smeg
INSTRUMENTS
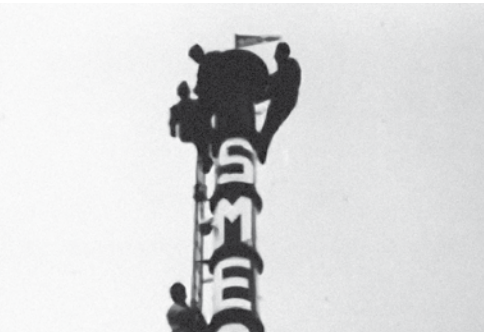
WASHING DISINFECTION CATALOGUE

Washing disinfection machine in the laboratory,
pharma and industry sector

smeg
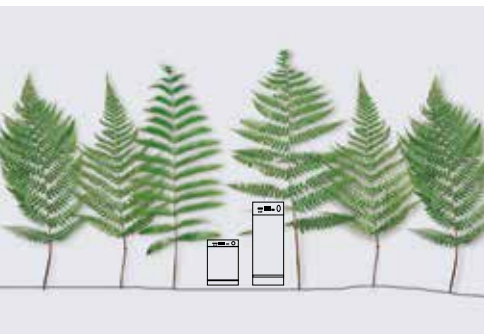INSTRUMENTS

86
Water treatment

37

Professional Line
GW3060, GW4090, GW6290,
GW6010, GW7010, GW7015
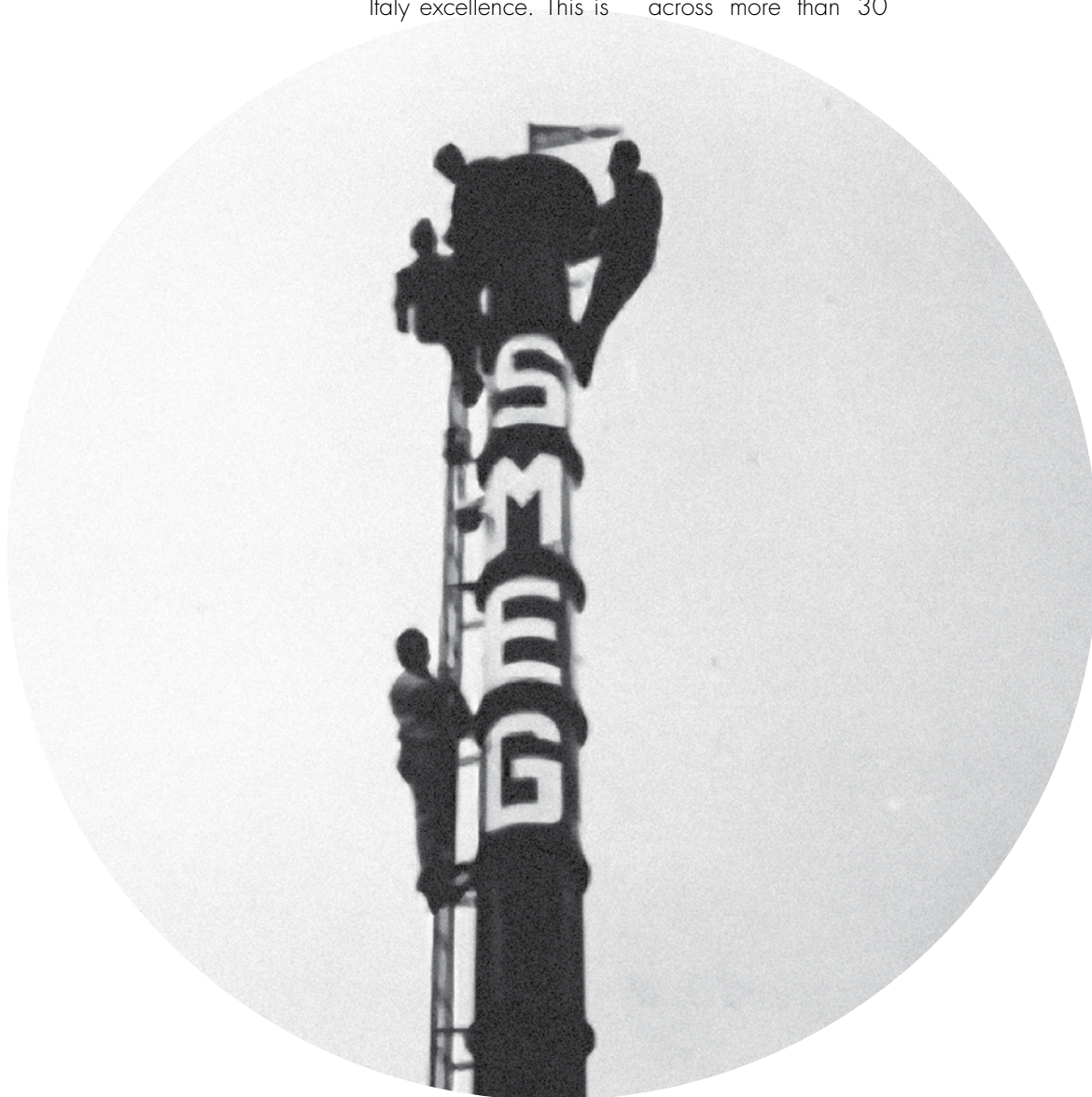

