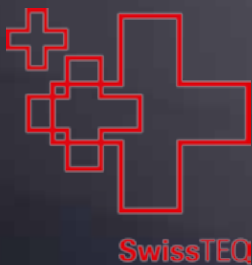


# Trend setting Laboratory Technology.



# About SalvisLab.

## Swiss tradition with a great future

Renggli AG, founded in 1927, is an established Swiss family enterprise with international orientation in the realm of complete laboratory solutions. As one of the leading European manufacturers and market leaders in Switzerland, Renggli designs and implements state-of-the-art laboratories for research, industry, medicine and education.

With the renowned SalvisLab trademark, Renggli AG develops and produces a range of forced air drying ovens, incubators, vacuum drying ovens, heating cabinets, glassware cleaners and the corresponding accessories for each appliance. SalvisLab products are distributed world-wide through our international network of dealers.

## We design professional equipment systems for you

SalvisLab develops and distributes high-quality laboratory equipment in close collaboration with the complete laboratory solutions provider Renggli AG in Rotkreuz. SalvisLab sets standards in quality, design and the production of laboratory equipment. New developments undergo intensive testing in our Development Center, so that they meet our customers' requirements.

The comprehensive range of equipment offered by SalvisLab provides extensive coverage of requirements in the laboratory field with forced air drying ovens, incubators, vacuum drying ovens, heating cabinets, glassware cleaners and the corresponding accessories for each appliance. The new SalvisTEQ controller sets new benchmarks in modern laboratory equipment and has equipment-specific options for individual needs in addition to the standardized functions.

With our well-trained team, we offer you comprehensive advice on our equipment as well as reliable on-site service. Our collaboration with partners means there is an extensive global network to meet all needs in the laboratory field and we are also in a position to provide you with support extending beyond individual items of equipment, both as a consultant and an intermediary.

## Our Core Competences

### Counselling Competence

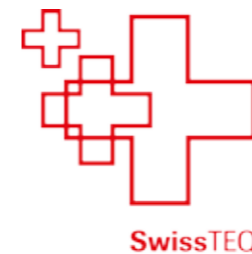
Our laboratory experts are eager to support you in all facets of laboratory technology. They will advise you accurately on all pertinent norms, legal provisions and safety aspects.

### Planning and Engineering Competence

Our specialists are at your disposal to carry out the planning of the entire project. They even cover the engineering part, from media supply of the individual work place all the way to interfacing with the building control systems.

### System Competences

In addition to being a dependable supplier of laboratory installations and equipment, we are your comprehensive one-stop service for counselling, planning/engineering, production, installation and maintenance/service. This is the key and guarantee for decades of perfect performance of your laboratories.



# SalvisTEQ controller.

«SalvisTEQ looks ahead, thinks for itself and adapts, and does so at every stage of the process.»

The new Model Predictive controller and a high-resolution color touch screen once again make SalvisLab a pioneer in trend-setting laboratory technology.

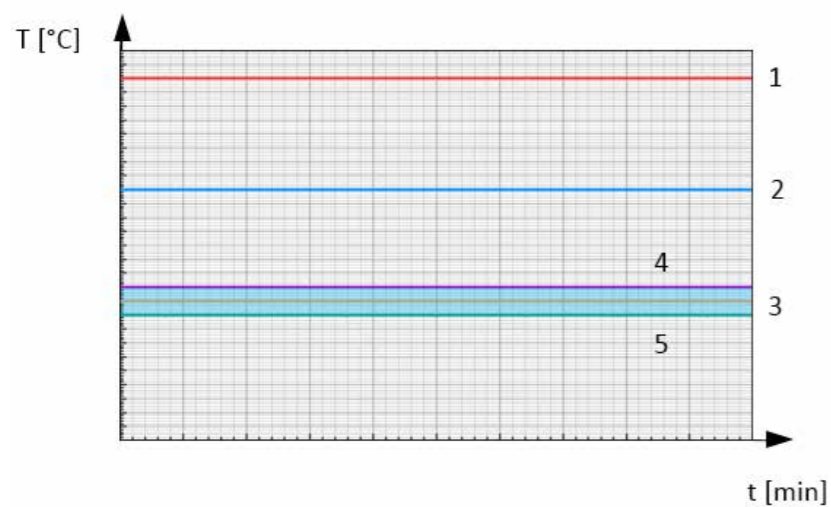
A SalvisTEQ controller monitors and registers the historical progression of process variables. With the predictive controller which was developed in house, we use equipment-specific process models of dynamic behavior, which means the controller knows at all times what it has done, where exactly it is, where it wants to go and how it can achieve the outcome in the most efficient way.

The advantages of the SalvisTEQ controller are very clear in comparison to PID controllers normally used in the sector:

- shorter heating-up times
- dynamic control behavior
- no dead or waiting times
- higher precision

## Safety class 3.3

SalvisLab has upgraded the safety of the controller. All SalvisTEQ controllers are in safety class 3.3 as standard, which means they have lower and upper temperature limit protection.



- 1) Mechanical temperature limiter
- 2) Electronical temperature limiter
- 3) Set point temperature
- 4) Electronical over-temperature protection
- 5) Electronical under-temperature protection



## Operation

SalvisLab has stayed true to itself in terms of the operation of the SalvisTEQ controller. The touch screen is clearly laid out and intuitive to operate.

- |  |   |
|--|---|
|  | <p>Real-time temperature monitoring during the heating-up phase (TC/VC)<br/>Temperature settings:</p> <ul style="list-style-type: none"> <li>– Selection of the sensor for temperature measurement (internal/external)**</li> <li>– Set-point temperature</li> <li>– Gradient (only for linear heating process)</li> <li>– Actual temperature</li> </ul>  |
|  | <p>Real-time pressure monitoring during the heating-up phase (VC) or fan control (TC)<br/>Settings depending on the equipment:</p> <ul style="list-style-type: none"> <li>– Vacuum On/Off (VC)</li> <li>– Fan (fan speed, adjustable between 40/60 and 100 %, depending on the equipment)</li> <li>– Ventilation flap (opening width, adjustable between 0 and 100 %)*</li> <li>– Pressure (target pressure, adjustable between 0.1 and 999.9 mbar and hysteresis)**</li> </ul> |
|  | <p>Real-time process duration<br/>Time settings:</p> <ul style="list-style-type: none"> <li>– Start in</li> <li>– Start at (start at specified time)</li> <li>– Hold for (heating up and holding of the set-point temperature for a specified time)</li> </ul>  |
|  | <p>Play key</p> <ul style="list-style-type: none"> <li>– Start/stop of the heating process with the selected settings</li> <li>– Real-time display of process parameters (temperature, pressure and fan speed)**</li> </ul>   |
|  | <p>Menu/Stop</p>  |

\* Available from 2017

\*\* Option

### SalvisTEQ standard functions

Self-check	SalvisTEQ checks itself for hardware and software errors on every boot.
Sterilization according to WHO	This standard technology enables sterilization of the chamber according to WHO guidelines.
°C or °F	Easy switching of the temperature measurement unit.
Time	Real time clock.
Automatic restart	Set the devices behavior on power outage: Restart, stop or continue the running program at the exact point it was stopped.
Heating	Reach the temperature set as quick as possible or follow a certain gradient while heating.
Logbook	Every change of settings or process parameters is being recorded in the logbook.
Internal storage	SalvisTEQ comes with 20 MB of internal storage.
Calibration	All SalvisLab products have 2-point factory calibration ex works.
Reference temperature	With an additional PT-100 sensor built in as standard, the SalvisTEQ controller measures the ambient temperature.
Alarm	Acoustic and visual alarms.
Info	Display of software version and serial number as well as QR code for downloading the user manual.
Connections	Standard USB and RJ45 connections at the front.

### SalvisTEQ options

Vacuum display	Digital display and logging of the actual vacuum.
Vacuum control	The controller controls the vacuum via the vacuum valve with set-point and hysteresis.
Vacuum and ventilation control	In addition to vacuum control, ventilation is also automatically controlled.
Programmable power socket	Programmable power socket, which for example enables connection of the vacuum pump.
Extended programs	Programs with up to 1500 programmable steps (Extension of programs via USB stick).
Users	Set individual permissions for every user.
Redundancy PT-100	Increased safety by using a redundant PT-100 probe.
Product temperature controller	The «product temperature controller» option enables you to adjust the holding temperature with an external product temperature sensor.
Ports	Additional USB or RJ45 ports are possible.
+ point calibration	As an option to the factory-based 2-point calibration, up to a 10-point calibration can be carried out.
Storage extension	Internal storage can be extended up to 32 GB.
Process graph	Process graph can be viewed live on the display or exported to a USB flash drive.
Calendar/Scheduler	Schedule your programs to automatically run and repeat.



# Thermocenter.



The SalvisLab Thermocenter sets standards in quality and design. Short heating and precise temperature control make the Thermocenters true experts in heating and drying tasks. The peculiarity of this multi-functional dry and heat cabinet is in a unique system «everything-in-the-door». Above all, the system guarantees full flexibility in the placement of the interior. Thanks to the touch screen, the operation is even easier and more manageable than before. SwissTEQ in its unique form.

- Improved energy efficiency thanks to our SalvisTEQ controller
- Compact and flexible thanks to the patented «everything-in-the-door» system
- Programmable independency
- Real-time clock
- Safety class 3.3
- USB and RJ45 interface
- Touch screen
- Standard 6mm entry port
- Ambient temperature probe



## Options

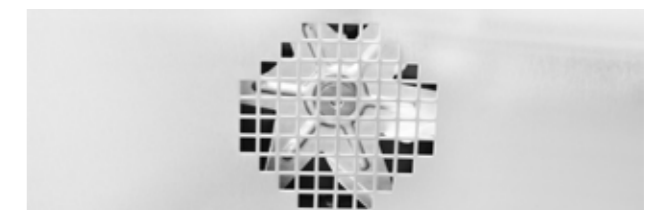
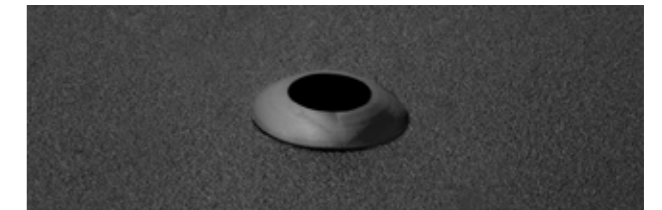
- Product temperature controller
- Program- and user package
- Process graph
- Redundant PT-100 probe
- Factory temperature mapping
- LAN-Interface
- Additional memory
- Entry port 20 mm
- Entry port 40 mm
- IQ/OQ draft paper, 3 hard copiest
- + point calibration

## Accessories

- Stainless steel shelves (standard)
- Perforated stainless steel shelves
- Wire shelves
- Exhaust air adapter
- Fresh air filter
- Product temperature probe
- Stacking adapter
- Wall bracket

## Technical specifications

- External dimensions (wxhxd) in mm
- Internal dimensions (wxhxd) in mm
- Internal volume (l)
- Shelves (standard/max.)
- Temp. range approx.  $>5^{\circ}\text{C}$  oRt to  $(^{\circ}\text{C})$
- Temp. variation at  $50/150^{\circ}\text{C}$  ( $\pm^{\circ}\text{C}$ )
- Temp. fluctuation at  $100^{\circ}\text{C}$  ( $\pm^{\circ}\text{C}$ )
- Heating-up time  $70/150^{\circ}\text{C}$  (in min.)
- Power (w)
- SalvisTEQ controller
- Display
- Ports



	TC40	TC100
External dimensions (wxhxd) in mm	460x490x526	570x620x656
Internal dimensions (wxhxd) in mm	340x370x330	450x500x460
Internal volume (l)	40	100
Shelves (standard/max.)	1/8	1/8
Temp. range approx. $>5^{\circ}\text{C}$ oRt to $(^{\circ}\text{C})$	200	200
Temp. variation at $50/150^{\circ}\text{C}$ ( $\pm^{\circ}\text{C}$ )	0.4/1.5	0.4/1.7
Temp. fluctuation at $100^{\circ}\text{C}$ ( $\pm^{\circ}\text{C}$ )	0.1	0.1
Heating-up time $70/150^{\circ}\text{C}$ (in min.)	10/24	15/35
Power (w)	1100	1100
SalvisTEQ controller	Yes	Yes
Display	Touch	Touch
Ports	USB, RJ45	USB, RJ45

# Thermocenter.



The SalvisLab Thermocenter sets standards in quality and design. Short heating and precise temperature control make the Thermocenter an ideal solution for heating and drying tasks of any kind. With the fans and heating elements in the rear part of the housing the Thermocenter guarantees reliability and precision down to the last corner. The clearly arranged touch screen makes operation even more efficient. SwissTEQ at its best.

