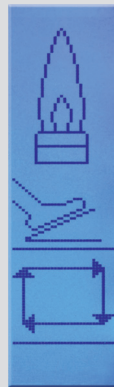
Precise settings of the required flame sterilization time.

Cooling period

The cooling time can be set for the inoculation loop material used - exact to the second.

Sterilization monitor

An intelligent sensor monitors the safe sterilization. Three setting options /off switch.

Additional flame sterilization

e.g. of bottle necks or test tubes during the automatic operation by activating a foot pedal.

Everything visible at a glance

Removal positions of cool inoculation loops or the remaining cooling time, residual heat display and sterilization time.

Autoloop^{PRO} WLD-TEC

*Autoloop*PRO with
Fuego SCS / pro

*Autoloop*PRO with
Fuego SCS basic / RF

*Autoloop*PRO with
gasprofi 1 SCS micro

Speed-up Flame Sterilizing Inoculation Loops and Cut Down Your Costs!

Case 1: Bunsen Burner & 1 Inoculation Loop

Loop 1

4 sequences finished after 80 seconds

Legend:
- Working with inoculation loop
- Flaming inoculation loop
- Time to change loops
- Cooling down period

Case 2: Fuego SCS & 4 Inoculation Loops placed on a Tray

Loop 1
Loop 2
Loop 3
Loop 4

... after 40 seconds
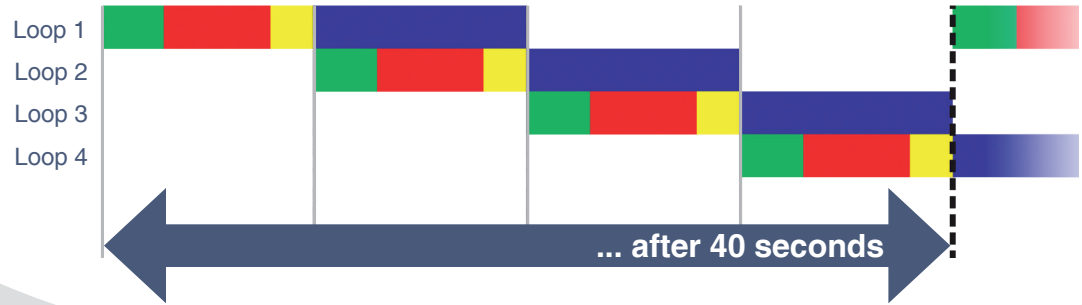
Case 3: Fuego SCS with Automated Caroussel Autoloop Pro & 4 Inoculation Loops

Loop 1
Loop 2
Loop 3
Loop 4

... after 24 seconds

(Optimized Flaming with Sterilization Monitor)
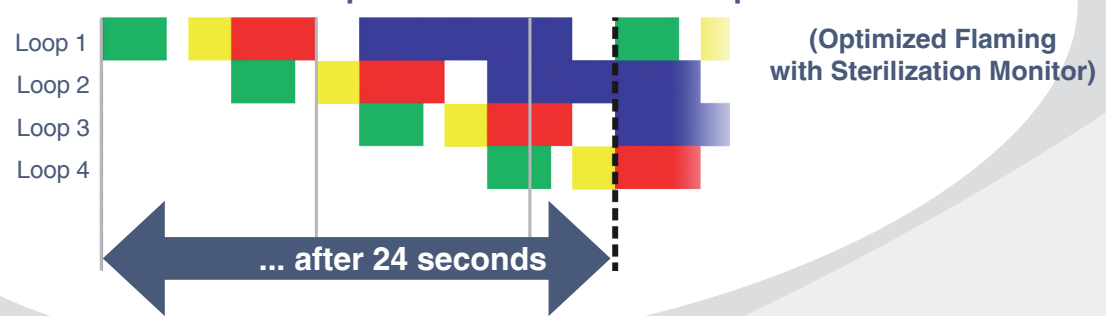
Working with the Autoloop Pro (Case 3):
Save 70% working time compared to Case 1
Save 40% working time compared to Case 2

Compared to Case 2 the Autoloop Pro has paid off after approx. 50 working hours!*

* based on an hourly rate of 30 Euro

The range:

Autoloop PRO

4 inoculation loop holders
4 inoculation loops
Pedestal
Foot pedal connector
Instruction manual
2-year warranty

Laboratory gas burner **not** included

for Fuego SCS - Series
Art.-No. 8.000.400

for Gasprofi 1 SCS micro - Series
Art.-No. 6.000.400

2 Jahre Garantie / 2-Year Warranty

Energy Saving / Energiesparend — EuP

made in Germany

CE

Technical data:

Technology:	Microprocessor
Display:	fully graphic dot-matrix
Rotational direction:	left / right, depends on removed holder
Inoculation loop holder:	1 - 4, with optical holder detection
Time of flame sterilizing:	1 - 15 sec
Time for cool-down period:	1 - 45 sec
Additional flame sterilization:	by foot pedal (optional)
Safety features:	temperature control
	flame activation warning
	indicator of remaining cooling time
	tilt sensor, residual heat display
Adjustable sterilization monitor:	1 - off
	2 - low intensity
	3 - middle intensity
	4 - high intensity
Stand by:	automatic unit switch off: 1 h
	(or with stand-by time of the burner)
Operating voltage:	via gas burner (foot pedal socket)
Casing:	stainless steel & aluminum,
	UV and solvent resistant
Measurements:	Pedestal (Art.-No. 8.000.400):
	135 x 180 mm (w x d)
	Pedestal (Art.-No. 6.000.400):
	135 x 135 mm (w x d)
	height *Autoloop* PRO: 305 mm
Weight:	Art-No.: 8.000.400: 1200 g
	Art-No.: 6.000.400: 1100 g
CE:	EN 61326-1, EN 61010-1, EN 61010-2-010
EU guidelines:	2014/35/EU, 2014/30/EU, 2011/65/EU

Inoculation loop holder
stainless steel, with sleeve nut,
for inoculation loops
with wire Ø 0.6 - 1 mm

Length 245 mm
Art.-No. 6.000.360

Length 215 mm
Art.-No. 6.000.365
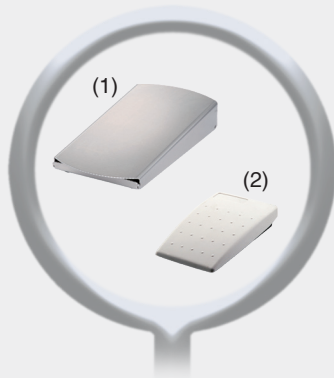
(1) Foot pedal
stainless steel, cable length 3.0 m
Art.-No. 6.000.402

(2) Foot pedal Mini
plastic, cable length 3.0 m
Art.-No. 6.000.403

Inoculation loops, wire Ø 0.6 mm

Special stainless steel
Ø 3 mm **Art.-No. 6.000.373**
Ø 5 mm **Art.-No. 6.000.375**

Platinum / Iridium
Ø 1 mm **Art.-No. 6.000.381**
Ø 3 mm **Art.-No. 6.000.383**
Ø 5 mm **Art.-No. 6.000.385**
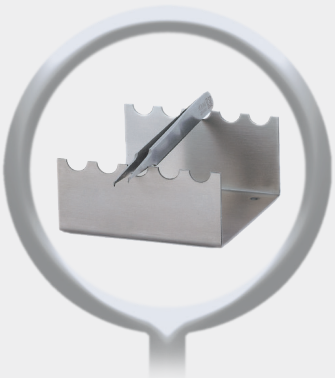
Tray, mobile
stainless steel, 5 places
Art.-No. 6.000.320

Spray protector for *Autoloop* PRO
for more safety when handling with
pathogenic material
Art.-No. 6.000.210

**Suitable gas burners
see page 3-12**
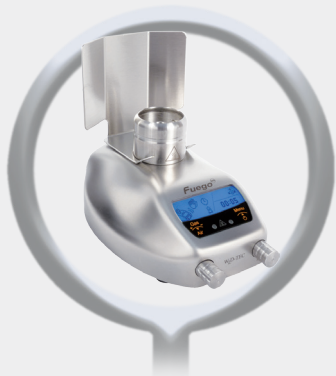
Fuego SCS / gasprofi 1 SCS micro

Accessories

Windshield
stainless steel, for a stable flame under conditions of strong air flow
Art.-No. 8.000.600

Spray protector
for more safety when handling with pathogenic material of strong air flow
Art.-No. 6.000.200