88
Detergents
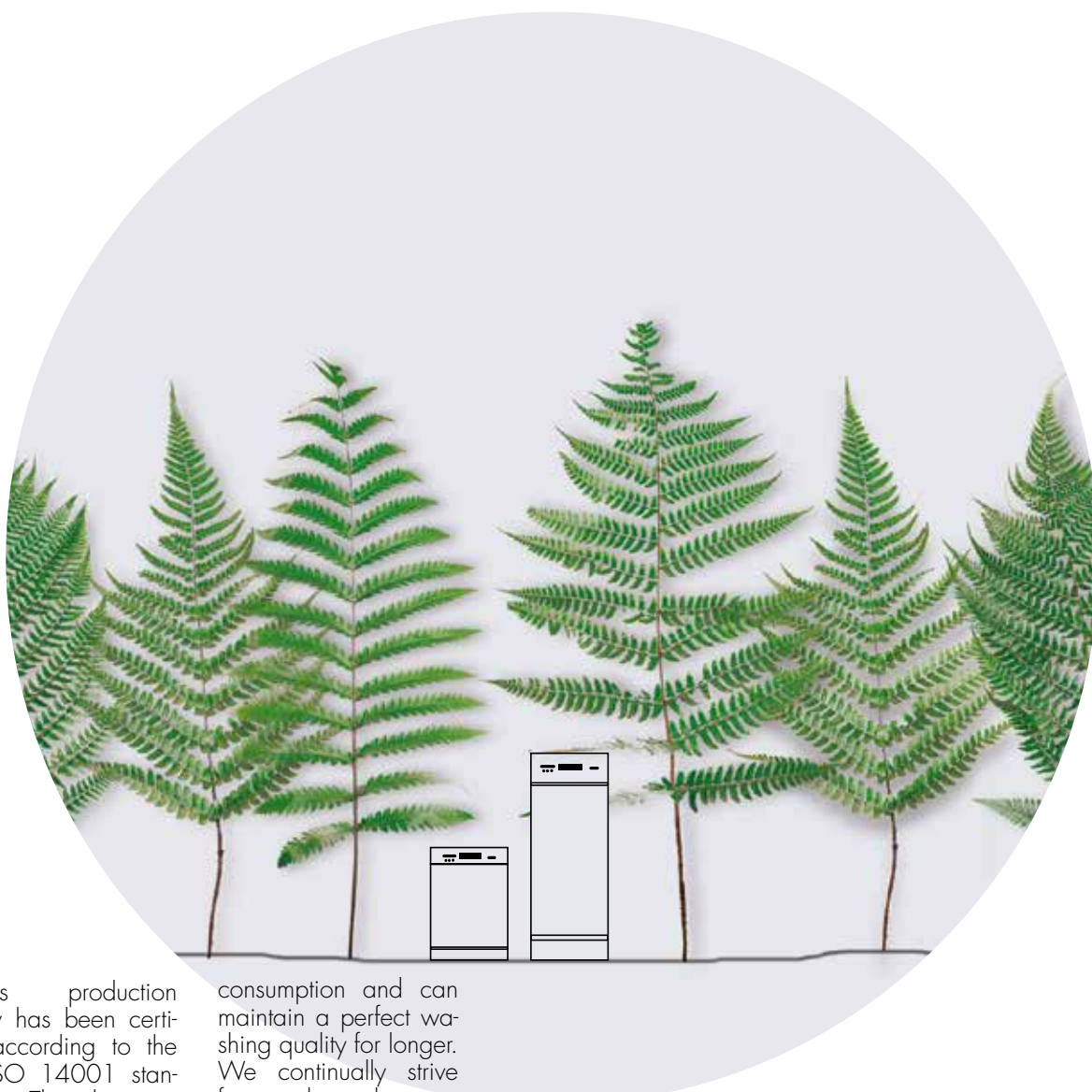

81
Washing configurations

HISTORY

The Smeg group was founded in 1948 and now has almost 2,000 employees in Guastalla, Italy, with a further 18 offices globally. Established worldwide as a leading manufacturer of domestic and professional equipment, Smeg today represents a symbol of Made in Italy excellence. This is thanks to constant research and attention to quality, technology and design. For more than 30 years, Smeg Instruments has developed with the same values in the field of professional washing. Knowledge has been built up over this time and professional collaborations across more than 30 countries worldwide has allowed us to exceed industry expectations. Smeg Instruments offers the industry advanced technology in the laboratory, pharmaceutic, chemical and industrial field with fully customisable solutions that are efficient, reliable and certifiable

Smeg's production facility has been certified according to the EN ISO 14001 standards. The business is continually working to ensure that all products have the smallest possible environmental impact and energy efficient consumption.

We are constantly researching and developing products that have lower water consumption and can maintain a perfect washing quality for longer. We continually strive for products that use less chemical agents, especially in glassware washers, and we take advantage of the high temperature inside the machine. These key areas of research and development are ongoing and evolving every day.

ECOLOGY

In professional environments, Smeg always strives for high performance. In fact, Smeg is continuously researching and developing new equipment that is not only reliable and safe, but also guarantees the best washing performance for the operator in the shortest possible time. This is the "Made in Italy" quality that distinguishes Smeg, making it a world market leader.

VISION

MISSION

Excellent raw materials and innovative design techniques have always been at the forefront of Smeg products. We offer an extremely complex and demanding industry a professional solution that guarantees exceptional performance, efficiency, flexibility and reliability.

OUR VALUES