- Improved energy efficiency thanks to our SalvisTEQ controller
- Unlimited flexibility
- Real-time clock with process times
- Safety class 3.3
- Programmable, automatic restart after power loss
- USB and RJ45 interface
- Touch screen
- Easy cleaning of the chamber
- Increased capacity of mechanical support
- Fresh air filter
- Ambient temperature probe



## Options

- Product temperature controller
- Program- and user package
- Process graph
- Redundant PT-100 probe
- Factory temperature mapping
- LAN-Interface
- Additional memory
- Additional USB or RJ45 port
- Entry port 20 mm
- Entry port 40 mm
- IQ/OQ draft paper, 3 hard copies
- Freely assignable analog outputs
- Programmable power socket + point calibration
- Potentialfree contact

## Accessories

- Wire shelves (standard)
- Fresh air filter
- Product temperature probe
- Wall bracket



## Technical specifications

	TC40+	TC80+	TC160	TC240	TC400
External dimensions (wxhxd) in mm	650x510x510	750x540x600	800x720x680	890x820x720	990x920x900
Internal dimensions (wxhxd) in mm	385x370x305	485x400x395	535x580x475	625x680x515	725x780x695
Internal volume (l)	40	80	160	240	400
Shelves (standard/max.)	2/5	2/5	2/8	2/8	2/10
Temp. range approx. >5°C oRt to (°C)	275	275	275	275	275
Temp. variation at 50/150°C (±°C)	0.6/1.4	0.6/1.4	0.8/1.8	0.8/2.1	1.0/2.5
Temp. fluctuation at 100°C (±°C)	0.2	0.2	0.2	0.2	0.2
Heating-up time 70/150°C (in min.)	7/20	8/20	12/30	16/30	20/40
Power (w)	1000	1000	1600	1800	2000
SalvisTEQ controller	Yes	Yes	Yes	Yes	Yes
Display	Touch	Touch	Touch	Touch	Touch
Ports	USB, RJ45	USB, RJ45	USB, RJ45	USB, RJ45	USB, RJ45

# Vacucenter.



The SalvisLab Vacucenter is the optimal solution for oxidation-sensitive substances and thermally instable products. It provides precise thermal conditions in dust-free vacuum atmosphere. These characteristics enable highly successful SalvisLab Vacucenter applications for a wide range of laboratory applications in areas such as chemical engineering, pharmaceuticals, foodstuffs, cosmetics and electronics. The SalvisLab Vacucenter is renowned for its compact formfactor, reliability and durability. SwissTEQ in its complete form.

- Dynamic regulation and improved energy efficiency thanks to our SalvisTEQ controller
- Precise needle valve ensures a perfectly controlled pressurizing
- Real-time clock with process times
- Uniform temperature through mantle heating
- Safety class 3.3
- USB and RJ45 interface
- Touch screen
- Standard DN25 entry port
- Ambient temperature probe



## Options

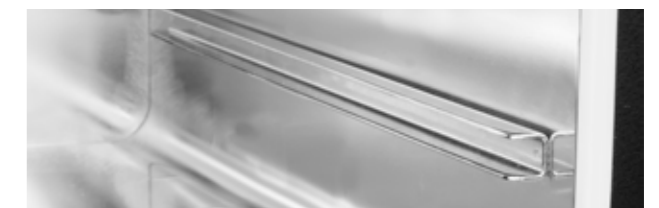
- Digital vacuum display
- Digital vacuum display & vacuum control
- Digital vacuum display & highvacuum control (0,1 – 20 mbar)
- Digital vacuum display, vacuum control & ventilation control
- Product temperature controller
- Program- and user package
- Process graph
- Redundant PT-100 probe
- Factory temperature mapping
- Additional memory
- IQ/OQ draft paper, 3 hard copies
- Solenoid vacuum valve chemical proof
- Freely assignable analog outputs
- Programmable power socket
- + point calibration (max. 10 points)
- Potentialfree contact

## Accessories

- Stainless steel shelves
- Aluminum shelves
- Double connector air & inert gas
- Light barrier
- Product temperature probe PT-100
- Vacuum pump connector DN16

## Technical specifications

- External dimensions (wxhxd) in mm
- Internal dimensions (wxhxd) in mm
- Internal volume (l)
- Shelves (standard/max.)
- Temp. range approx. >5°C oRt to (°C)
- Temp. variation at 50/150 °C (±°C)
- Temp. fluctuation at 100 °C (±°C)
- Power (w)
- SalvisTEQ controller
- Display
- Ports



## VC20

- 545x375x425
- 250x250x320
- 20
- 1/3
- 200
- 1.0/2.4
- 0.2
- 900
- Yes
- Touch
- USB, RJ45

## VC50

- 645x475x525
- 350x350x420
- 50
- 1/5
- 200
- 1.0/2.6
- 0.2
- 1350
- Yes
- Touch
- USB, RJ45

# Incucenter.



SalvisLab Incucenter are highly accurate apparatus designed for incubation in clinical and industrial laboratory fields as well as for quality control. The exclusive Intelli-Fan-System from SalvisLab provides uniform, constant level temperature conditions at all locations within the chamber – independent of load. High degree of precision is assured over the full temperature range. The inner door made of safety glass permits optical process monitoring without heat energy loss. SwissTEQ for your incubation processes.

- SalvisTEQ controller
- Quick heating and precise temperature control
- High energy efficiency
- In support of decontamination, the units may be heated up to +110 °C.
- Real-time clock with process times
- Safety class 3.3
- USB and RJ45 interface
- Touch screen
- Standard 6 mm entry port
- Fresh air filter
- Ambient temperature probe

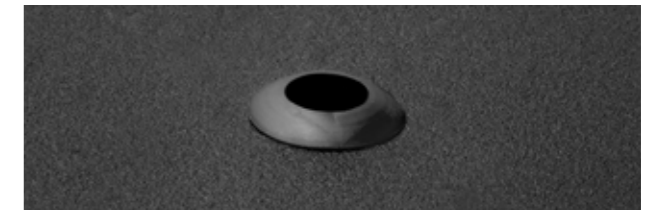


## Options

- Product temperature controller
- Program- and user package
- Process graph
- Redundant PT-100 probe
- Factory temperature mapping
- LAN-Interface
- Additional memory
- Additional USB or RJ45 interface
- Entry port 20 mm
- Entry port 40 mm
- IQ/OQ draft paper, 3 hard copies
- Two freely assignable analog outputs
- Programmable power socket
- + point calibration
- Potentialfree contact

## Accessories

- Wire shelves (standard)
- Fresh air filter
- Product temperature probe PT-100



## Technical specifications

	IC40	IC80	IC160	IC240	IC400
External dimensions (wxhxd) in mm	650x510x510	750x540x600	800x720x680	890x820x720	990x920x900
Internal dimensions (wxhxd) in mm	385x370x305	485x400x395	535x580x475	625x680x515	725x780x695
Internal volume (l)	40	80	160	240	400
Shelves (standard/max.)	2/5	2/5	2/8	2/8	2/10
Temp. range approx. >5 °C oRt to (°C)	110	110	110	110	110
Temp. variation at 37/110 °C (± °C)	0.3/0.8	0.3/0.8	0.5/1.2	0.5/1.8	0.5/2.0
Temp. fluctuation at 37 °C (± °C)	0.2	0.2	0.2	0.2	0.2
Heating-up time 37 °C (in min.)	10	14	20	26	33
Recovery time (in min.)	3	3	5	5	5
Power (w)	500	800	1000	1200	1200
SalvisTEQ controller	Yes	Yes	Yes	Yes	Yes
Display	Touch	Touch	Touch	Touch	Touch
Ports	USB, RJ45	USB, RJ45	USB, RJ45	USB, RJ45	USB, RJ45



# Biocenter.



The SalvisLab Biocenter is the ideal CO<sub>2</sub> incubator for cell and tissue cultures. The innovative and reliable design concept ensures optimal conditions for your applications. The selected temperature control technology operates without any ventilation inside the chamber, thus reducing the risk of contamination to a minimum. Constant conditions for temperature, CO<sub>2</sub> and humidity are kept independent from the load.

- Easy touchscreen control
- Decontamination at 200 °C
- Temperature uniformity is achieved by heating the chamber from all six sides
- Infrared CO<sub>2</sub> probe
- Export process data to an SD card
- Sealing inner glass door
- Standard 25mm entry port
- Safety class 3.1



## Options

- 1 – 19% O<sub>2</sub>-control
- Log Software
- Entry port 25 mm
- RJ45 Port
- Alarm contact
- Inner glass door, 8 compartments (BC190)
- Inner glass door, 6 compartments (BC50)

## Accessories

- Perforated stainless steel shelves
- Stacking kit & stand, with castors
- Stacking kit (no stand)
- Stand (no stacking kit) with four castors
- Automatic CO<sub>2</sub> cylinder change over unit (external)
- CO<sub>2</sub> Filter (pack of two)
- In-line CO<sub>2</sub> reducing valve with pressure gauge
- Two stage CO<sub>2</sub> regulator
- SD memory card



## Technical specifications

External dimensions (wxhxd) in mm	535x705x430	850x765x600
Internal dimensions (wxhxd) in mm	400x400x305	685x630x435
Internal volume (l)	50	190
Shelves (standard/max.)	3	4/8
Temp. range approx. >5 °C oRt to (°C)	60	60
Temp. variation at 37°C (± °C)	0.2	0.25
Temp. fluctuation at 37°C (± °C)	0.1	0.1
CO <sub>2</sub> range (%)	0 – 20	0 – 20
CO <sub>2</sub> variation (± %)	0.1	0.1
CO <sub>2</sub> fluctuation (± %)	0.2	0.2
CO <sub>2</sub> recovery time 37°C (door open for 30 s, %/min.)	>0.7	>0.7
Waterbath (l)	1.5	1
Relative humidity 37°C (%)	<95	<95
Voltage (± 10 %) 50/60 Hz	230	230
Ethernet port	Optional	Optional
Entry port (25 mm)	Yes	Yes
O <sub>2</sub> 1 – 19% Control	No	Optional

	BC50	BC190
External dimensions (wxhxd) in mm	535x705x430	850x765x600
Internal dimensions (wxhxd) in mm	400x400x305	685x630x435
Internal volume (l)	50	190
Shelves (standard/max.)	3	4/8
Temp. range approx. >5 °C oRt to (°C)	60	60
Temp. variation at 37°C (± °C)	0.2	0.25
Temp. fluctuation at 37°C (± °C)	0.1	0.1
CO <sub>2</sub> range (%)	0 – 20	0 – 20
CO <sub>2</sub> variation (± %)	0.1	0.1
CO <sub>2</sub> fluctuation (± %)	0.2	0.2
CO <sub>2</sub> recovery time 37°C (door open for 30 s, %/min.)	>0.7	>0.7
Waterbath (l)	1.5	1
Relative humidity 37°C (%)	<95	<95
Voltage (± 10 %) 50/60 Hz	230	230
Ethernet port	Optional	Optional
Entry port (25 mm)	Yes	Yes
O <sub>2</sub> 1 – 19% Control	No	Optional

# Coolingcenter.



SalvisLab Coolingcenter CIC150 is our solution for cooled incubation processes. Coolingcenter stands for incubation of microbiological cultures and for reproducible results in every routine test in the laboratory – especially by high batch throughputs during long-term operation. The CIC is built to last, in typical SalvisLab Swiss Quality. The exclusive EasyMenu controller from SalvisLab provides an uniform and constant level of temperature conditions at any and all location within the chamber. SwissTEQ, what else.