Burner head
stainless steel, double lengh for better heating of Erlenmeyer flasks, decomposable, dishwasher-proof and autoclavable
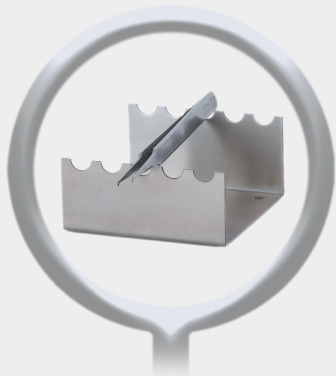**Art.-No. 8.100.091**

Tray
stainless steel, right, left or rear side
for Fuego SCS - Series
Art.-No. 8.000.340
for Gasprofi 1 SCS micro - Series
Art.-No. 6.000.341

Tray, mobil
stainless steel, 5 places
Art.-No. 6.000.320

External IR - Sensor
touch-free flame activation, stainless steel, cable length 0.4 m
Art.-No. 6.000.406

Foot pedal radio set RF Stick
cable-free foot pedal operation, simply connect the RF-Stick and control the gas burner with wireless radio technology (available in EU countries only)
for Fuego SCS - Series and Gasprofi 1 SCS micro - Series (as of Serial-No. 05...)
Art.-No. 8.000.404-RF
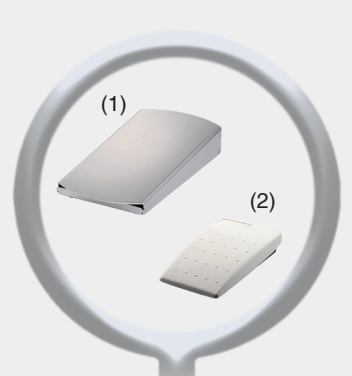
(1) Foot pedal
stainless steel, cable length 3.0 m
Art.-No. 6.000.402
(2) Fußpedal Mini
plastic, cable length 3.0 m
Art.-No. 6.000.403

Inoculation loop holder
stainless steel, with sleeve nut, for inoculation loops with wire Ø 0.6 - 1 mm
Length 245 mm
Art.-No. 6.000.360
Length 215 mm
Art.-No. 6.000.365
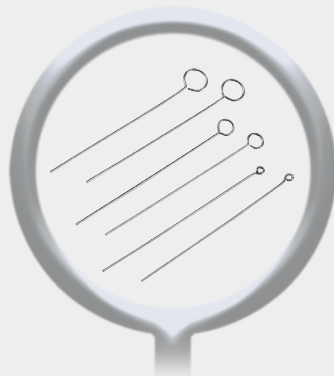
Inoculation loops, wire Ø 0.6 mm
Special stainless steel
Ø 3 mm **Art.-No. 6.000.373**
Ø 5 mm **Art.-No. 6.000.375**
Platinum / Iridium
Ø 1 mm **Art.-No. 6.000.381**
Ø 3 mm **Art.-No. 6.000.383**
Ø 5 mm **Art.-No. 6.000.385**

Measuring adapter
for thermocouples, type K, temperature range from +35 °C to +350 °C (only Fuego SCS / Fuego SCS pro as of Serial-No. 12Z...)
Art.-No. 8.200.230
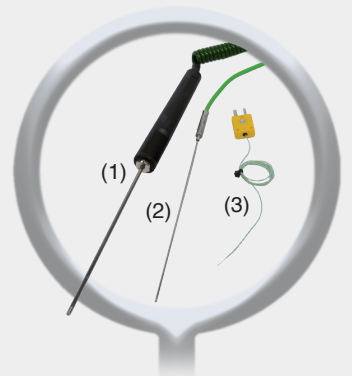
Thermocouple type K
(only Fuego SCS / Fuego SCS pro as of Serial-No. 12Z...)
(1) Immersion sensor Ø 3 mm with handle, sensor length 130 mm, helix connection cable
Art.-No. 8.200.240
(2) Immersion sensor Ø 1.5 mm, sensor length 150 mm, bendable, cable length 2 m
Art.-No. 8.200.241
(3) Air sensor, PTFE insulated, cable length 1 m
Art.-No. 8.200.242

Safety adapter
with integrated pressure regulator
for gas cartridges **CV 360**
Art.-No. 8.000.700

for gas cartridges **Express 444**
Art.-No. 6.000.750

Safety adapter C 206
with integrated pressure regulator,
gas leak protection and DVGW-tubing
(0.5 m) for gas cartridges **C 206**
Art.-No. 6.000.800

Safety adapter CV
with integrated pressure regulator,
gas leak protection, DVGW-tubing
(0.5 m) and stainless steel stand
for gas cartridges
CV 470 Art.-No. 6.000.850
CV 300 Art.-No. 6.000.831
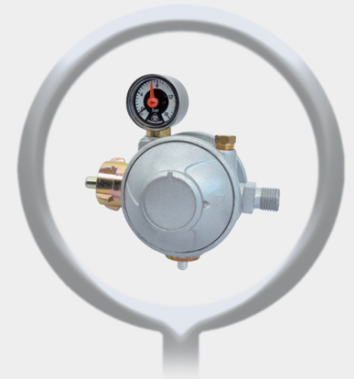
DVGW low pressure regulator
DIN 4811-4, for household liquid
gas installation, with overpress.-,
temperature- fuse & manometer,
for **gas bottles up to 14 kg**
Art.-No. 6.000.150

Safety adapter CP 250
with integrated pressure regulator
and DVGW-tubing (0.5 m)
for gas cartridges **CP 250**
Art.-No. 6.000.820

Safety adapter CG 1750
with integrated pressure regulator,
DVGW-tubing (0.5 m) and stainless steel
stand for gas cartridges with 7/16" × 28
UNEF-thread, e.g. **CG 1750**
Art.-No. 6.000.810

Tubing deflector
for front side gas connection
Art.-No. 6.000.124

90° connection
for sidewise tubing connection
Art.-No. 6.000.123

Gas cartridges propane / butane
with valve

(1) CV 360, 52 g   **Art.-No. 6.000.180**
(2) CV 300, 240 g   **Art.-No. 6.000.183**
(3) CV 470, 450 g   **Art.-No. 6.000.185**
(4) CP 250, 250 g   **Art.-No. 6.000.192**
(5) CG 1750, 170 g   **Art.-No. 6.000.181**
(6) Express 444, 60 g   **Art.-No. 6.000.182**

without valve

(7) C 206, 190 g   **Art.-Nr. 6.000.190**
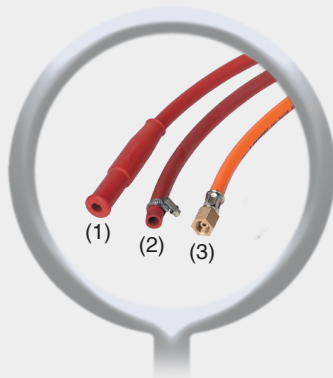
DVGW-Safety tubing
(1) for push-fit connection (0.5 m)
Art.-No. 6.000.102

(2) for push-fit connection,
with 2 tubing clips (0.5 m)
Art.-No. 6.000.101

(3) for threaded connection (0.5 m)
Art.-No. 6.000.112

other length on demand
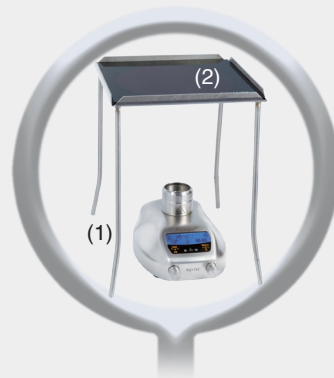
(1) Quadrupod
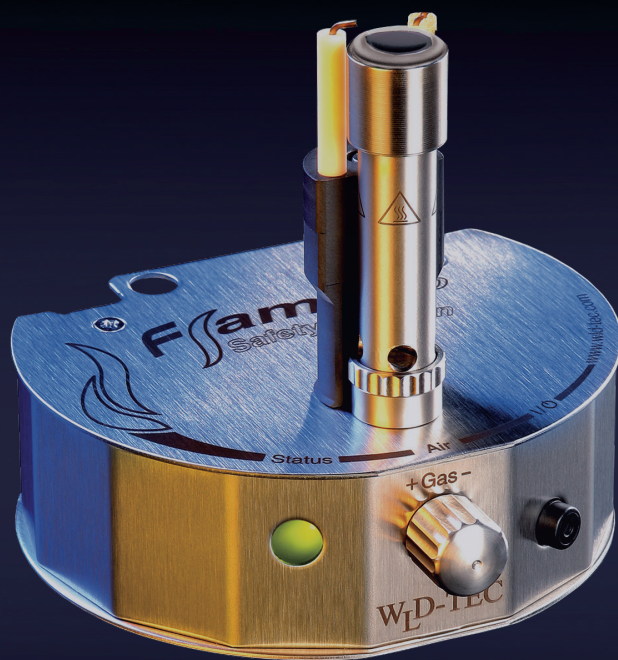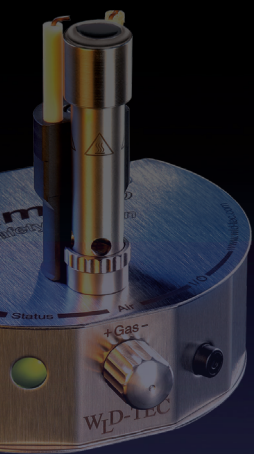155 x 155 x 210 mm (l x w x h)
Art.-No. 6.000.930