SERVICE

Smeg supports its customers in all phases of the product's life cycle through widespread technical assistance both in Italy and worldwide. In Italy, commissioning and staff training are carried out directly by qualified personnel trained by Smeg itself, including our post-warranty service. The central technical support department provides training and support to technicians worldwide with dedicated multilingual staff. Choosing to rely on Smeg means having access to a prompt after-sales service, capable of delivering spare parts within 24 hours, to answer all our customers' questions in a timely manner.

INNOVATION

All Smeg glassware washers and their accessories are designed by a team of in-house product research and development specialists who are in constant contact with the sales department. This constant exchange of information allows us to develop new products, which, thanks to the use of cutting-edge technology, effectively meet the ever-increasing demands of our customers.

QUALITY

Due to Smeg's in-depth experience in the field and first-hand experience dealing with medical technology and instruments, Smeg can guarantee impeccable washing and disinfection results.

In fact, the company is certified according to the ISO 9001:2008 quality standard and complies with all environmental and workplace safety standards. An optimal workplace environment is where excellent products are made.

RELIABILITY

The utmost care is taken in choosing the most suitable and best quality raw materials. Smeg continuously makes use of advanced technology to turn these materials into outstanding products, known for their reliability and durability. The entire manufacturing process is overseen by a quality control system and subsequent statistical checks in the laboratory that simulate the use of the machines for ten years

KEY POINTS

PERFECT WASH

Every washing requirement needs a dedicated solution. To ensure a perfect wash, Smeg offers not only cutting-edge glassware washers but also specific programs, detergents and demineralisers or water softeners purposely designed to achieve this goal. All the parameters of the washing cycle are designed with utmost care to ensure high quality results.