- Precise temperature control
- High energy efficiency
- Real-time clock
- Easy and user friendly operation
- Safety class 3.1
- Compressor cooled



## Options

Factory temperature mapping  
IQ/OQ draft paper, 3 hard copies

## Accessories

Wire shelves



## Technical specifications

External dimensions (wxhxd) in mm  
Internal dimensions (wxhxd) in mm  
Internal volume (l)  
Shelves (standard/max.)  
Weight (kg)  
Temp. range (°C)  
Temp. variation at 5/25/37°C (± °C)  
Temp. fluctuation at 5/25/37°C (± °C)  
Heating-up time 23 °C to 37°C (in min.)  
Recovery time 37/50 °C 5/25/37°C (door open for 30 s, in min.)  
Voltage (± 10%) 50/60 Hz (w)  
Heating power (w)  
Cooling power at 20 °C (w)  
Idle power consumption 20/37°C (w)  
Coolant  
Controller  
Display  
Ports

## CIC150

685x860x755  
490x495x595  
150  
2/13  
75  
+5 to +60  
0.4/0.4/0.4  
0.1/0.1/0.1  
5  
2/1/4  
230/115  
900  
200  
370/60  
R134a  
LCD  
LCD  
RS 232

# Heatingcenter.



The HC120 heating cabinet was specially developed and manufactured for the care and surgical sector, traumatology, intensive care units, baby units, maternity wards, old-age and care homes, therapy units, physiotherapy, wellness areas, etc. The housing is made of heavy-duty, powder-coated steel, while the interior is entirely manufactured from electropolished stainless steel and has all-round insulation and sealing. The temperature can be continuously and precisely adjusted, ambient temperature +5°C to +80°C, using the control thermostat and the analog display. The door locking mechanism is equipped with two magnetic fasteners in order to ensure secure closure of the doors. Excellent materials and good insulation guarantee low operating costs. The HC120 heating cabinet is designed for continuous operation.

The heating cabinet is used to keep the following warm:

- Bedding
- Surgical drapes
- Wraparound garments/bath towels
- Infusion solutions
- Baby bottles
- etc.



## Technical specifications

External dimensions (wxhxd) in mm  
 Internal dimensions (wxhxd) in mm  
 Internal volume (l)  
 Shelves  
 Temp. range 10°C oRt to (°C)  
 Idle power consumption at 50°C (w)

## HC120

550x760x500  
 480x610x435  
 120  
 2  
 80  
 65

# Mixcenter.



SalvisLab Mixcenter assist you in daily laboratory work with the appropriate device. The magnetic stirrer is available in a classic and in a digital version, both versions can be heated. Even thermally demanding tasks can be mastered easily.

- Precise temperature control
- Ideal for thermally demanding tasks
- Easy and user friendly operation



## Options

Carrying plate, blue  
 Fixed ring, blue  
 Quarter pie, black  
 Quarter pie, blue  
 Quarter pie, gold  
 Quarter pie, green  
 Quarter pie, purple  
 Quarter pie, red  
 Reaction block for 50 ml\*  
 Reaction block for 100 ml\*  
 Reaction block for 250 ml\*  
 External PT-1000 temp. probe  
 Support clamp for PT-1000

## Accessories

Reaction block for 500 ml  
 Stirrer bar (10 mm x 6 mm)  
 Stirrer bar (15 mm x 8 mm)  
 Stirrer bar (20 mm x 8 mm)  
 Stirrer bar (25 mm x 8 mm)  
 Stirrer bar (30 mm x 6 mm)  
 Stirrer bar (40 mm x 8 mm)  
 Stirrer bar (50 mm x 8 mm)  
 Stirrer bar (65 mm x 8 mm)  
 Stirrer bar (80 mm x 13 mm)  
 Stirrer bar remover



## Technical specifications

Voltage (v) 200 – 240  
 Power (w) 530  
 Max. stirring Volume (l H<sub>2</sub>O) 20  
 Plate (∅ mm) 135  
 Plate material Ceramic coated  
 Speed 0 – 1500  
 Speed adjustment analog  
 Temp. range approx. >5°C oRt to (°C) 350  
 RS 232 port No  
 Safety class IP 42

## MC35

200 – 240  
 530  
 20  
 135  
 Ceramic coated  
 0 – 1500  
 analog  
 350  
 No  
 IP 42

## MC350

200 – 240  
 550  
 20  
 135  
 Ceramic coated  
 100 – 1500  
 digital  
 350  
 Yes  
 IP 42

# Cleaner.



SalvisLab laboratory glass cleaning machines are the ideal solution for the treatment of dirty glassware. They were designed as a under-bench or as free-standing model. Quiet and efficient washing is possible simultaneously on two independent levels. Through constant innovation our laboratory glass cleaning machines meet the highest level of development and guarantee constant reproducible cleaning results. SalvisLab guarantees great flexibility, compatibility and individuality in the selection of the washing baskets. All of our cleaning machines are made of stainless steel.

- Efficient washing and/or drying with jet pipe racks on two levels
- Individually configurable jet pipe racks
- Temperature control through two independent sensors (PT-1000)
- Preinstalled with two dosing pumps
- Standard USB SLAVE, USB HOST and printer interface
- Touch panel with colour graphic display
- Water softener for cold and hot water
- Wash chamber made of high quality stainless steel, AISI 316L (EN1.4404)
- Standard conductivity probe, spray arm monitor, wash chamber LED light
- Chemical product level sensor
- Optionally also as a 230V and 50 or 60 Hz version

## Technical specifications

External dimensions (wxdxh) in mm	600x650x845
Internal volume (l)	165 l
Max. pump flow rate	370 l/mn
Max. drying fan flow rate with filter	180 m <sup>3</sup> /h
Max. absorbed power	6.2 kW
Number of dosing pumps for chemicals (Standard/max.)	2/4
Chemical tank capacity	5 l

## SCD G6

External dimensions (wxdxh) in mm	600x650x845
Internal volume (l)	165 l
Max. pump flow rate	370 l/mn
Max. drying fan flow rate with filter	180 m <sup>3</sup> /h
Max. absorbed power	6.2 kW
Number of dosing pumps for chemicals (Standard/max.)	2/4
Chemical tank capacity	5 l



## Technical specifications

External dimensions (wxdxh) in mm	900x650x845
Internal volume (l)	165 l
Max. pump flow rate	370 l/mn
Max. drying fan flow rate with filter	180 m <sup>3</sup> /h
Max. absorbed power	6.2 kW
Number of dosing pumps for chemicals (Standard/max.)	2/4
Chemical tank capacity	5 l

## SCD G9

External dimensions (wxdxh) in mm	900x650x845
Internal volume (l)	165 l
Max. pump flow rate	370 l/mn
Max. drying fan flow rate with filter	180 m <sup>3</sup> /h
Max. absorbed power	6.2 kW
Number of dosing pumps for chemicals (Standard/max.)	2/4
Chemical tank capacity	5 l



## Technical specifications

External dimensions (wxdxh) in mm	600x650x845
Internal volume (l)	165 l
Max. pump flow rate	-
Max. drying fan flow rate with filter	150 m <sup>3</sup> /h
Max. absorbed power	2.3 kW
Number of dosing pumps for chemicals (Standard/max.)	-
Chemical tank capacity	-

## SD 1

External dimensions (wxdxh) in mm	600x650x845
Internal volume (l)	165 l
Max. pump flow rate	-
Max. drying fan flow rate with filter	150 m <sup>3</sup> /h
Max. absorbed power	2.3 kW
Number of dosing pumps for chemicals (Standard/max.)	-
Chemical tank capacity	-



**Technical specifications**

External dimensions (wxdxh) in mm

Internal volume (l)

Max. pump flow rate

Max. drying fan flow rate with filter

Max. absorbed power

Number of dosing pumps for chemicals (Standard/max.)

Chemical tank capacity

**SCD G10**

650x670x1850

262 l

626 l/mn

150 m<sup>3</sup>/h

11.4 kW

2/4

5 l

**Technical specifications**

External dimensions (wxdxh) in mm

Internal volume (l)

Max. pump flow rate

Max. drying fan flow rate with filter

Max. absorbed power

Number of dosing pumps for chemicals (Standard/max.)

Chemical tank capacity

**SCD G10A**

680x670x1950

262 l

626 l/mn

150 m<sup>3</sup>/h

11.4 kW

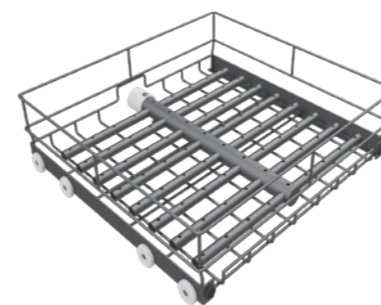
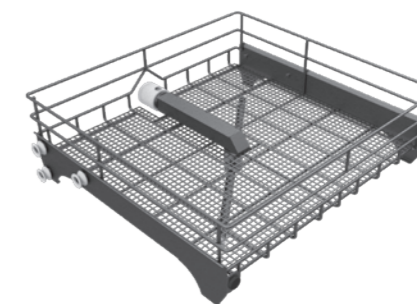
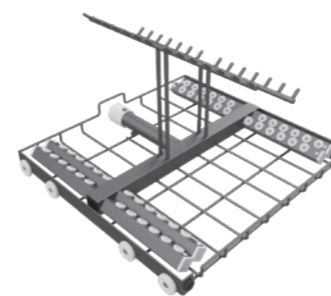
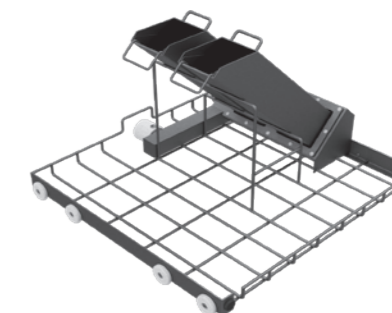
2/4

5 l



## Cleaner accessories.

All racks and accessories are suitable for under bench cleaner SC/SCD 1160/1190/G60/G90/2560/2560/G6/G9. Further accessories and small parts for SalvisLab cleaners can be found in our comprehensive cleaner catalogue.

**Jet pipe rack****Basic rack****Pipettes washing rack with jets****Pipettes washing rack with cassettes,****Insert for petri dishes or instruments****Side cabinets**

**Manufacturer:**

Renggli AG  
SalvisLab  
Industrie-Ost  
CH-6343 Rotkreuz  
Switzerland  
[www.salvislab.com](http://www.salvislab.com)



**renggli**

Laboratory  
Systems

# SalvisLab

## Perfect washing cycles





# About SalvisLab.

## Swiss tradition with a great future

Renggli AG, founded in 1927, is an established Swiss family enterprise with international orientation in the realm of complete laboratory solutions. As one of the leading European manufacturers and market leaders in Switzerland, Renggli designs and implements state-of-the-art laboratories for research, industry, medicine and education.

With the renowned SalvisLab trademark, Renggli AG develops and produces a range of forced air drying ovens, incubators, vacuum drying ovens, heating cabinets, glassware cleaners and the corresponding accessories for each appliance. SalvisLab products are distributed world-wide through our international network of dealers.

## We design professional equipment systems for you

SalvisLab develops and distributes high-quality laboratory equipment in close collaboration with the complete laboratory solutions provider Renggli AG in Rotkreuz. SalvisLab sets standards in quality, design and the production of laboratory equipment. New developments undergo intensive testing in our Development Center, so that they meet our customers' requirements.