(2) Ceran cover plate
155 x 155 mm (l x w)
Art.-No. 6.000.931

External charging station
for rechargeable batteries:
Mignon (AA), NiMH
(only Fuego SCS pro)
Art.-No. 8.000.950

Innovative safety technology

Flame without match

Easy handling

F/ame 100
Safety Bunsen

SCS

W/D-TEC

Safety Laboratory
Gas Burner

Flame¹⁰⁰
Safety Bunsen

The *Flame ¹⁰⁰* – sets new standards in the Bunsen burner class!
The safe alternative for all traditional Bunsen or alcohol burners!

Multi-Use
The *Flame ¹⁰⁰* is ideally suited for all flame related applications in the laboratory. The precision flame allows graduated heating of dental tools as well as safe sterilization of microbiological instruments. Flame size and intensity can be adjusted infinitely.

Easy operation
The safety Bunsen burner *Flame ¹⁰⁰* activates immediately with the push of a button. No match or a pilot flame are required. Optionally, the *Flame ¹⁰⁰* can also be operated by a foot pedal* or an external IR - Sensor*.
The *Flame ¹⁰⁰* is suitable for stationary natural gas and propane / butane gas supplies as well as gas cartridges or gas cylinders. Numerous adapter systems are optionally available.

Reliable safety
The proven Safety Control System SCS© is also incorporated in the *Flame ¹⁰⁰*. All potential hazards are constantly monitored and, if necessary, protective measures – such as the shutting off the gas supply – are activated. In addition to the ignition and flame control function and the overheating protection the safety package also features the continuous burner head control BHC. BHC unfailingly identifies burner head clogging by liquids or solid substances. Compared with a conventional Bunsen burner, the *Flame ¹⁰⁰* with the safety standard "SCS" eliminates the risk of a gas leak or an explosion.

Efficient
The *Flame ¹⁰⁰* is economical to operate and attractively priced for any laboratory, thus making savings for both your budget and the environment. Compared with traditional Bunsen burners, the gas consumption is reduced to a minimum, because the flame burns only when it is really needed!

Compact and sturdy
The housing and burner tube of the *Flame ¹⁰⁰* are made of stainless steel. The removable burner tube makes cleaning easy and the small foot print is an advantage for any lab bench.

Flame ¹⁰⁰ - **for a safe flame in the laboratory!**

* optional

The range:

Flame¹⁰⁰
Safety Bunsen

Art.-No. 2.100.000

with button function
Safety Control System (SCS) with Burner Head Control (BHC)
2 standard programs
for button (function knob) and foot pedal
Removable burner tube
Holding device for 2 inoculation loop holders
Nozzles for natural gas, propane / butane gas
Wrench 17 mm for gas connection
Tubing connector with swivel nut
Screwdriver for electrode holder
Switching power supply (global, level 6)
Instruction manual and 2-year warranty
Stainless steel foot pedal optional e.g.: **Art.-No. 6.000.402**

made in Germany

CE
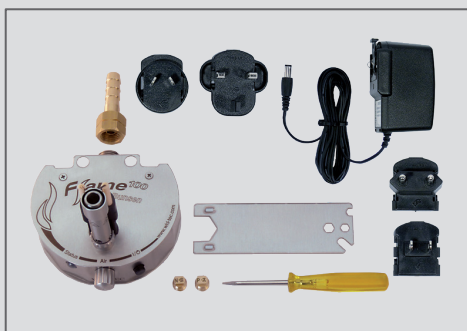
Technical Data:

Programs

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

Safety features
Safety Control System (SCS)

with gas safety cut off:	ignition and flame control
	temperature monitor
	burner head clogging monitor (BHC),
	automatic unit switch off after 4 h

Gas supply and consumption

Gas connection:	1/4" left with gas filter
Gas types:	natural gas E/LL,18 - 25 mbar,
	liquid gas 47.5 - 57.5 mbar, II₂ELL3B/P
Connected load:	43 g/h liquid gas, 49 l/h natural gas (LL)
Continuous cartridge operation:	Campingaz: CV 360 - 65 min, C 206 - 230 min,
(approx.)	CP 250 - 305 min, CV 470 - 550 min,
	CG 1750 - 210 min, CV 300 - 290 min
	Guilbert: Express 444 / 445 - 70 min
	Coleman: C 250 - 230 min, C 500 - 440 min

Temperatures

Max. Flame temperature:	1200 °C on liquid gas
	1170 °C on natural gas (E)
Temperature threshold level:	0.55 kW liquid gas, 0.50 kW natural gas (E)
	0.40 kW natural gas (LL)

Electrical

Power consumption:	2 VA (Stand-by max 0.1 VA)
Power connection (global):	100-240V / 50/60Hz / max. 0.3A; 9V DC / 1.3A
	Level 6 (Stand-by max. 0.1 W)

Mechanical

Burner tube:	removable, stainless steel
Measurements (w x h x d):	89 x 34 x 88 mm
Height with burner tube:	4 mm
Weight:	385 g

Licenses

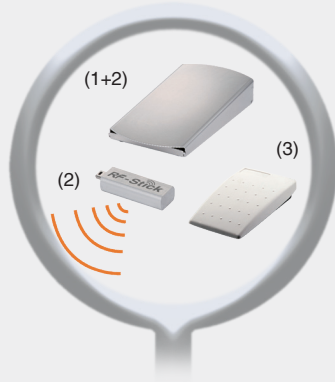|	
DIN-DVGW Reg.-No.:	NG-2211AS0167
CE:	EN 61326-1, EN 61010-1, EN 61010-2-010
EU guidelines:	2014/35/EU, 2014/30/EU, 2011/65/EU

**Safety adapter with DVGW-tubing (0.5 m) and pressure regulator**

for gas cartridges:

C 206:	**Art.-No. 6.000.800**
CP 250:	**Art.-No. 6.000.820**
CG1750:	**Art.-No. 6.000.810**
CV 300:	**Art.-No. 6.000.830**
CV 470:	**Art.-No. 6.000.850**

(1) Foot pedal
stainless steel, cable length 3.0 m
Art.-No. 6.000.402

(2) Foot pedal radio set RF-Stick
only available in EU countries
Art.-No. 6.000.404-RF

(3) Foot pedal Mini
plastic, cable length 3.0 m
Art.-No. 6.000.403
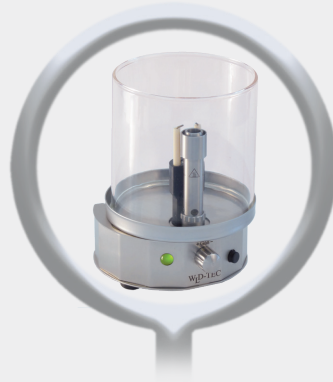
Spray and Wax protector
stainless steel base
and glass cylinder
Art.-No. 2.000.200

without glass cylinder
Art.-No. 2.000.201

Inoculation loop holder
stainless steel, with sleeve nut,
for inoculation loops
with wire Ø 0.6 - 1 mm

Length 245 mm
Art.-No. 6.000.360
Length 215 mm
Art.-No. 6.000.365

Safety adapter 360
with integrated pressure regulator
for gas cartridges CV 360
Art.-No. 2.000.701
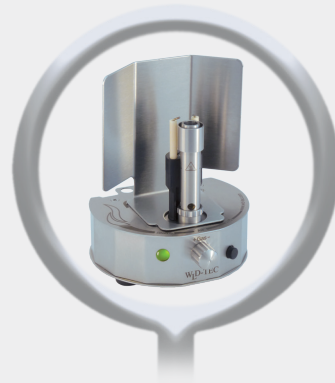
Windshield
stainless steel, for a stable flame
under conditions of strong air flow
Art.-No. 2.000.600

