

# Fuego<sup>SCS</sup>



Safety Laboratory  
Gas Burner



# Fuego<sup>SCS</sup> - A step ahead!

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

## Quality down to the smallest detail

The unique quality of the Fuego SCS - Series is the result of many years of experience in the development and manufacture of laboratory gas burners, which are fabricated in our own factory on state-of-the-art machines. Our outstanding technical competence is integral in every laboratory gas burner that bears the name Fuego SCS, and every one of them proves that: **The Fuego SCS - Series is absolutely convincing!** Now, we have further optimized this series and created masterpieces, which are better than ever before.

## 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.

## 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.

## 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<sup>®</sup>** 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 unflinchingly 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.

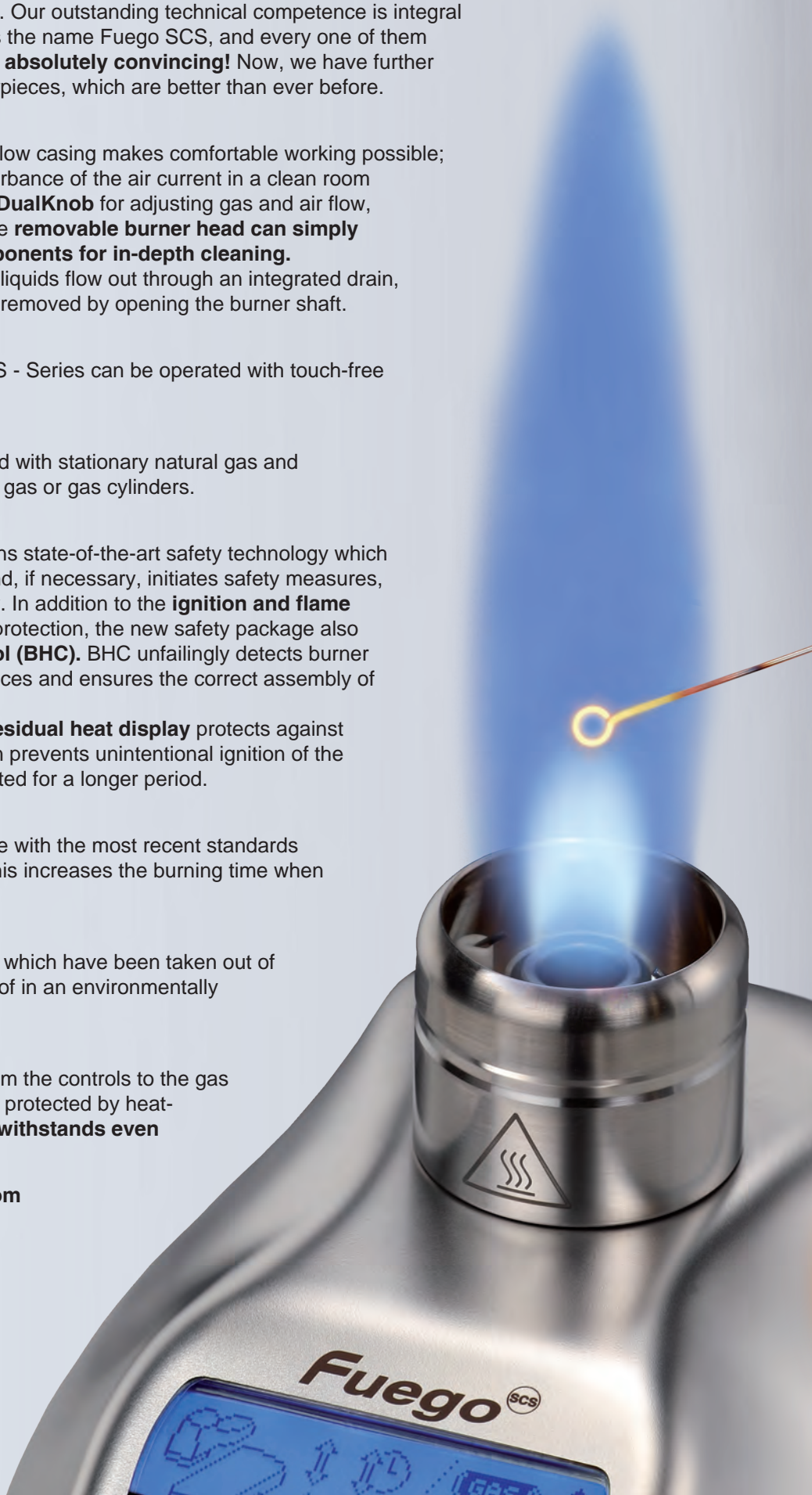
## Robust

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.**

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



\* registered design





# Innovative technology that thinks with you!

The new Fuego SCS - Series.