The comprehensive range of equipment offered by SalvisLab provides extensive coverage of requirements in the laboratory field with forced air drying ovens, incubators, vacuum drying ovens, heating cabinets, glassware cleaners and the corresponding accessories for each appliance.

With our well-trained team, we offer you comprehensive advice on our equipment as well as reliable on-site service. Our collaboration with partners means there is an extensive global network to meet all needs in the laboratory field and we are also in a position to provide you with support extending beyond individual items of equipment, both as a consultant and an intermediary.

## Our Core Competences

### Counselling Competence

Our laboratory experts are eager to support you in all facets of laboratory technology. They will advise you accurately on all pertinent norms, legal provisions and safety aspects.

### Planning and Engineering Competence

Our specialists are at your disposal to carry out the planning of the entire project. They even cover the engineering part, from media supply of the individual work place all the way to interfacing with the building control systems.

### System Competences

In addition to being a dependable supplier of laboratory installations and equipment, we are your comprehensive one-stop service for counselling, planning/engineering, production, installation and maintenance/service. This is the key and guarantee for decades of perfect performance of your laboratories.

# Overview.

The perfect line to effectively wash different types of glassware and other materials commonly used in laboratories.

In specialized laboratories quality and speed of the washing process are of utmost importance: Salvislab glassware washers offer reliability, operator safety and the highest levels of hygiene and cleanliness.

High standards of hygiene with high reliability, in compliance with the standards in force.



The wide range of racks, nozzles and accessories have been designed to reach every recess, ensuring the washing and drying of even the most sophisticated glassworks.



SCD G6



SCD 2560



SC 2560  
Stainless steel door, without  
drying system



SCD G9



SCD 2590  
Stainless steel door, without  
drying system



SCD G10



Automatic  
door

SCD G10A

# Key features.

## Alarm-check system

This system helps the operator to understand why an alarm has occurred before consulting the user manual. A text appears on the display with the number, the image of the alarm and the text explaining the possible causes of it.

## Chemical dosing control

The dosing system for chemical products is controlled by flowmeter. If the flowmeter doesn't perceive the passage of the liquid, after a few seconds the display will show an alarm that warns the operator of the nondispensing of the liquid in the wash chamber.

## Chemical products level sensor

The machine is equipped with a sensor placed in the suction probe of chemical products, which warn the user if the liquid is running out through a warning that appears on the LCD display.

## Chemical-resistant double glass

The door is made of two layers of tempered glass, resistant to chemicals, even the most aggressive ones. It allows to see inside the wash chamber during operation.

## Conductivity probe

All the cleaners are equipped with a conductivity probe that checks the water purity level at the end of rinsing. The machine repeats the rinse cycle again to remove any residue if the conductivity probe detects a water purity level, expressed in  $\mu\text{S}/\text{cm}$ , higher than the preset one.

## Customizable programs

The machine is supplied with a set of standard programs, variable according to the model, and with the addition of customizable programs, up to a maximum of 40 total programs.

## Detergent storage compartment

In the SCD 2590 and SCD G9 models, the detergent storage compartment is located in the side panel with a handle to allow access to it.

## Door locking and security system

The machines are equipped with an automatic door locking system which ensure a safety door block. For the safety of the operators, the machine does not allow the door to be unlocked during the wash cycle or in the presence of high temperatures. An extra sensor guarantee that, even if in presence of a malfunction of the machine, the water pump will be switched off with the unlock of the door.

## Empty Total System(E.T.S.)

On request, SCD G10 and SCD G10A can be integrated with the E.T.S. system which, at the end of each cycle, automatically discharges the residual water from the pump, water storage tank and pipes, to ensure complete cleaning inside the machine.

## Ergonomic handle

Thanks to the ergonomic handle on models equipped with manual door, the opening and closing operations of the door are facilitated without the need to push it strongly.

## E-version

SC 2560 is without drying system, for all others it can be programmed: at the end of the cycle, the machine automatically opens the door, partially, to dry the instruments with a natural air recirculation, saving on consumption.

## Filter cleaning sensor

A dedicated vacuum state monitors the filter clogging. An alarm message on the display will indicate that the filter is clogged, causing a cycle stop.

## Hybrid heating system: electric steam

On request, SCD G10 and G10A can be integrated with the Hybrid heating system: The water is heated both by the heating elements inside the tank and by the coil crossed by network steam. In this way it is possible to reduce program times and electricity consumption.

## Microconroller

The machine is equipped with a microcontroller that constantly monitors its operation. It's provided with an internal flash memory that allows the machine to store all the information regarding: cycle params, allarms and log history. An internal watchdog monitors the microcontroller and blocks the device in case of a malfunction.

## Printer

On request, the machine is equipped with a printer that prints a receipt log of the running program.

## Reliable washing

Thanks to a dedicated pressure switch that monitors the water pressure of the washing circuit in real time, all the washing parameters will always be perfect, ensuring the validation of each cycle. An alarm message on the display will indicate if there's a pressure lost during the cycle, causing a cycle stop.

## RS232 port connection

## Spray arm monitor

All the cleaners are equipped with a spray arm monitor system. If the washing impeller monitor is enabled, it checks the correct rotation of the spray arm. An alarm message on the display will indicate a problem during the cycle.

## Stainless steel design

The wash chamber is made of stainless steel AISI 316L (EN 1.4404) while the chassis and external panels are made of stainless steel AISI 304 (EN 1.4301). They are shockproof and long-lasting. Scotch Brite surface finish makes cleaning easier.

## Steam condenser system

The machine is equipped with an effective steam condenser system that acts to reduce the steam during drying phases.

### **Support for an easy access**

On request, SC/SCD 2560/2590/G6/G9 can be integrated with a stainless steel support under the machine that provides an ergonomic height of 150 cm when the machine is not installed under-counter, making the access to the machine easier for the operator. The support is also useful for storing detergent tanks.

### **Touch-ad keyboard with graphic display**

The touch control panel consists of 8 backlit keys and a 3.5" LCD display. The flat display with colour graphics shows all cycle parameters, alarm messages, measured temperatures of the two temperature probes positioned in the wash chamber and the drying temperatures.

### **Uniform forced air drying**

During the drying phase, the forced air pushed by a blower, is introduced into the washing chamber, passing through an electric heater. The air then comes out of the jets of the impellers to ensure a warm uniform air distribution. The filter, with an F5 efficiency grade, allows to block the fine dust present in the air. On request it is possible to integrate a HEPA H14 filter, with an efficiency of the 99.995%.

### **USB Port**

The 2 USB ports are located on the front:

- USB 1 port for PC USB, that allows to connect the machine to a PC for programming
- USB 2 port for flash drive, that allows you to download the history of executed programs and alarms or for update the firmware and datasets.

### **User pin management**

On request, Salvislab cleaners can be provided with a firmware option that allows to manage a secure access to the programs by the users. An user name and password protection level limits the access to the device only to authorized personnel. (Not available for SCD G10/G10A)

### **Wash chamber LED light**

The machine with viewing Door are equipped with a LED light positioned inside the wash chamber, with low energy consumption, for a better visibility during the wash cycle and during loading and unloading of the basket. The LED may vary in color depending on machine status. In the event of an alarm, the wash chamber lights red; when the cycle is successfully completed, the wash chamber lights green.

### **Washer RePortal**

On request, Salvislab cleaners can be accompany with the software "Washer RePortal" (running on OS MS Windows), available under license. With this software it is possible to connect to the machine to manage the user PIN and download, via USB PenDrive, the cycles ran, that are saved on a special database, moreover it is possible to generate the cycle reports in PDF format and export them in CSV format, compatible with the most popular softwares (MS Excel, Open Office, etc. ...). (Not available for SCD G10/G10A)

### **Water heating with boiler**

On request it is possible to integrate the machinery of a boiler to accelerate the heating of demineralized water, while the machine is performing the previous washing phases.

### **Water softener system**

It is a standard system that softens the cold and hot water entering the wash chamber, so as to reduce the formation of limestone in the hydraulic circuit of the machine. The machine automatically regenerates the resins based on the water hardness set at the time of installation.



# SCD G6 | SCD 2560 | SC 2560 165lt

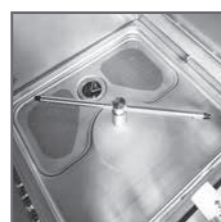


**UNDER BENCH MODELS.** Machines equipped with a manual opening and closing door made in double tempered glass (SCD G6) or stainless steel (SCD 2560 and SC2560), for laboratory glassware with 2 independent levels. SCD G6 and SCD 2560 are equipped with a system that filter, electrically heat and force, with a powerful blower, the air in the wash chamber and inside the hollow instruments, to obtain an excellent drying result. A wide range of racks, nozzles and accessories complete these machines, suitable to wash and dry a wide variety of laboratory glassware.

## Key features



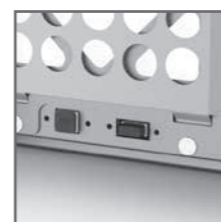
Filter



Wash chamber



External printer



USB memory

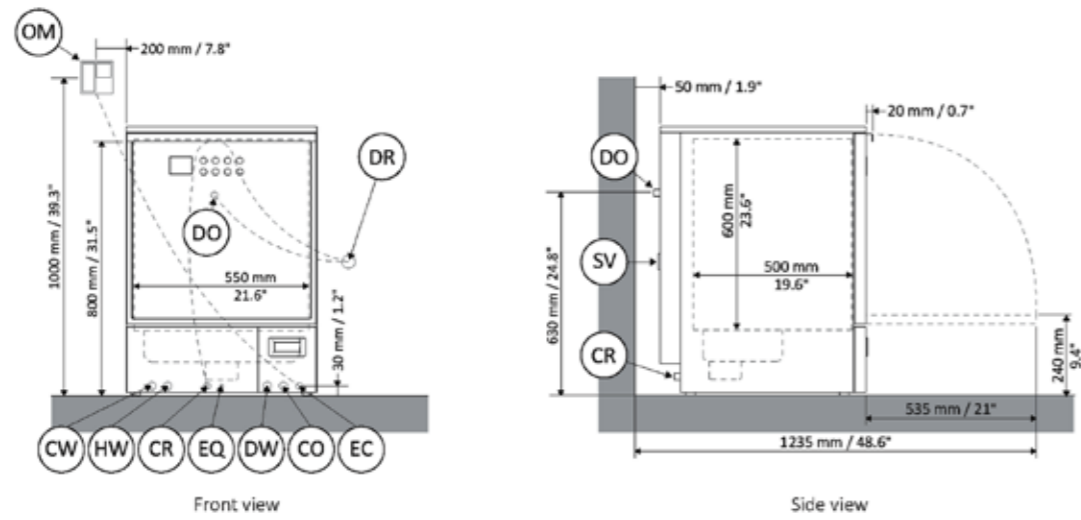


Touch control system

Technical features	SCD G6	SCD 2560	SC 2560
External dimension (WxDxH)	600x650x845 mm		
Chamber dimension (WxDxH)	550x500x600 mm		
Max. pump flow rate	370 l/mn		
Max. drying fan flow rate with filter	180 m <sup>3</sup> /h	-	
Max. absorbed power	6.2 kW		
Standard/max. number of dosing pumps for chemicals with flowmeters	2/4		
Chemical tank capacity	5 l		
Device configuration options	SCD G6	SCD 2560	SC 2560
USB SLAVE interface for PC	Standard		
USB HOST interface for FLASH DRIVE	Standard		
Interface for external printer or data connection exchange	Standard		
Touch panel with color graphic display	Standard		
Certified according to standards 2006/42/EC, 2014/35/EU, 2014/30/EU, EN 61010-1, EN 61326-1	Standard		
Certificated plumbing system, designed to isolate the potable water pipeline system (water gap) as prescribed by European Standard EN 1717	Standard		
Manual door with interlock	Standard		
Forced air drying	Standard	-	
Wash chamber made of high quality stainless steel; AISI 316L (EN1.4404)	Standard		
Hot water connection	Standard		
Cold water connection	Standard		
HEPA H14 filter	Optional	-	
Conductivity probe	Standard		
Cold/hot water softener system	Standard		
Wash chamber LED light	Standard	-	
Demineralized water connection	Standard		
Spray arm monitor	Standard		
External printer	Optional		

The reference values are based on a voltage of 230V between Phase and Neutral (between Phase and Phase in three-phase versions without Neutral) with a possible variance between -5 and +10%.