Tilt adjustment
stainless steel
Art.-No. 2.000.300
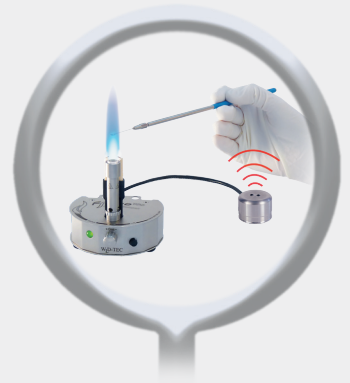
External IR - Sensor
touch-free flame activation,
stainless steel, cable length 0.4 m
Art.-No. 6.000.406

*Flame*¹⁰⁰ Safety Bunsen

Programs:	
Button function	✔
Pedal Standard (foot pedal optional)	✔
Safety Control System SCS©	✔
Brennerkopfüberwachung (BHC)	✔
Gas inlet filter	✔
Removable & decomposable burner head	✔
Housing, burner head, gas connection & controls made of stainless steel	✔
DVGW approved	✔

Inoculation loop holder
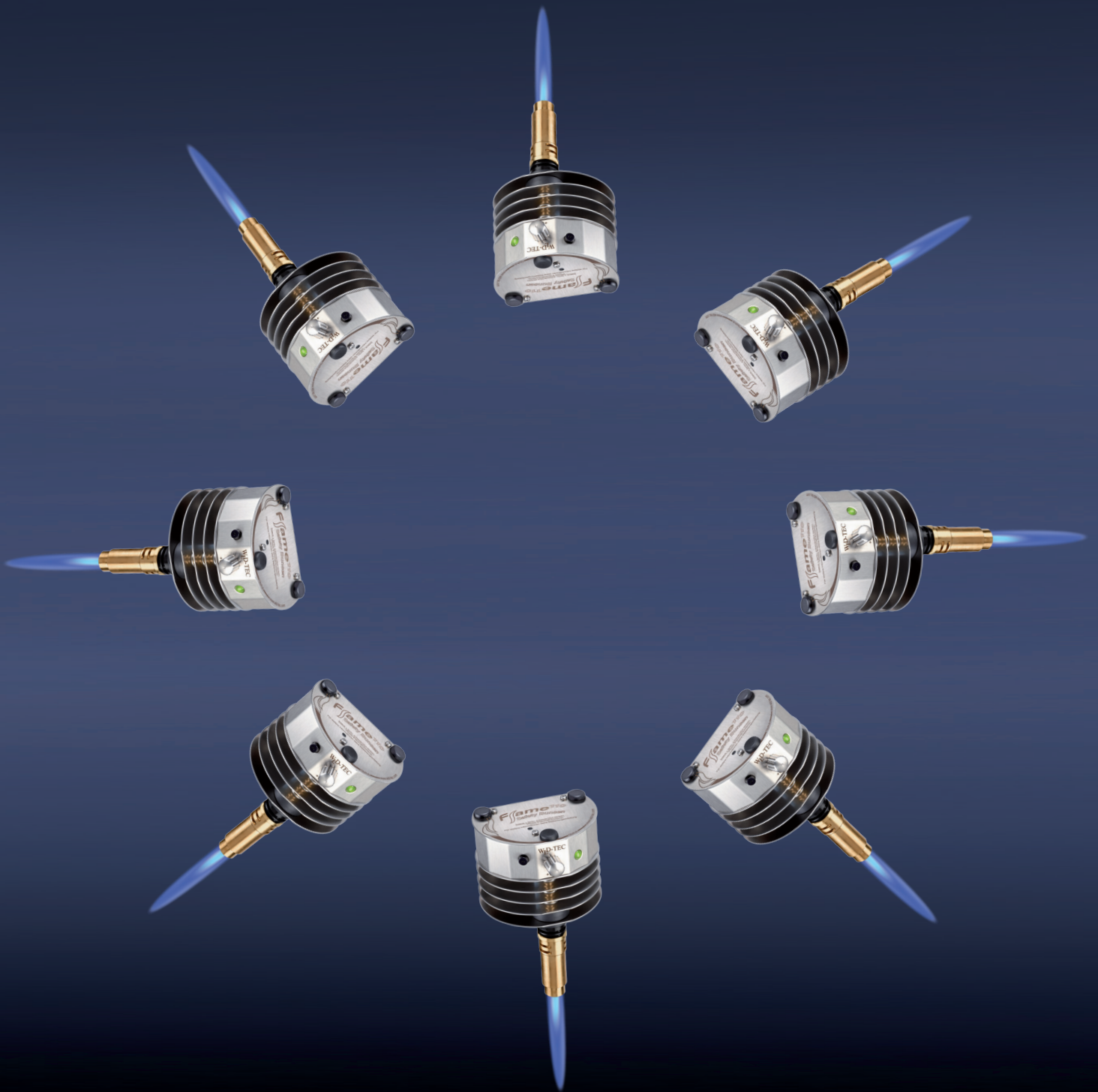
F/ame 110
Safety Bunsen

Flaming
from any angle

Flame 110
Safety Bunsen

The *Flame 110* – the extraordinary precision burner

Are you looking for a solution to heat or flame any item under any angle - even upside down?
Here is what you need: Our new precision burner *Flame 110*!

Multi-talent
The *Flame 110* is ideally suited for any kind of flaming process in laboratory or industry. Its long precision flame can heat your dental instruments, can sterilize your microbiological tools or flame deburr resp. flame polish your moulded plastic or rubber parts in any type of industrial production. Always safe and perfect!

Simple and safe handling
Simply push the button: Flame will start or stop instantly! You may also control it by foot pedal* or external IR - Sensor*. Safety is built-in and always active (overheat protection and automatic re-ignition).

Compact and efficient
Stainless steel, efficient cleaning, small footprint, exclusive variability and convincing economics are vital for any type of laboratory and industrial workstation. *Flame 110* is offering a perfect combination of features:

- **Variable flame from any angle – even upside down**
- **Safety in any operation mode**
- **Very easy cleaning of removable burner head**
- **Operation with liquid gas from cylinders or cartridges (with optional adapters)**
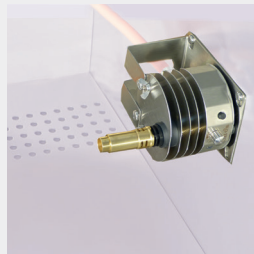- **Very economic consumption of gas**
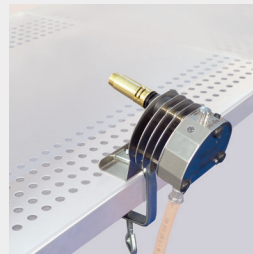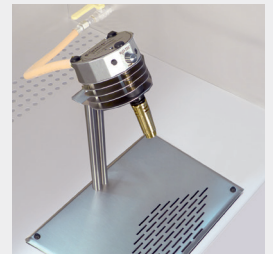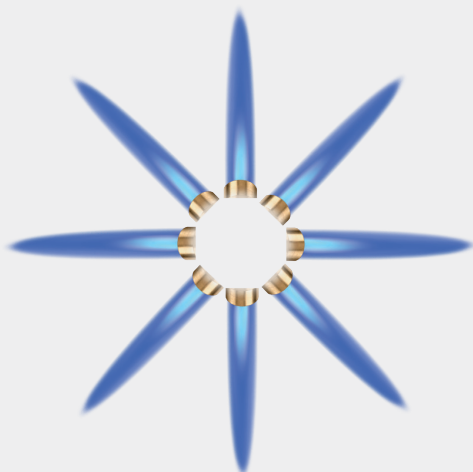
* optional

Flaming from any angle
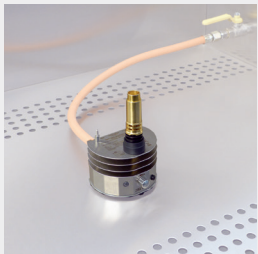
standard
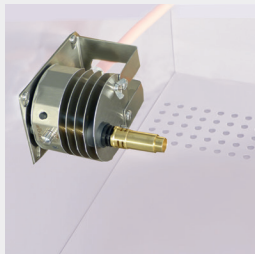
sidewise (left)

sidewise (right)

horizontal

overhead

Flame 110
Safety Bunsen

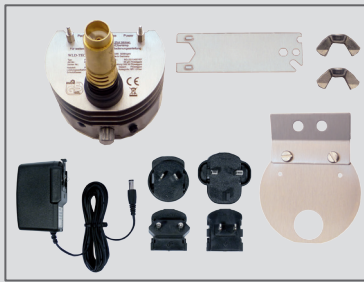| **Programs:**	
Button function	✓
Pedal Standard (foot pedal optional)	✓
Gas inlet filter	✓
Removeable burner head	✓
Housing, gas connection & controls made of stainless steel	✓
DVGW approved	✓