DRYING WITH FORCED AIR

Smeg glassware washers ensure quality drying, to obtain perfectly dry glassware so as not to compromise future use. This solution ensures time savings for the operator and the certainty that at the end of the cycle each component will come out of the machine perfectly washed and dried.

PROGRAMS

The standard programs available in Smeg glassware washers are the result of years of experience in the laboratory, petrochemical and pharmaceutical sectors. They respond to the different washing requirements of operators, offering them a wide range of choices. For this reason, it is possible to customise ad hoc programs.

KEY POINTS

EASY TO USE

Each feature of Smeg's glassware washers can be controlled through user-friendly, highly intuitive displays, which makes it easier for users to operate the equipment.

FLEXIBILITY

Smeg machines are designed to meet different washing requirements. These include flasks, beakers, test tubes, pipettes, cylinders, bottles, can, dies, and any other type of glass or industrial component.
This is thanks to a wide range of inserts and accessories studied by the R & D department, along with specific wash programs which operate according to the material to be treated.

TO GAIN THE BEST RESULTS

State-of-the-art electronics are used to verify and control every parameter of the washing cycle. Thanks to the stored data, absolute safety and certain results are guaranteed.

THE RANGE

The GW Series is the result of more than thirty years of experience in the field of professional washing and it combines the state-of-the-art technology and design that is totally reliable and it guarantees the highest level of performance in compliance with the sector standards.

The wash-chamber and the closing door are made exclusively of AISI 316L stainless steel with nickel chromium molybdenum, while the external panels are made of AISI 304 stainless steel. The components are made of a plastic material with heat-resistant properties and can also withstand corrosive substances and organic solvents.

The machines can be equipped with a forced hot air-drying system. It combines perfect drying results of the materials within the washing chamber with respect for the environment, thanks to a steam condenser that uses less water than normal. The glassware washers come in a range of different sizes, from the smallest one measuring just 45cm in width and 85cm in height to the largest (over 2 metres in height), specific for washing large amounts of material or products of

BASIC LINE

WASHING
CHAMBER
UP TO TWO LEVELS

DISPLAY EASY
TOUCH

considerable size or more compact ones. Smeg glassware washers are equipped with customisable programs created for the customer either in the Smeg laboratories or directly during commissioning, in order to meet the various customer requirements. The machines come with a wide range of accessories and trolleys, purposely designed for each specific washing requirement and in some cases designed and manufactured specifically for the user. In the case of larger appliance, there are also trolleys that can adapt to each individual cycle, according to the material

to be inserted in the washing chamber. This flexibility ensures not only significant financial savings but also a better use of available space. The equipment, except for GW0160, features an internal memory for storing the programs and any other events occurring during a cycle. This enables operators to trace the work and washing results achieved, which is an extremely important factor in some sectors such as pharmaceuticals.

PROFESSIONAL

WASHING CHAMBER WITH 5 WASHING LEVELS

DISPLAY FULL TOUCH

BASIC LINE

GW0160, GW2145, GW1160, GW4060, GW4190

GW0160 is a glassware washer designed to work with one to two independent and flexible washing levels. The washing chamber measures 530x510x620mm (168L gross). Possibility for washing and thermic disinfection (up to 85°C).