## Installation drawing



<b>CW</b>	Cold water connection - tube G 1/2" (BSPP 1/2") male-thread G 3/4" (BSPP 3/4")	<b>DO</b>	Outlet condenser drain connection from machine
<b>HW</b>	Hot water connection - tube G 1/2" (BSPP 1/2") male-thread G 3/4" (BSPP 3/4")	<b>EC</b>	Electrical connection output from machine
<b>DW</b>	Deionized water connection - tube G 1/2" (BSPP 1/2") male-thread G 3/4" (BSPP 3/4")	<b>OM</b>	Omnipolar magneto switch with a circuit breaker
<b>CO</b>	Steam condenser connection - tube G 1/2" (BSPP 1/2") male-thread G 3/4" (BSPP 3/4")	<b>EQ</b>	Equipotential clamp
<b>CR</b>	Drain connection outlet from machine	<b>SV</b>	Steam outlet exhaust
<b>DR</b>	Drain DN40 (1.6") with hose barb connection $\varnothing$ 22mm (0.9")		



# SCD G9 | SCD 2590 165lt



**UNDER BENCH MODELS.** Machines equipped with a manual opening and closing door made in double tempered glass (SCD G9) or stainless steel (SCD 2590), for laboratory glassware with 2 independent levels. Both cleaners are equipped with a system that filter, electrically heat and force, with a powerful blower, the air in the wash chamber and inside the hollow instruments, to obtain an excellent drying result. A wide range of racks, nozzles and accessories complete these machines, suitable to wash and dry a wide variety of laboratory glassware.

## Key Features



Filter

Wash chamber with multi filters

Chemicals

Touch control system

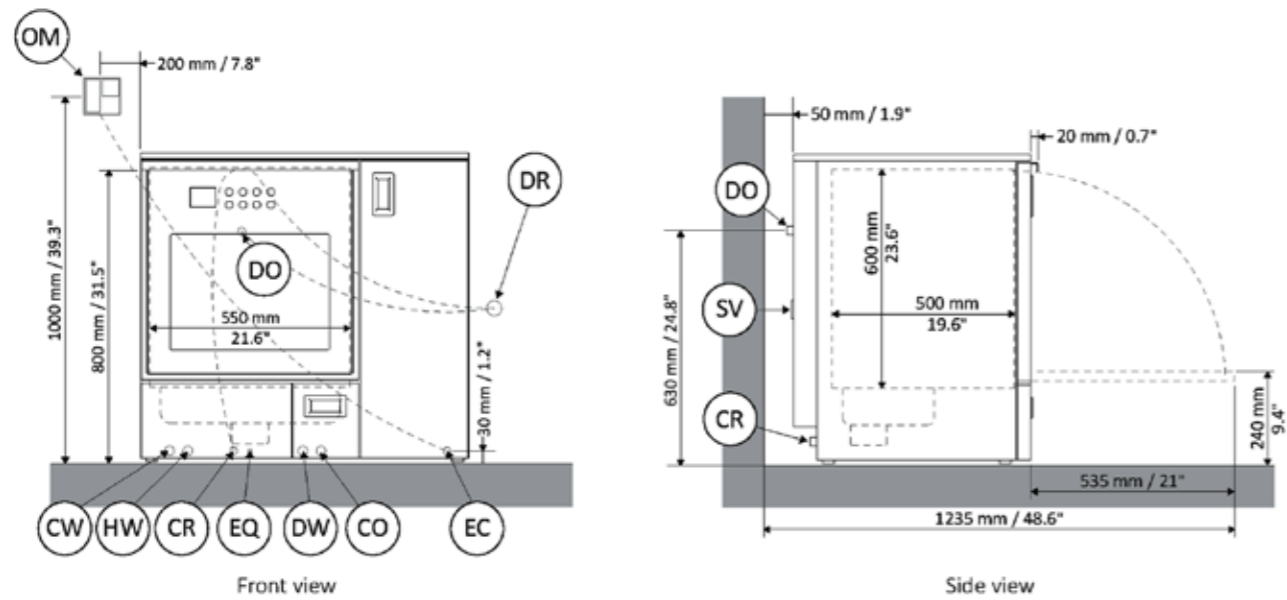
USB memory

Built-in printer

Technical features	SCD G9	SCD 2590
External dimension (WxDxH)	900x650x845 mm	
Chamber dimension (WxDxH)	550x500x600 mm	
Max. pump flow rate	370 l/mn	
Max. drying fan flow rate with filter	180 m <sup>3</sup> /h	
Max. absorbed power	6.2 kW	
Standard/max. number of dosing pumps for chemicals with flowmeters	2/4	
Chemical tank capacity	5 l	
Device configuration options	SCD G9	SCD 2590
USB SLAVE interface for PC	Standard	
USB HOST interface for FLASH DRIVE	Standard	
Interface for external printer or data connection exchange	Standard	
Touch panel with color graphic display	Standard	
Certified according to standards 2006/42/EC, 2014/35/EU, 2011/65/EU, 2014/30/EU, EN61010-1, EN 61326-1	Standard	
Certificated plumbing system, designed to isolate the potable water pipeline system (water gap) as prescribed by European Standard EN 1717	Standard	
Manual door with interlock	Standard	
Forced air drying	Standard	
Wash chamber made of high quality stainless steel; AISI 316L (EN1.4404)	Standard	
Hot water connection	Standard	
Cold water connection	Standard	
HEPA H14 filter	Standard	
Conductivity probe	Standard	
Cold/hot water softener system	Standard	
Wash chamber LED light	Standard	-
Demineralized water connection	Standard	
Spray arm monitor	Standard	
Built-in printer installed in the side panel	Optional	

The reference values are based on a voltage of 230V between Phase and Neutral (between Phase and Phase in three-phase versions without Neutral) with a possible variance between -5 and +10%.

## Installation Drawing



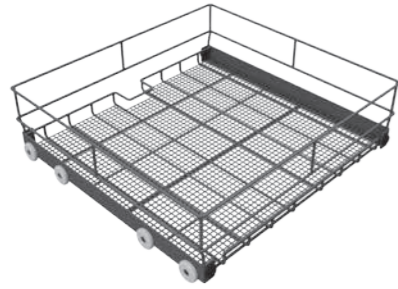
<b>CW</b>	Cold water connection - tube G 1/2" (BSPP 1/2") male-thread G 3/4" (BSPP 3/4")	<b>DO</b>	Outlet condenser drain connection from machine
<b>HW</b>	Hot water connection - tube G 1/2" (BSPP 1/2") male-thread G 3/4" (BSPP 3/4")	<b>EC</b>	Electrical connection output from machine
<b>DW</b>	Deionized water connection - tube G 1/2" (BSPP 1/2") male-thread G 3/4" (BSPP 3/4")	<b>OM</b>	Omnipolar magneto switch with a circuit breaker
<b>CO</b>	Steam condenser connection - tube G1/2" (BSPP 1/2") male-thread G3/4 (BSPP 3/4")	<b>EQ</b>	Equipotential clamp
<b>CR</b>	Drain connection outlet from machine	<b>SV</b>	Steam outlet exhaust
<b>DR</b>	Drain DN40 (1.6") with hose barb connection ø22mm (0.9")		





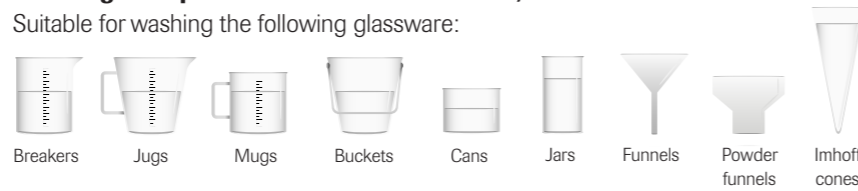
# Baskets

SCD G6 | SCD 2560 | SC2560 | SCD G9 | SCD 2590

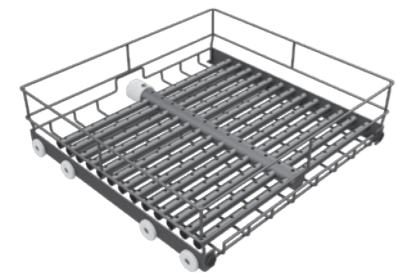


**25F01076. Lower Rack**  
Washing rack positioned on the lower level, basic version

Suitable for washing the following glassware:



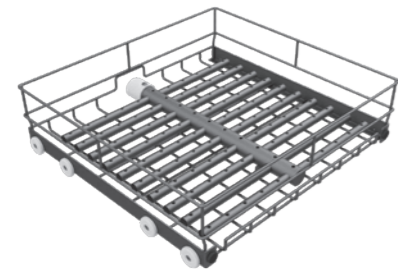
Internal loading dimensions WxD: 500x485 mm  
Rack external dimensions WxDxH: 525x502x148 mm



**25F01077. Lower Rack 195 Pos.**  
Washing rack positioned at the lower level

Rack external dimensions WxDxH: 525x497x148 mm

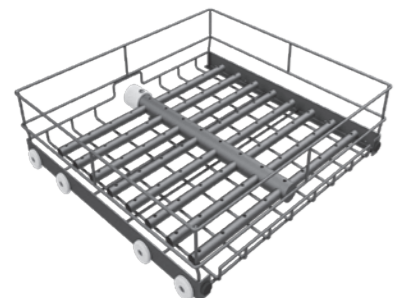
N° max. positions	ø max. glassware	Usable nozzles
195	30 mm	ø 2,5 mm
56	57 mm	ø 2,5/4 mm
41	70 mm	All



**25F01078. Lower Rack 110 Pos.**  
Washing rack positioned at the lower level

Rack external dimensions WxDxH: 525x497x148 mm

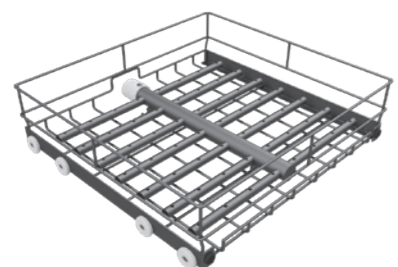
N° max. positions	ø max. glassware	Usable nozzles
110	40 mm	ø 2,5 mm
56	57 mm	ø 2,5/4 mm
41	70 mm	All



**25F01079. Lower Rack 72 Pos.**  
Washing rack positioned at the lower level

Rack external dimensions WxDxH: 525x497x148 mm

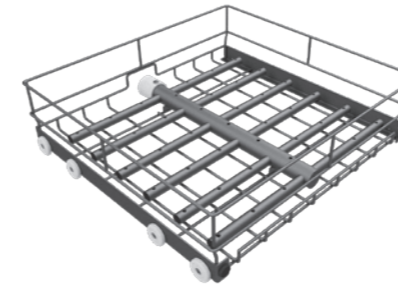
N° max. positions	ø max. glassware	Usable nozzles
72	50 mm	ø 2,5 mm
56	57 mm	ø 2,5/4 mm
41	70 mm	All



**25F01080. Lower Rack 56 Pos.**  
Washing rack positioned at the lower level

Rack external dimensions WxDxH: 525x497x148 mm

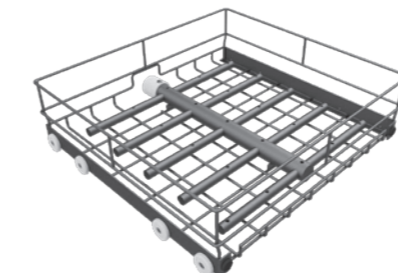
N° max. positions	ø max. glassware	Usable nozzles
56	57 mm	ø 2,5/4 mm
41	70 mm	All