The range:

F̷ame¹¹⁰
Safety Bunsen

Art.-No. 2.110.000-L

Nozzle for propane / butane gas
Removable special burner head
Bracket with 2 wing nuts for
upside down mounting
Wrench 17 mm
Switching power supply
(global, level 6)
Instruction manual
2-year warranty

Industrial version:
on request

2-Jahre Garantie / 2-Year Warranty · Energy Saving / Energiesparend · DVGW GS geprüfte Sicherheit · made in Germany · CE

Technical Data:

Programs
Button:	Start-Stop with timer
Foot pedal (optional):	flame during pressed foot pedal

Safety features
with gas safety cut off:	re-ignition 1 x per second
	overheat protection
	automatic unit switch off, 4h
	pressure monitoring at approx. 3.5 to 4 bar
	tilt sensor for overhead usage

Gas supply and consumption
Gas connection:	1/4" left hand thread with gas filter
Gas types:	I3P 1.5 bar liquid gas
Connected load:	38 g/h
Cartridge operation (type - time):	C 206 - 4.5 h / CV 300 - 6 h / CV 470 - 11 h

Flame characteristics
Max. flame temperature:	approx. 1200 °C
Flame measurements (h x Ø):	max. 120 x 10 mm
Temperature threshold level:	500 W

Electrical
Power consumption:	2 VA (stand-by max 0.1 VA)
Switching power supply (global):	100-240V / 50/60Hz / max. 0.3A; 9V DC / 1.3A
	Level 6 (stand-by max. 0.1 W)

Mechanical
Burner head:	removable
Dimensions (h x Ø) / with burner head:	75 x 88 mm / 135 x 88 mm
Weight:	580 g

Licenses
DIN-DVGW Reg.-No.:	NG-2211AS0167
CE:	EN 61326-1, EN61010-1, EN61010-2-010
EU guidelines:	2014/30/EU, 2014/35/EU, 2011/65/EU

**Bracket sidewise
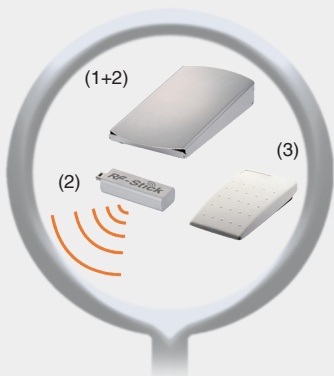right / left**
stainless steel
Art.-No. 2.110.400
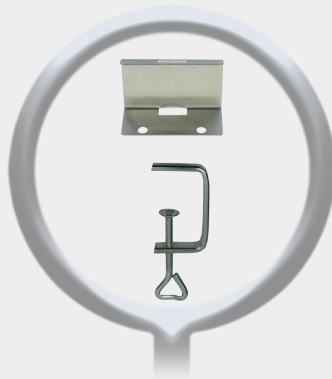
Bracket horizontal
stainless steel
Art.-No. 2.110.450
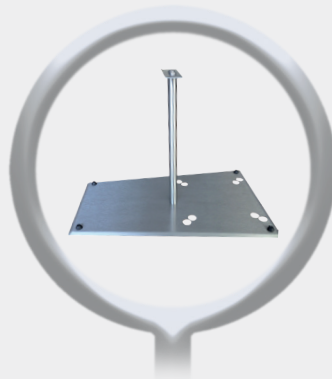
Base bracket overhead
with fixing holes for
CV 300 / 470 holder,
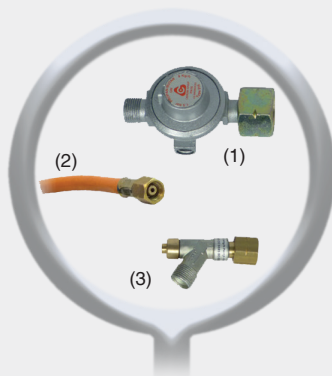stainless steel
Art.-No. 2.110.490

External IR - Sensor
touch-free flame activation,
stainless steel, cable length 0.4 m
Art.-No. 6.000.406

(1) Foot pedal
stainless steel, cable length 3.0 m
Art.-No. 6.000.402

**(2) Foot pedal radio set
RF-Stick**
only available in EU countries
Art.-No. 6.000.404-RF

(3) Foot pedal Mini
plastic, cable length 3.0 m
Art.-No. 6.000.403

**(1) Safety medium pressure
regulator 1.5 bar -** for gas bottles
with 5, 11 or 33 kg
Art.-No. 2.110.150

(2) DVGW-Safety tubing
for threaded connection
3/8" L«-»1/4" L (1.5 m)
Art.-No. 2.110.310

(3) Gas leak protection 1.5 bar
Art.-No. 2.110.131

Safety adapter for gas cartridges
with integrated pressure regulator,
gas leak protection and
DVGW-tube (0.5 m)
C 206 - 1.5: Art.-No. 2.110.800

additional with stainless steel holder
CV 300 - 1.5: Art.-No. 2.110.831
CV 470 - 1.5: Art.-No. 2.110.850

**Gas cartridges
propane / butane**

without valve
(1) C 206, 190 g:
Art.-No. 6.000.190

with valve
(2) CV 300, 240 g:
Art.-No. 6.000.183

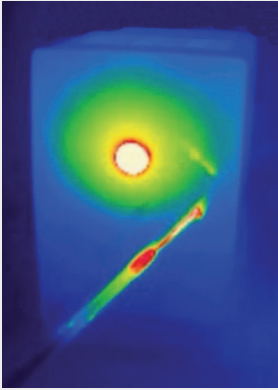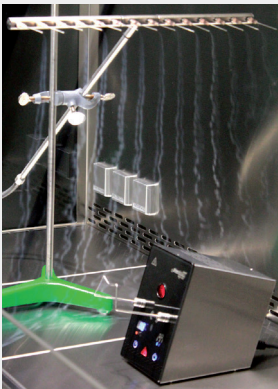**(3) CV 470,** 450 g:
Art.-No. 6.000.185

Sterilizing

SteriMax *basic*

by IR-HotSpot

New

SteriMax basic
SteriMax smart

Infrared loop sterilizer - using IR-HotSpot technology

Efficient use of energy

High-Speed annealing and sterilizing the smartest way
Are you looking for a fast, efficient and flameless product to anneal or sterilize your inoculation loops and delicate micro instruments? Then our electrical *SteriMax basic / smart* should be your first choice – ideally suited for use in any type of lab, anaerobic work environment and Laminar Flow Cabinet!

Smart infrared light – instantly ready to work
Specifically focused infrared light generates an IR-HotSpot in which your inoculation loop is sterilized at temperatures from 750 to 1000°C after only 5 to 10 seconds. The *SteriMax basic / smart* just needs to be plugged in and will be immediately ready to use, without any warm-up period!

Our highly sophisticated annealing tube is based on many years of experience. It is made of special quartz glass. The tube is closed at one end preventing any risk of contamination with pathogens. The annealing tube can be slid out in a matter of seconds for easy cleaning.

No air turbulences

Smart operation – comfortable working
SteriMax basic / smart allows you to fully focus on your core task. Hardly any attention is needed for inserting your inoculation loop into the annealing tube – which is easily accessible from the front of the flat glass panel. Depending on the model you can start the sterilization process via touch panel, IR-Sensor or foot pedal*.

Smart use of energy – minimum heat dissipation
"Thermocontrol" is the key element for an efficient use of energy. It allows a quick but smooth softstart of the infrared light, a short heating period and the re-use of residual heat for the next sterilization process. Whenever you pause, your energy consumption and heat dissipation will pause as well.

Smart design – outstanding features
SteriMax smart / basic is presented in an elegant stainless steel housing with a safety glass touch panel designed for extreme laboratory environments with many unique features.