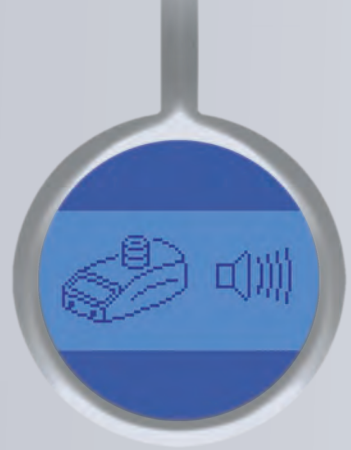
Graphical installation instructions



Zero-pressure shut-off



Gas consumption display



Acoustic signals as operating aids

User-friendly stainless steel knobs



Animated, high-contrast graphic display



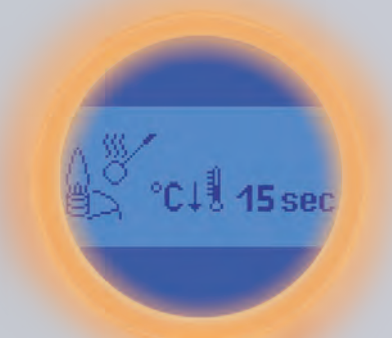
Individually adjustable Single or DoubleClick IR motion sensor



Automatic unit cut-off



Cooling reminder for inoculation loops



Temperature regulation for heating media



# Fuego<sup>SCS</sup> 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<sup>SCS</sup> basic RF

## Wireless operation

Wireless and safe flame sterilization! The „RF“ model allows operation via radio foot pedal without a disturbing cable. Other than that, 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<sup>SCS</sup>

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

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 of delivery:

### Fuego<sup>SCS</sup> basic

Art.-No.: 8.201.000

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

### Fuego<sup>SCS</sup> 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)  
Available in EU countries only

### Fuego<sup>SCS</sup>

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: Art.-No.: 6.000.402

### Fuego<sup>SCS</sup> 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: 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 accessory brochure)

### Autoloop Pro

The fully automatic carousel for flame sterilizing inoculation loops (see Autoloop brochure)



## Technical Data:

<b>Technology</b>	Microprocessor, illuminated graphic display with acoustic signals as operating aids <sup>2,3</sup>
<b>Programs</b>	
IR-Sensor <sup>2,3</sup> :	Start-Stop with timer, 1 sec - 2 h Auto-Off with timer, 0 sec - 2 h Standard (flame during pressed foot pedal)
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 <sup>2,3</sup> :	with timer, 1 sec - 2 h temperature range from +35 °C to +350 °C
<b>Safety features</b>	
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°) <sup>3</sup>
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 <sup>2,3</sup> :	end of work procedure to lower the pressure in the supply hose
<b>Comfort functions<sup>2,3</sup></b>	cooling reminder, user account selection, gas consumption display for gas cartridges, graphical installation and operating instructions
<b>Gas supply and consumption</b>	
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:	Campingaz: CV 360 - 40 min, C 206 - 170 min, CP 250 - 210 min, CV 470 - 370 min, CG 1750 - 150 min, C 300 - 200 min
Guilbert:	Express 444 / 445 - 50 min
Coleman:	C 250 - 160 min, C 500 - 320 min
<b>Temperatures</b>	
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
<b>Electrical</b>	
Switching power supply:	100 - 240 V / 50/60 Hz / max. 0.3 A; 9 V DC / 1.3 A level 6 (stand by power consumption U <sub>IN</sub> max. 0.1 W) 2 VA; (stand by max. 0.1 VA)
Power consumption:	5 - 50 mW, adjustable
IR-Sensor detection range <sup>2,3</sup> :	time range 0.5 - 2.5 sec (adjust. / disengageable)
DoubleClick IR-Sensor <sup>2,3</sup> :	
<b>Technical Data Battery Operation<sup>3</sup></b>	
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
<b>Radio Frequency System<sup>1</sup></b>	
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)
<b>Mechanical</b>	
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):	103 x 49 x 130 mm
Weight:	700 g
<b>Licenses</b>	
DIN-DVGW Reg.-No.:	NG-2211AS0167
CE:	EN 61326-1, EN 61010-1, EN 61010-2-010 EN 301489 <sup>1</sup> , EN 300440-1 <sup>1</sup> , EN 300440-2 <sup>1</sup> 2014/30/EU, 2014/35/EU, 2011/65/EU, 2014/53/EU (RED) <sup>1</sup>
EU guidelines:	

<sup>1</sup> only Fuego SCS basic RF, <sup>2</sup> only Fuego SCS, <sup>3</sup> only Fuego SCS pro

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(09/16) Specifications subject to change without notice