**25F01081. Lower Rack 41 Pos.**  
Washing rack positioned at the lower level

Rack external dimensions WxDxH: 525x497x148 mm

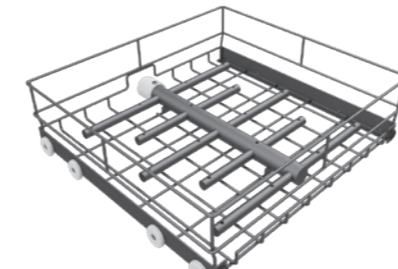
N° max. positions	ø max. glassware	Usable nozzles
41	70 mm	All



**25F01082. Lower Rack 25 Pos.**  
Washing rack positioned at the lower level

Rack external dimensions WxDxH: 525x497x148 mm

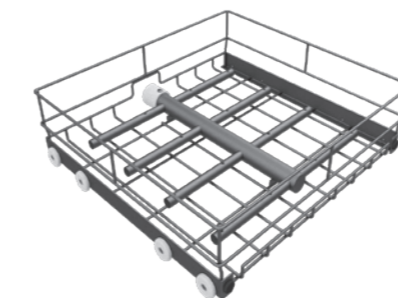
N° max. positions	ø max. glassware	Usable nozzles
25	89 mm	All



**25F01083. Lower Rack 18 Pos.**  
Washing rack positioned at the lower level

Rack external dimensions WxDxH: 525x497x148 mm

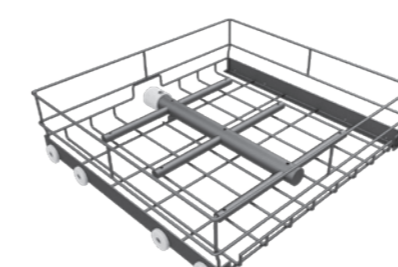
N° max. positions	ø max. glassware	Usable nozzles
18	105 mm	All



**25F01084. Lower Rack 16 Pos.**  
Washing rack positioned at the lower level

Rack external dimensions WxDxH: 525x497x148 mm

N° max. positions	ø max. glassware	Usable nozzles
16	110 mm	All



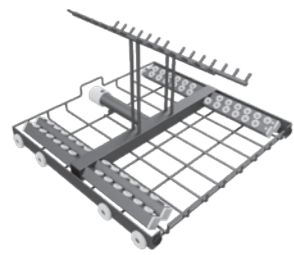
**25F01085. Lower Rack 9 Pos.**  
Washing rack positioned at the lower level

Rack external dimensions WxDxH: 525x497x148 mm

N° max. positions	ø max. glassware	Usable nozzles
9	150 mm	All

# Baskets

SCD G6 | SCD 2560 | SC2560 | SCD G9 | SCD 2590



**25F01086. Lower Rack 48 Pos. Pip.**  
**Washing rack for pipettes positioned at the lower level**

Suitable for washing the following glassware:



Rack external dimensions WxDxH: 525x497x313 mm

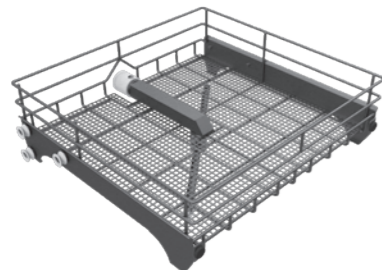


**25F01087. Lower Rack 2 Cass. Pip.**  
**Pipettes washing rack positioned at the lower level, with 2 cassettes**

Suitable for washing the following glassware:

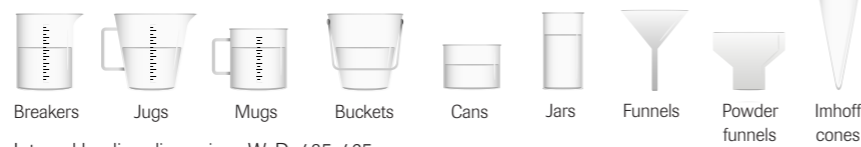


Rack external dimensions WxDxH: 525x497x346 mm



**25F01088. Upper Rack W/S. Arm**  
**Washing rack positioned on the upper level, with spray arm**

Suitable for washing the following glassware:



Internal loading dimensions WxD: 485x465 mm  
 Rack external dimensions WxDxH: 530x483x164 mm



**25F01089. Upper Rack 195 Pos.**  
**Washing rack positioned at the upper level**

Rack external dimensions WxDxH: 530x483x164 mm

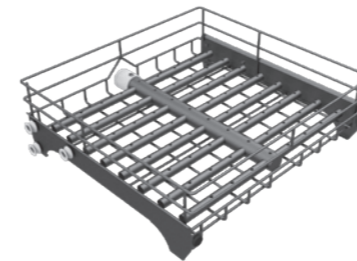
N° max. positions	ø max. glassware	Usable nozzles
195	30 mm	ø 2,5 mm
56	57 mm	ø 2,5/4 mm
36	74 mm	All



**25F01090. Upper Rack 110 Pos.**  
**Washing rack positioned at the upper level**

Rack external dimensions WxDxH: 530x483x164 mm

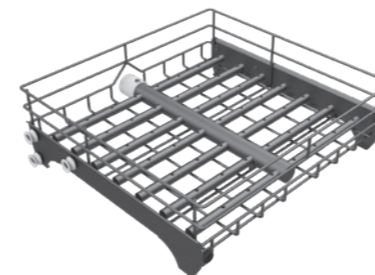
N° max. positions	ø max. glassware	Usable nozzles
110	40 mm	ø 2,5 mm
56	57 mm	ø 2,5/4 mm
36	74 mm	All



**25F01091. Upper Rack 72 Pos.**  
**Washing rack positioned at the upper level**

Rack external dimensions WxDxH: 530x483x164 mm

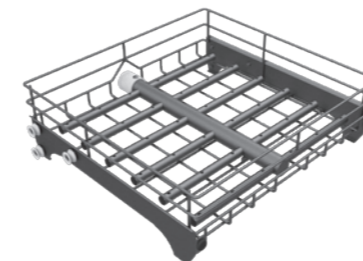
N° max. positions	ø max. glassware	Usable nozzles
72	50 mm	ø 2,5 mm
56	57 mm	ø 2,5/4 mm
36	74 mm	All



**25F01092. Upper Rack 56 Pos.**  
**Washing rack positioned at the upper level**

Rack external dimensions WxDxH: 530x483x164 mm

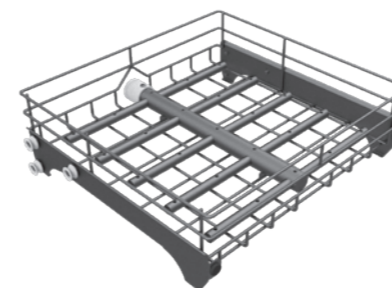
N° max. positions	ø max. glassware	Usable nozzles
56	57 mm	ø 2,5/4 mm
36	74 mm	All



**25F01093. Upper Rack 36 Pos.**  
**Washing rack positioned at the upper level**

Rack external dimensions WxDxH: 530x483x164 mm

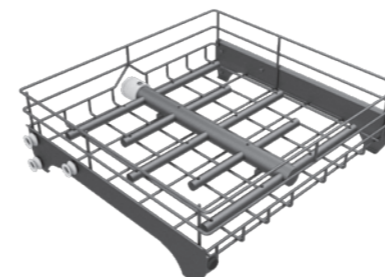
N° max. positions	ø max. glassware	Usable nozzles
36	74 mm	All



**25F01094. Upper Rack 25 Pos.**  
**Washing rack positioned at the upper level**

Rack external dimensions WxDxH: 530x483x164 mm

N° max. positions	ø max. glassware	Usable nozzles
25	90 mm	All



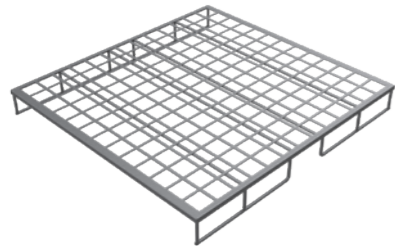
**25F01095. Upper Rack 18 Pos.**  
**Washing rack positioned at the upper level**

Rack external dimensions WxDxH: 530x483x164 mm

N° max. positions	ø max. glassware	Usable nozzles
18	105 mm	All

# Other accessories.

SCD G6 | SCD 2560 | SC2560 | SCD G9 | SCD 2590



**25F01096 Raising Grid**  
Raising grid suitable for washing racks positioned at upper level

Grid external dimensions WxDxH: 477x456x51 mm



**25F01064 Stainless Steel Stand**  
Stand for SCD G6, SCD 2560 and SC2560 provides an ergonomic height of 150 cm, if machine is not installed undercounter. Suitable for use as a detergent storage compartment.

Stand external dimension WxDxH: 600x585x600 mm



**25F01065 Stainless Steel Stand**  
Stand for SCD G9 and SCD 2590 provides an ergonomic height of 150 cm, if machine is not installed undercounter. Suitable for use as a detergent storage compartment.

Stand external dimension WxDxH: 900x585x900 mm



**25F01066 Stainless Steel cabinet (free standing) with Door**  
Side cabinet for SCD G6, SCD 2560 and SC2560 with door. Suitable for use as a detergent storage compartment.

External dimensions WxDxH: 300x580x845 mm



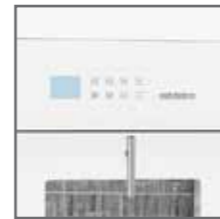
**25F01067 Stainless Steel cabinet (free standing) with Drawer**  
Side cabinet for SCD G6, SCD 2560 and SC2560 with drawer. Suitable for use as a detergent storage compartment.

External dimensions WxDxH: 300x580x845 mm

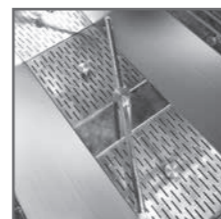
# SCD G10 265lt



Built-in printer



Touch control system



Chamber with spray arms



Detergents



Filter

**MANUAL DOOR.** Cleaner equipped with a manual opening and closing door made in double tempered glass, for laboratory glassware with 4 independent levels. The upper levels are removable for washing large materials. Is equipped with a system that filter, electrically heat and force, with a powerful blower, the air in the wash chamber and inside the hollow instruments, to obtain an excellent drying result. A wide range of racks, nozzles and accessories complete these machines, suitable to wash and dry a wide variety of laboratory glassware.