* optional

- **Instantly ready to work without any warm-up period**
- **No ranger of combustion on the housing (Cool-Touch)**
- **Comfortable touch operation**
- **Efficient use of energy through Thermocontrol**
- **Annealing tube made of special quartz glass**
- **Very simple cleaning of the device and annealing tube**
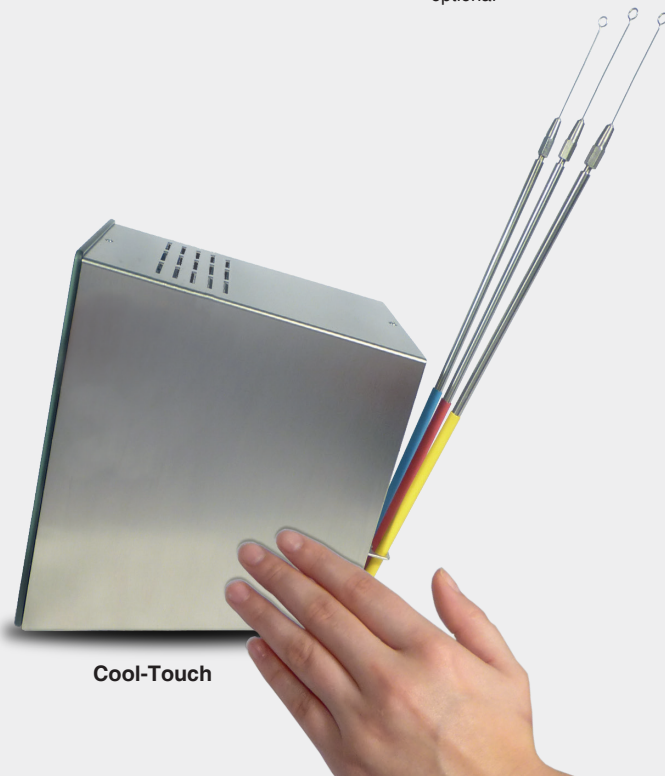
Cool-Touch

SteriMax basic

New

The sterilization process starts with just a fingertip on the touch panel or by pushing the foot pedal*.

A fixed timer (10 sec.) controls the annealing of your instruments automatically.

Thermocontrol uses the residual heat and automatically shortens the energy supply for the next sterilization.

The course of the sterilization can be followed from start to end by looking upon the inoculation loop symbol.

After that your inoculation loop is ready for use!

*optional
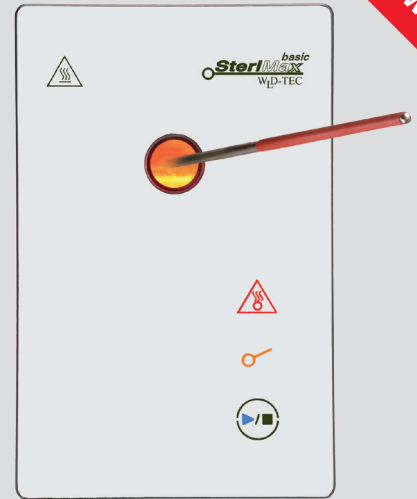
Programs:	SteriMax basic	SteriMax smart
Start via IR-Sensor		✓
Start via touch	✓	
Start via foot pedal*	✓	
2 user accounts		✓
Sterilization at start-up	✓	✓
Adjustable sterilization- / cool down period		✓
Adjustable sensor range		✓
Timer display		✓
Sterilization display	✓	✓
No warm-up period	✓	✓
Thermocontrol	✓	✓
Residual heat display	✓	✓
Buzzer		✓
Holding device for 3 WLD-TEC inoculation loop holder		✓
Cool-Touch casing	✓	✓

*optional

SteriMax smart

Touchless IR-Sensor technology starts the sterlization process automatically.

The timer can be viewed and adjusted (exact to the second) for 2 different user accounts simply by touching the panel.

Thermocontrol is using the residual heat and automatically reduces the time of sterilization up to 5 seconds.

2 adjustable timers indicate the completion of the sterilization period (5 - 10 sec.) and cooling down process (0 - 25 sec.) via the display and an audible signal.

After that your inoculation loop is ready for use!

The range:

Infrared light technology and quartz glass annealing tube
Replacement quartz glass annealing tube (smart)
Inoculation loop holder with inoculation loop Ø 3 mm
Holding device for 3 WLD-TEC inoculation loop holders (smart)
Instruction manual, 2-year warranty (except parts of wear and tear)

SteriMax basic

for 230 V mains voltage   **Art.-No. 4.101.000**
for 120 V mains voltage   **Art.-No. 4.102.000**
for 100 V mains voltage   **Art.-No. 4.103.000**

SteriMax smart

for 230 V mains voltage   **Art.-No. 4.001.000**
for 120 V mains voltage   **Art.-No. 4.002.000**
for 100 V mains voltage   **Art.-No. 4.003.000**

2 Jahre Garantie / 2-Year Warranty

EuP Energy Saving! / Energiesparend!

made in Germany

CE

Tray, 3 places
stainless steel, for right or left side
Art.-No. 4.000.341

Magnetic instrument support
stainless steel
Art.-No. 4.000.350

Quartz glass annealing tube
**Art.-No. 4.000.400**

Inoculation loop holder
stainless steel, with sleeve nut,
for inoculation loops Ø 0.6 - 1 mm

length 245 mm
Art.-No. 6.000.360
length 215 mm
Art.-No. 6.000.365

Technical Data

SteriMax smart

IR-Sensor:	start of sterilization
	sensor range (8-stages adjustable)
Touch operation:	ON / OFF, 2 user accounts
	sterilization timer 5 - 10 sec.
	inoculation loop cooling down timer 0 - 25 sec.
	with acoustic signal (disengageable)
Automatic unit switch off:	15, 30 or 60 min.

SteriMax basic

Touch operation:	start of sterilization (10 sec.)
Foot pedal* operation:	start of sterilization (10 sec.)
Automatic unit switch off:	15 min.

All models

Status display:	optical display of the sterilization progress
Thermocontrol:	dynamic sterilization timer
Sterilization at start-up:	sterilization of the annealing tube before usage
	(disengageable for SteriMax smart)

Annealing tube

Quartz glass:	750 °C - 1000 °C sterilization temperature

Safety features

Residual heat display:	indicates a hot annealing tube
Temperature monitor:	thermal circuit breaker

Electrical

Power supply:	230 V mains voltage: 220 - 240 V 50/60 Hz 2.6 A
	120 V mains voltage: 112 - 128 V 50/60 Hz 5.1 A
	100 V mains voltage: 95 - 105 V 50/60 Hz 6 A
Power consumption:	approx. 600 W / short time (5 - 10 sec.)
Protection class:	IP 20
Heat source:	IR-Halogen lamp

Mechanical

Quartz glass annealing tube:	outer-Ø 19 mm, inner-Ø 16 mm, length 112 mm
Casing:	heat resistant glass / stainless steel,
	UV and solvent resistant
Measurements (w x h x d):	110 x 170 x 180 mm
Weight:	approx. 1800 g

Licences

CE:	EN 61326-1, EN 61010-1, EN 61010-2-010,
	EN 62471
EU guidelines:	2014/30/EU, 2014/35/EU, 2011/65/EU, 2006/25/EG
Protected Design	Ⓓ DM/082 011 (smart)
	Ⓤ DE 20 2016 101 067 (basic)

* foot pedal optional
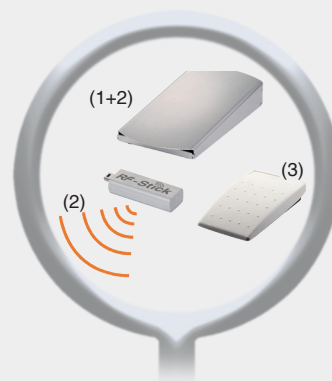
Foot pedals
only SteriMax basic

(1) Foot pedal
stainless steel, cable length 3.0 m
Art.-No. 6.000.402

**(2) Foot pedal radio set
RF-Stick**
only available in EU countries
Art.-No. 6.000.404-RF

(3) Foot pedal Mini
plastic, cable length 3.0 m
Art.-No. 6.000.403
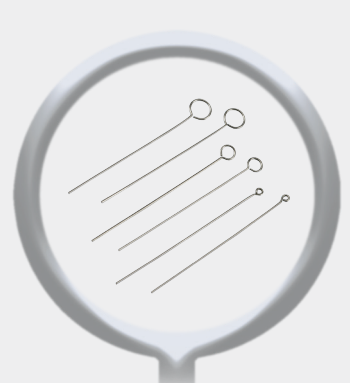
Inoculation loops, wire Ø 0.6 mm

Special stainless steel
Ø 3 mm **Art.-No. 6.000.373**
Ø 5 mm **Art.-No. 6.000.375**

Platinum / Iridium
Ø 1 mm **Art.-No. 6.000.381**
Ø 3 mm **Art.-No. 6.000.383**
Ø 5 mm **Art.-No. 6.000.385**

SteriMax
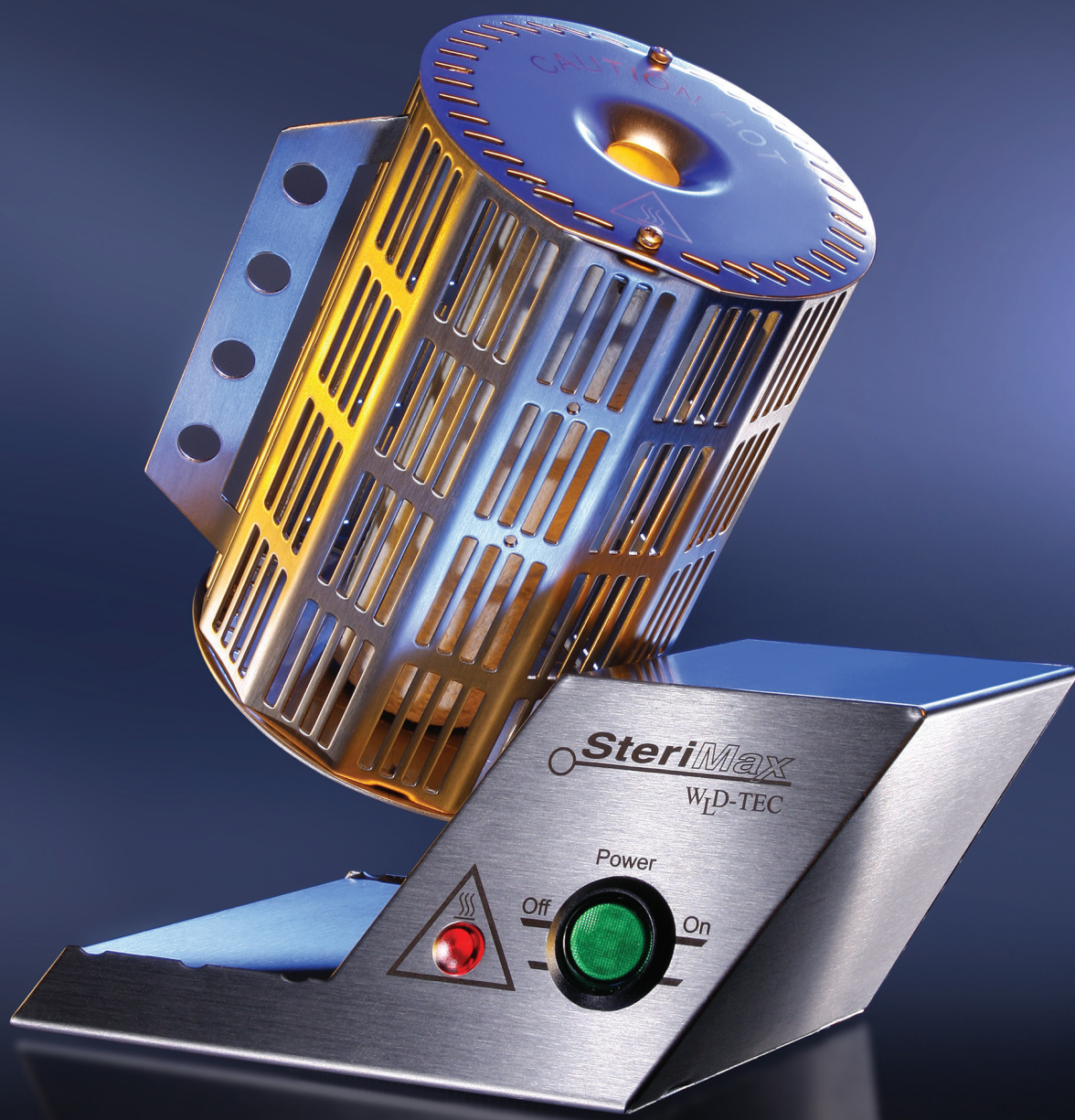
Annealing without Flame

SteriMax

Annealing without Flame!

The electrical sterilization system *SteriMax* is most suitable for the sterilization of inoculation loops, needles and instruments. It is ideal for laboratories and safety cabinets where the use of gases and open flames is not permitted.

Robust
The unique double tube system, which is made of robust quartz glass and wear-resistant ceramic, reaches its optimal temperature of 900°C after only a few minutes. To sterilize the inoculation loop, simply insert it into the ceramic annealing tube. After 5 - 7 seconds, the inoculation loop is sterilized*. A back side spray protector is integrated for more safety when handling with pathogenic material. Even clogging is not an issue. The ceramic annealing tube can be removed easily for in-depth cleaning. A 100% stainless steel design makes the *SteriMax* resistant to even the most extreme laboratory conditions.

Flexible and safe
The sterilization tube can lock itself into place, using the specially designed angular adjusting device. The low and stable housing facilitates ergonomic operation; the unique design protects the working surface from contamination. Exceptional passive safety feature: After prolonged use, the residual heat display signals a hot surface of the sterilization tube in order to protect the user from burns.

- **Stainless steel design**
- **Long - lasting double tube system**
- **Sterilization period 5-7 seconds***
- **Self - locking angular adjustment**
- **Two different sizes available**

* tested with inoculation loops, WLD-TEC **Art.-No. 6.000.373**

Double Tube System
Ceramic / Quartz glass
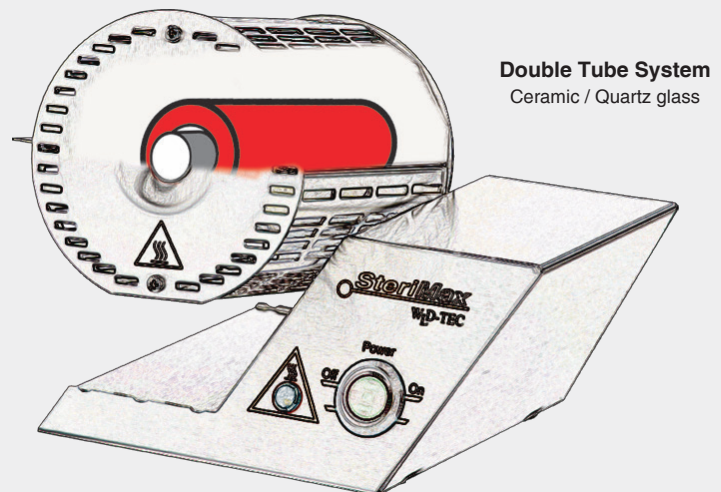
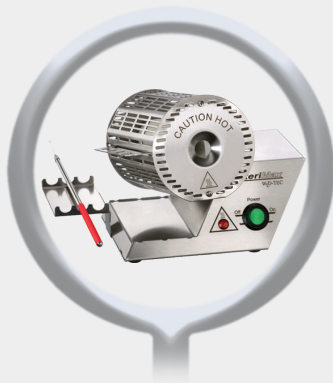**Quartz glass heating element**

**Holding device for WLD-TEC
inoculation loop holders**
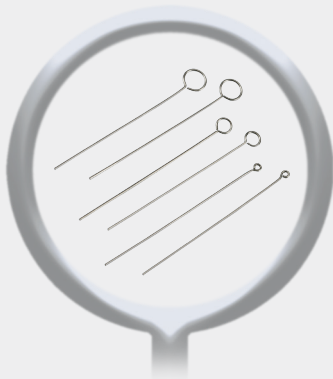suitable for all angles
Art.-No. 5.000.100

**Universal support for all
inoculation loop holders**
for angular pos.1 - 3
Art.-No. 5.000.101

Tray, 3 places
for left side,
stainless steel
Art.-No. 6.000.341

Inoculation loop holder
stainless steel, with sleeve nut,
for inoculation loops Ø 0.6 - 1 mm

length 245 mm
Art.-No. 6.000.360
length 215 mm
Art.-No. 6.000.365

Inoculation loops, wire Ø 0.6 mm

Special stainless steel
Ø 3 mm **Art.-No. 6.000.373**
Ø 5 mm **Art.-No. 6.000.375**

Platinum / Iridium
Ø 1 mm **Art.-No. 6.000.381**
Ø 3 mm **Art.-No. 6.000.383**
Ø 5 mm **Art.-No. 6.000.385**