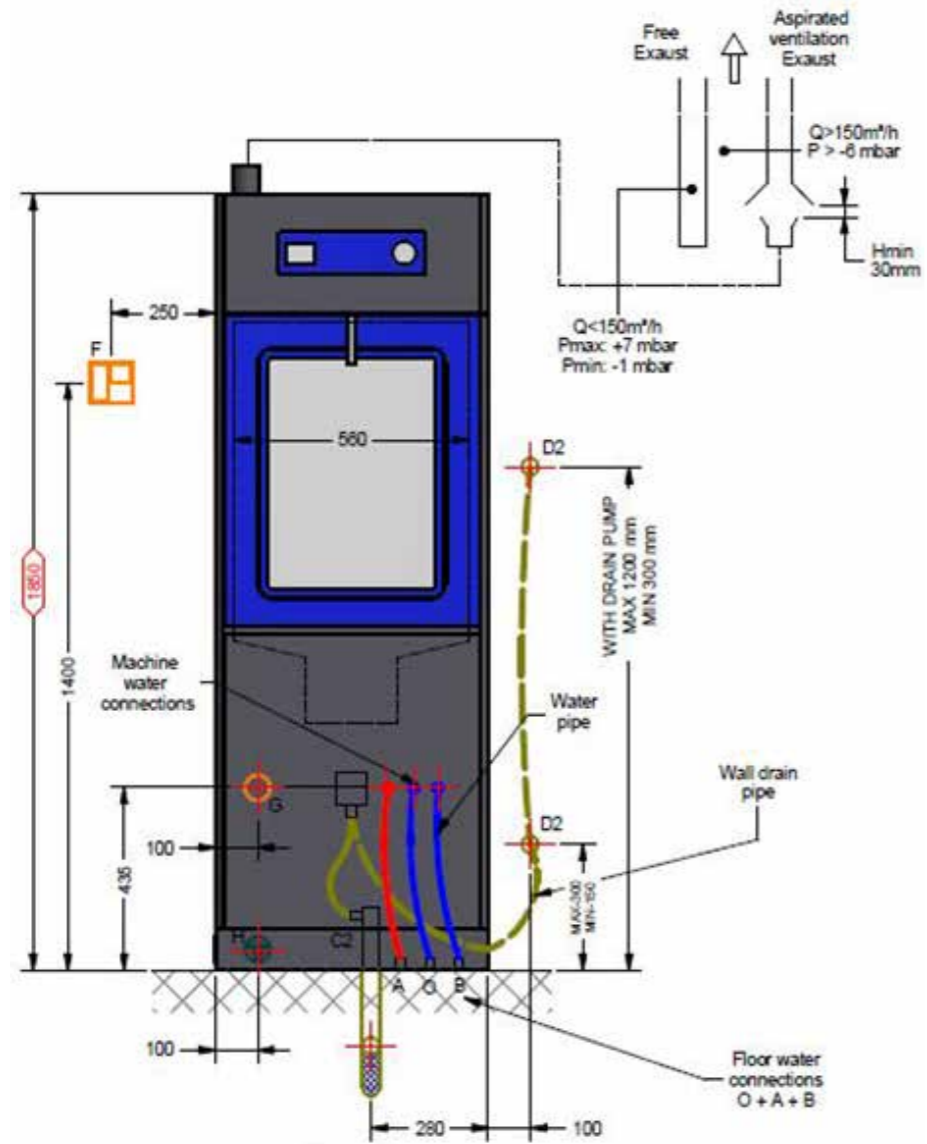
## Key Features



Technical features	SCD G10
External dimension (WxDxH)	650x670x1850 mm
Chamber dimension (WxDxH)	560x585x800 mm
Max. pump flow rate	626 l/mn
Max. drying fan flow rate with filter	150 m³/h
Max. absorbed power	11,4 kW
Standard/max. number of dosing pumps for chemicals with flowmeters	2/4
Chemical tank capacity	5 l
<b>Device configuration options</b>	
USB SLAVE interface for PC	Standard
USB HOST interface for FLASH DRIVE	Standard
Interface for external printer or data connection exchange	Standard
Touch panel with color graphic display	Standard
Certificated plumbing system, designed to isolate the potable water pipeline system (water gap) as prescribed by European Standard EN 1717	Standard
Manual door with interlock	Standard
Forced air drying	Standard
Wash chamber made of high quality stainless steel; AISI 316L (EN1.4404)	Standard
Hot water connection	Standard
Cold water connection	Standard
HEPA H14 filter	Optional
Main switch ON/OFF. In accordance with the electrical connection	Optional
Empty Total System (E.T.S.)	Optional
Hybrid heating system (electric steam)	Optional
Demi water heating with boiler	Optional
Discharge pump	Optional
Conductivity probe	Standard
Water softener system	Standard
Wash chamber LED light	Standard
Demineralized water connection	Standard
Spray arm monitor	Standard
Built-in printer frontally installed	Optional

The reference values are based on a voltage of 230V between Phase and Neutral (between Phase and Phase in three-phase versions without Neutral) with a possible variance between -5 and +10%.

## Installation Drawing



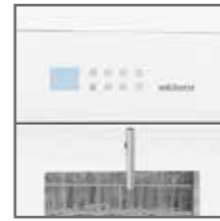
<b>A</b>	Hot water connection 3/4" G-M (Tube 1/2" G)	<b>G</b>	Electrical connection box
<b>B</b>	Cold water connection 3/4" G-M (Tube 1/2" G)	<b>H</b>	Equipotential Clamp
<b>C2</b>	Drain DN40 - Hose connection 25mm (at floor)	<b>O</b>	Demineralized water connection 3/4" G-M (Tube 1/2" G)
<b>D2</b>	Drain DN40 - Hose connection 25mm (at wall)	<b>Q</b>	Steam connection 1/2 G (Inlet)
<b>F</b>	Omnipolar magneto switch with a circuit breaker	<b>R</b>	Steam connection outlet 1/2 G (Outlet)



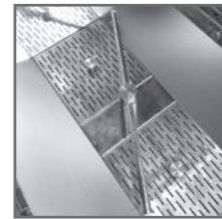
# SCD G10A 265lt



Built-in printer



Touch control system



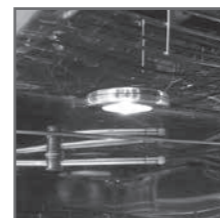
Chamber with spray arms



Detergents



Filter



Wash chamber LED light

**AUTOMATIC DOOR.** Machine equipped with an automatic sliding door, in double tempered glass, for laboratory glassware with 4 independent levels. The upper levels are removable for washing large materials. Is equipped with a system that filter, electrically heat and force, with a powerful blower, the air in the wash chamber and inside the hollow instruments, to obtain an excellent drying result. A wide range of racks, nozzles and accessories complete these machines, suitable to wash and dry a wide variety of laboratory glassware.

## Key Features

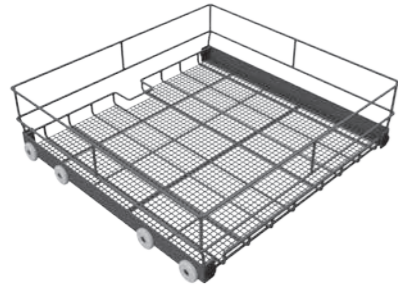


Technical features	SCD G10
External dimension (WxDxH)	680x670x1950 mm
Chamber dimension (WxDxH)	560x585x800 mm
Max. pump flow rate	626 l/mn
Max. drying fan flow rate with filter	150 m <sup>3</sup> /h
Max. absorbed power	11,4 kW
Standard/max. number of dosing pumps for chemicals with flowmeters	2/4
Chemical tank capacity	5 l
<b>Device configuration options</b>	
USB SLAVE interface for PC	Standard
USB HOST interface for FLASH DRIVE	Standard
Interface for external printer or data connection exchange	Standard
Touch panel with color graphic display	Standard
Certificated plumbing system, designed to isolate the potable water pipeline system (water gap) as prescribed by European Standard EN 1717	Standard
Automatic door	Standard
Forced air drying	Standard
Wash chamber made of high quality stainless steel; AISI 316L (EN1.4404)	Standard
Hot water connection	Standard
Cold water connection	Standard
HEPA H14 filter	Optional
Main switch ON/OFF. In accordance with the electrical connection	Optional
Empty Total System (E.T.S.)	Optional
Hybrid heating system (electric steam)	Optional
Demi water heating with boiler	Optional
Discharge pump	Optional
Conductivity probe	Standard
Water softener system	Standard
Wash chamber LED light	Standard
Demineralized water connection	Standard
Spray arm monitor	Standard
Built-in printer frontally installed	Optional

The reference values are based on a voltage of 230V between Phase and Neutral (between Phase and Phase in three-phase versions without Neutral) with a possible variance between -5 and +10%.

# Baskets.

SCD G10 | SCD G10A

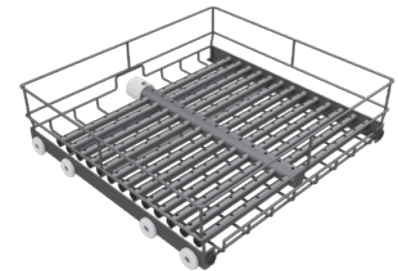


**TL133 LAB. Lower Rack**  
Washing rack positioned on the lower level, basic version

Suitable for washing the following glassware:



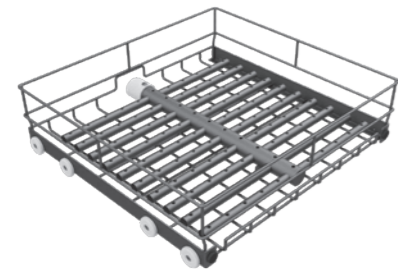
Internal loading dimensions WxD: 495x545 mm  
Rack external dimensions WxDxH: 530x568x148 mm



**TL127 LAB. Lower Rack 110 Pos.**  
Washing rack positioned at the lower level

Rack external dimensions WxDxH: 530x568x148 mm

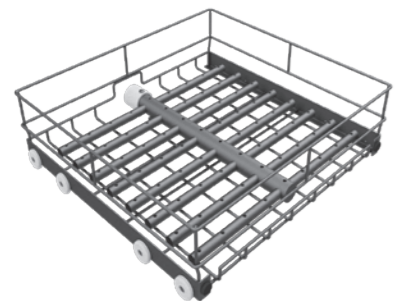
N° max. positions	ø max. glassware	Usable nozzles
110	40 mm	ø 2,5 mm
81	52 mm	ø 2,5/4 mm
42	70 mm	All



**TL011 LAB. Lower Rack 81 Pos.**  
Washing rack positioned at the lower level

Rack external dimensions WxDxH: 530x568x148 mm

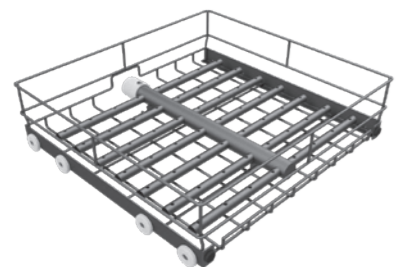
N° max. positions	ø max. glassware	Usable nozzles
81	52 mm	ø 2,5/4 mm
42	70 mm	All



**TL012 LAB. Lower Rack 56 Pos.**  
Washing rack positioned at the lower level

Rack external dimensions WxDxH: 530x568x148 mm

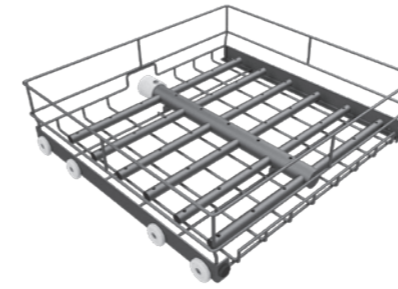
N° max. positions	ø max. glassware	Usable nozzles
56	60 mm	ø 2,5/4 mm
42	70 mm	All



**TL013 LAB. Lower Rack 42 Pos.**  
Washing rack positioned at the lower level

Rack external dimensions WxDxH: 530x568x148 mm

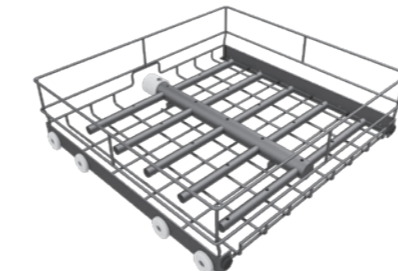
N° max. positions	ø max. glassware	Usable nozzles
42	70 mm	All



**25F01478. Lower Rack 36 Pos.**  
Washing rack positioned at the lower level

Rack external dimensions WxDxH: 530x568x148 mm

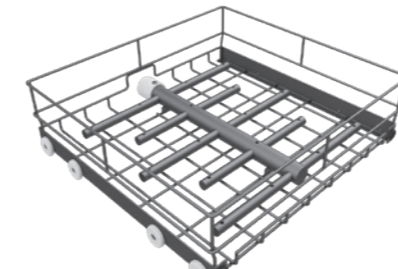
N° max. positions	ø max. glassware	Usable nozzles
36	80 mm	All