**7 angular
adjustments**

35
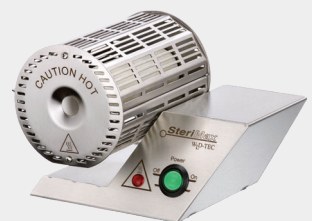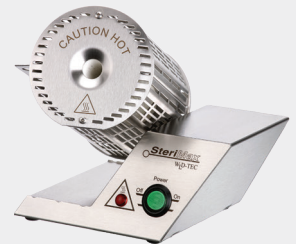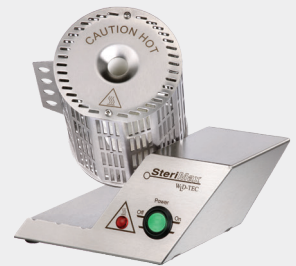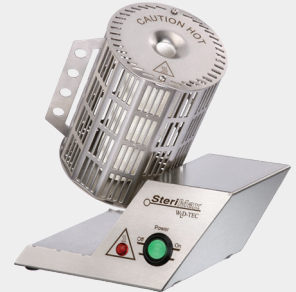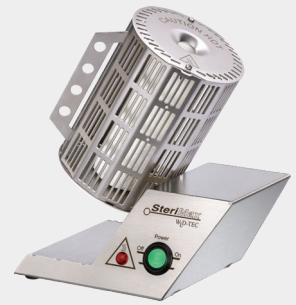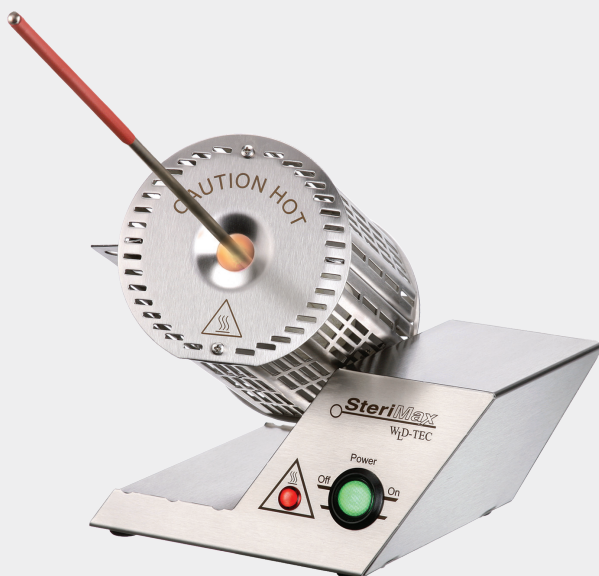
The range:

SteriMax

with 7 angular adjustments
Residual heat display
Inoculation loop holder and inoculation loop
Tray for 3 instruments, screwdriver
Instruction manual
2-year warranty (except parts of wear and tear)

Short version:
Diameter Ø 15 mm, length 118 mm:

for 230 V mains voltage	**Art.-No. 5.001.000**
for 120 V mains voltage	**Art.-No. 5.002.000**
for 100 V mains voltage	**Art.-No. 5.003.000**

Long version:
Diameter Ø 20 mm, length 161 mm:

for 230 V mains voltage	**Art.-No. 5.101.000**
for 120 V mains voltage	**Art.-No. 5.102.000**
for 100 V mains voltage	**Art.-No. 5.103.000**

2 Jahre Garantie   2-Year Warranty

2

■ made
■ in
■ Germany

C E

Technical Data:

Short version

Ceramic annealing tube:	Ø 15 mm, length 118 mm
Quartz glass heating element:	Ø 21 mm
Power consumption:	160 W
Weight:	960 g
Measurements (w x h x d):	175 x 129 x 139 mm
Heating up time:	700 °C / 11 minutes
	800 °C / 14 minutes
	900 °C / 24 minutes
Heat transfer:	a stainless steel surface located above, warms up at motionless air and at an ambient temperature of 20°C; Distance: 20 cm: 65°C, 30 cm: 34°C, 40 cm: 28°C

Long version

Ceramic annealing tube:	Ø 20 mm, length 161 mm
Quartz glass heating element:	Ø 26 mm
Power consumption:	225 W
Weight:	1060 g
Measurements (w x h x d):	175 x 129 x 169 mm
Heating up time:	700 °C / 15 minutes
	800 °C / 22 minutes
	900 °C / 40 minutes
Heat transfer:	a stainless steel surface located above, warms up at motionless air and at an ambient temperature of 20°C; Distance: 20 cm: 65°C, 30 cm: 40°C, 40 cm: 32°C

All models

Angular adjustments:	7
Sterilization temperature:	900°C - 950°C
Sterilization time:	5 - 7 seconds*
Safety features:	residual heat display
Casing:	stainless steel, UV and solvent resistant
CE:	EN 61326-1, EN 61010-1, EN 61010-2-010
EU guidelines:	2014/30/EU, 2014/35/EU, 2011/65/EU

* tested with inoculation loops, WLD-TEC **Art.-No. 6.000.373**

power*jet* 2

Mobil sterilizing

The mobil handheld laboratory gas burner with piezoelectrical ignition

The solution for all flame sterilization processes in microbiology or biotechnical fields. The burner ignites immediately by pressing the button. The flame can be regulated in size and will be extinguished again by releasing the button.

Additional the button of the power*jet* / power*jet 2* is equipped with a locking device. The locking device comprises both, short and long term ranges.

power*jet*

- **Automatic ignition due to piezo effect**
- **For propane / butane gas cartridges**
- **Connection for gas cartridges CG 1750**
- **Gas supply only when button is pressed**
- **Stainless steel stand (optional)**
- **Safe handling due to one-handed operation**

power*jet 2*

- **Automatic ignition due to piezo effect**
- **For propane / butane gas cartridges and natural gas**
- **Connection for gas cartridges or gas tubing**
- **Gas supply only when button is pressed**
- **Stainless steel stand**
- **Safe handling due to one-handed operation**

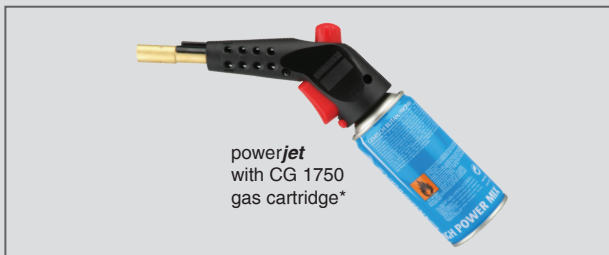
The range:

power*jet*   Art.-No. 6.005.000

for propane / butane gas cartridges with 7/16" x 28 UNEF thread
(e.g. CG 1750 from Campingaz)
Instruction manual, 2-year warranty

Technical Data:

Gas types:	liquid gas, gas cartridges
Connected load:	0.12 kg / h liquid gas
Flame temperature:	1350°C liquid gas
Temp. threshold level:	1.54 kW liquid gas
Measurements (w x h):	150 x 180 mm
Weight:	300 g

power*jet*
with CG 1750
gas cartridge*

* gas cartridge is not included in the delivery range

The range:

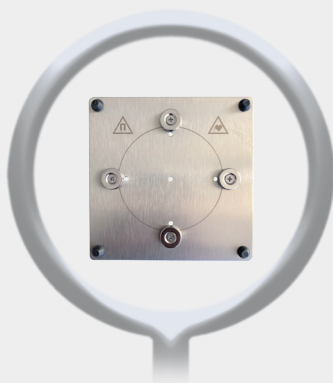## power*jet 2*   Art.-No. 6.006.000

for propane / butane gas cartridges and natural gas
Adapter for gas cartridges CV 360 from Campingaz
Tubing connector with swivel nut, stainless steel stand
Nozzle for natural gas (08)
Nozzle for propane / butane gas (06)
Nozzle-box spanner, wrench 14 / 17 mm
Instruction manual, 2-year warranty

Technical Data:

Gas types:	natural gas E/LL, liquid gas II 2ELL3B/P 20 - 50 mbar gas cartridge CV 360 (Campingaz) / Express 444
Connected load:	0.13 kg / h liquid gas
Flame temperature:	1350°C liquid gas, 1300°C natural gas (E)
Temp. threshold level:	1.7 kW liquid gas, 1 kW natural gas
Measurements (w x h):	150 x 210 mm
Weight:	500 g

power*jet 2*
with CV 360
gas cartridge*

* gas cartridge is not included in the delivery range

Stainless steel stand
for power*jet*
Art.-No. 6.000.816

(1) CG 1750 gas cartridge
(2) CV 360 gas cartridge
(3) Express 444 gas cartridge

power*jet 2*
gas cartridge adapter for
Express 444 gas cartridges
Art.-No. 6.006.080

Notes

Contact person

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Sales Manager

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🛒 sales@wld-tec.com

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