**25F01479. Lower Rack 20 Pos.**  
Washing rack positioned at the lower level

Rack external dimensions WxDxH: 530x568x148 mm

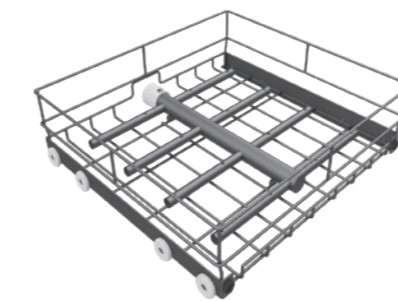
N° max. positions	ø max. glassware	Usable nozzles
20	100 mm	All



**25F01480. Lower Rack 16 Pos.**  
Washing rack positioned at the lower level

Rack external dimensions WxDxH: 530x568x148 mm

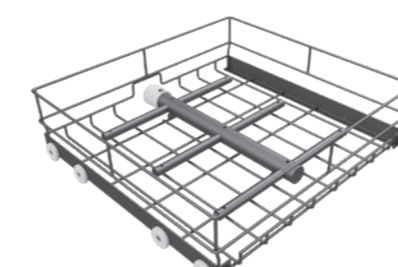
N° max. positions	ø max. glassware	Usable nozzles
16	110 mm	All



**25F01481. Lower Rack 12 Pos.**  
Washing rack positioned at the lower level

Rack external dimensions WxDxH: 530x568x148 mm

N° max. positions	ø max. glassware	Usable nozzles
12	130 mm	All



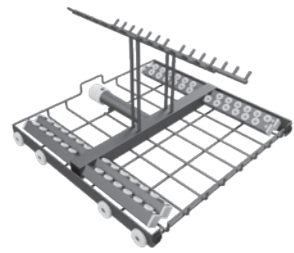
**25F01482. Lower Rack 9 Pos.**  
Washing rack positioned at the lower level

Rack external dimensions WxDxH: 530x568x148 mm

N° max. positions	ø max. glassware	Usable nozzles
9	160 mm	All

# Baskets.

SCD G10 | SCD G10A



**25F01483. Lower Rack 56 Pos. Pip.**  
Washing rack for pipettes positioned at the lower level

Suitable for washing the following glassware:



Rack external dimensions WxDxH: 525x497x313 mm



**25F01484. Lower Rack 2 Cass. Pip.**  
Pipettes washing rack positioned at the lower level, with 2 cassettes

Suitable for washing the following glassware:



Rack external dimensions WxDxH: 525x497x540 mm

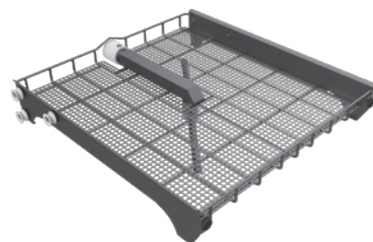


**25F01485. Lower Rack 3 Cass. Pip.**  
Pipettes washing rack positioned at the lower level, with 3 cassettes

Suitable for washing the following glassware:



Rack external dimensions WxDxH: 525x497x540 mm

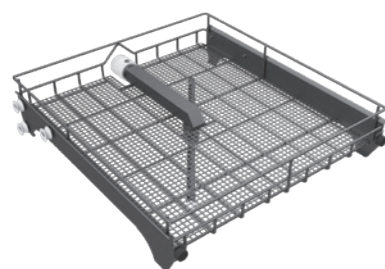


**25F01486. Int. Rack W/S.Arm**  
Washing rack positioned at intermediate level, with spray arm

Suitable for washing the following glassware:



Internal loading dimensions WxD: 485x530 mm  
Rack external dimensions WxDxH: 530x550x95 mm



**25F01487. Upper Rack W/S.Arm**  
Washing rack positioned on the upper level, with spray arm

Suitable for washing the following glassware:



Internal loading dimensions WxD: 485x530 mm  
Rack external dimensions WxDxH: 530x550x164 mm



**25F01488. Upper Rack 169 Pos.**  
Washing rack positioned at the upper level

Rack external dimensions WxDxH: 530x550x164 mm

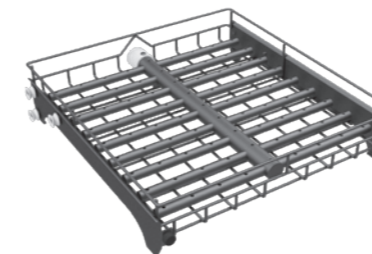
N° max. positions	ø max. glassware	Usable nozzles
169	32 mm	ø 2,5 mm
81	52 mm	ø 2,5/4 mm
42	70 mm	All



**25F01489. Upper Rack 110 Pos.**  
Washing rack positioned at the upper level

Rack external dimensions WxDxH: 530x550x164 mm

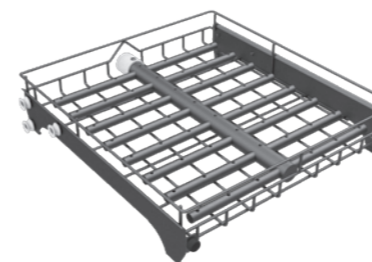
N° max. positions	ø max. glassware	Usable nozzles
110	40 mm	ø 2,5 mm
81	52 mm	ø 2,5/4 mm
42	70 mm	All



**25F01490. Upper Rack 81 Pos.**  
Washing rack positioned at the upper level

Rack external dimensions WxDxH: 530x550x164 mm

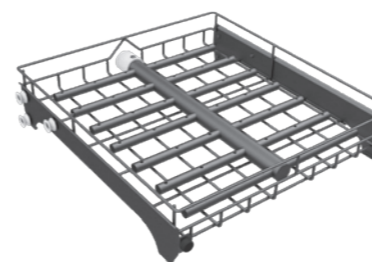
N° max. positions	ø max. glassware	Usable nozzles
81	52 mm	ø 2,5/4 mm
42	70 mm	All



**25F01491. Upper Rack 56 Pos.**  
Washing rack positioned at the upper level

Rack external dimensions WxDxH: 530x550x164 mm

N° max. positions	ø max. glassware	Usable nozzles
56	60 mm	ø 2,5/4 mm
42	70 mm	All



**25F01492. Upper Rack 42 Pos.**  
Washing rack positioned at the upper level

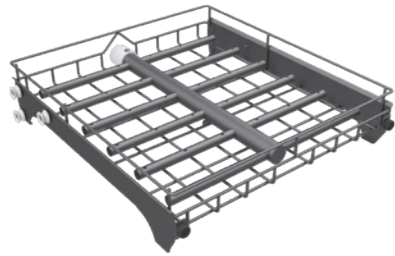
Rack external dimensions WxDxH: 530x550x164 mm

N° max. positions	ø max. glassware	Usable nozzles
42	70 mm	All



# Baskets.

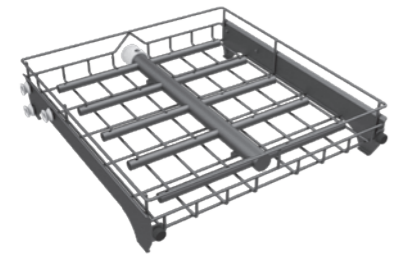
SCD G10 | SCD G10A



**25F01493. Upper Rack 36 Pos.**  
Washing rack positioned at the upper level

Rack external dimensions WxDxH: 530x550x164 mm

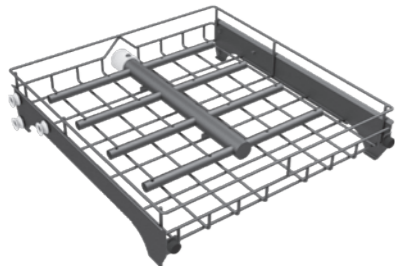
N° max. positions	ø max. glassware	Usable nozzles
36	80 mm	All



**25F01494. Upper Rack 20 Pos.**  
Washing rack positioned at the upper level

Rack external dimensions WxDxH: 530x550x164 mm

N° max. positions	ø max. glassware	Usable nozzles
20	100 mm	All



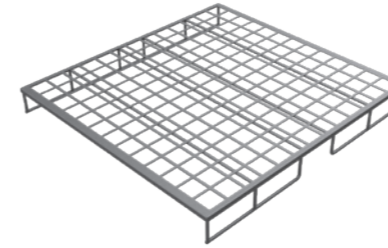
**25F01495. Upper Rack 16 Pos.**  
Washing rack positioned at the upper level

Rack external dimensions WxDxH: 530x550x164 mm

N° max. positions	ø max. glassware	Usable nozzles
16	110 mm	All

# Other accessories.

SCD G10 | SCD G10A



**25F01497. Raising Grid**  
Raising grid suitable for washing racks positioned at the upper level

Grid external dimensions WxDxH: 477x522x51 mm



**25F01496. Fix. H. Transf. Trolley SCD G10**  
Loading trolley with block system to load washing material into the machine

Rack external dimensions WxDxH: 750x628x880 mm



**25F01501. Fix. H. Transf. Trolley SCD G10A**  
Loading trolley with block system to load washing material into the machine

Rack external dimensions WxDxH: 750x623x875 mm

# Nozzles.

## Standard Nozzles ø 4 mm

Suitable for washing the following glassware:



High capacity flasks



Graduated cylinders

25F0...	1316	1317	1318
Height	76 mm	111 mm	176 mm
Width	54 mm		

## Standard Nozzles ø 6 mm

Suitable for washing the following glassware:



High capacity flasks



Graduated cylinders

25F0...	1303	1304	1305	1306	1307
Height	120 mm	140 mm	180 mm	230 mm	280 mm
Width	75 mm				

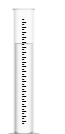
## Nozzle with flexible internal ø 6 mm

With 3 flexible internal arms to block glassware during washing

Suitable for washing the following glassware:



Imhoff cones



Graduated cylinders



Erlenmeyer Flasks



Bottles



Weighing bottles

25F0...	1300	1301	1302
Height	140 mm	230 mm	280 mm
Width	75 mm		

## Nozzle with flexible external ø 6 mm

With 3 flexible external arms to block glassware during washing

Suitable for washing the following glassware:



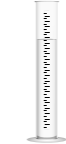
Erlenmeyer flasks narrow neck



Flat or round bottom flask narrow neck



Funnels



Graduated cylinders

25F0...	1313	1314	1315
Height	180 mm	230 mm	280 mm
Width	73.5 mm (flex)		

## Nozzle with rigid internal ø 6 mm

With rigid bottle holder to block glassware during washing

Suitable for washing the following glassware:



Erlenmeyer Flasks



Bottles

25F0...	1308	1309	1310	1311	1312
Height	120 mm	140 mm	180 mm	230 mm	280 mm
Width	75 mm				

## Standard or with rigid cap nozzles ø 2.5 mm

Standard or with internal rigid cap to block small glassware during washing

Suitable for washing the following glassware:



Test tubes



Low capacity flasks



Centrifuge tubes

25F0...	1319	1320	1321	1322	1323
Height	81 mm	81 mm	51 mm	81 mm	156 mm
Width	15.5 mm		32 mm		

# Small components.



**25F01324. CAP Screw M8x1**  
**Hexagon head screw with M8x1 thread**

To be screwed to the positions of the rack where the nozzles are not placed, to allow the passage of the washing water only in the occupied positions.



**25F01325. Test Tubes Basket H=160**  
**Test tube basket**

Use up to 4 baskets per cart.



Suitable for washing the following glassware:



Test tubes

Maximum tube height: 150 mm



**25F01326. Insert for petri dishes**  
**Capacity: 30 pcs. petri dishes**

External dimensions WxDxH: 470x240x77 mm



**25F01327. Bott. rigid support ø33**  
**Bottle holder ø 33mm for nozzles with rigid inside ø 6mm**



**25F01328. Bott. rigid support ø45**  
**Bottle holder ø 45 mm for nozzles with rigid inside ø 6 mm**



Renggli AG  
SalvisLab  
Birkenstrasse 31  
CH-6343 Rotkreuz  
Switzerland  
[www.salvislab.com](http://www.salvislab.com)



**salvisLAB**

**renggli**

Laboratory  
Systems