LM40
WASHING SOLUTION FOR NARROW-NECKED
GLASSWARE TILL 49 CM IN HEIGHT

LB16S
INJECTION WASHING SOLUTION FOR
16 BOTTLES

CS2
UNIVERSAL WASHING SOLUTION TO PLACE BIG
DIMENSIONS GOODS OR SPECIFIC SUPPORTSS

CP192
WASHING SOLUTION FOR TEST TUBES TILL 192
MM IN HEIGHT

LPM2010
MIXED WASHING SOLUTION FOR TEST TUBES,
PIPETTES AND NARROW-NECKED GLASSWARE -
20 +10 POSITIONS

LM40S
WASHING SOLUTION FOR 40 NARROW-NECKED
GLASSWARE TILL 225MM IN HEIGHT

RC1
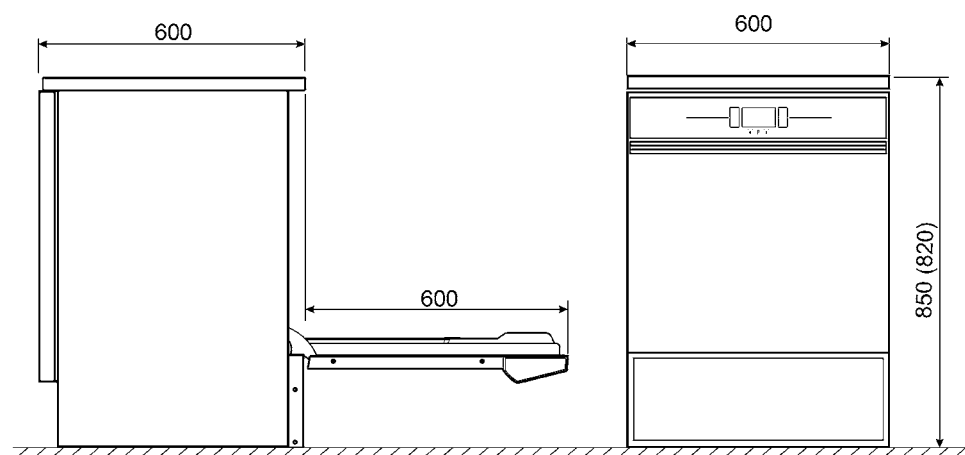SOLUTIONS TO BLOCK GLASSWARE INSIDE THE
BASKETS

CSK2
WASHING SOLUTION FOR VARIOUS
GLASSWARE PRODUCTS

GW0160 TECHNICAL FEATURES	All versions
Electronic control	microprocessor
Standard programs stored	7
Customisable programs	0
Display with segments and communication	yes, 4 digits
Clock and calendar	yes
Tank internal temperature	from room temperature to 85°C
Accurancy	0,1°C
Temperature sensors in tank	n° 1 x PT 1000 CLASS B IEC 60751
Detergent and neutralizing agent dosing system	max. 1 powder dispenser and 1 pump for neutralizing agent
Detergent level sensor	no
Safety lock	yes, with electromagnetic release and automatic opening
Safety devices	safety thermostats, door interlock
Alarm display	30
Troubleshooting menu	no
Programme editing	no
AUXILIARY FUNCTIONS	
Storage of data for 250 most recently run programs	no
RS232 serial port for PC connection	no
Cycle storage	no
Cycle file download	no
Download archivio cicli	no
Program editing	no
WATER SUPPLY (PRESSURE 1,5-5 BAR)	
Cold water inlet	yes, hardness max 42°f
Demineralized water inlet	yes, < 30 µS/cm
Demineralized water booster pump	optional
Water softener incorporated	yes
Recirculation pump	400 l/min
WATER HEATING	
Electrical	6,3 kW on three-phase version, 2,3 kW on single-phase version
STEAM CONDENSER	no
DIMENSIONS LxDxH mm	
Outside (with built-in top)	600x600x850 (830)
Inside (gross)	530x510x620
Net weight (Kg)	72
STAINLESS STEEL	
Wash tank	AISI 304
Exterior covering	AISI 304
ELECTRICAL POWER SUPPLY	
Max. voltage/power	1/N/PE 230V ~ 50Hz 2,8 kW 3/N/PE 400V - 50 Hz 7,0 kW
NOISE LEVEL	max 50 dB

GW2145 is a glassware washer with slim dimensions, designed to work with either one to two independent and flexible washing levels. The washing chamber measures 380 x 480 x 580mm (105 litres) and has the capability for washing and thermic disinfection (up to 95°C).

LM24
UNIVERSAL WASHING SOLUTION FOR NARROW-NECKED GLASSWARE - 24 POSITIONS

LPM24
MIXED WASHING SOLUTION FOR NARROW-NECKED GLASSWARE/PIPETTES - 12+12 POSITIONS

SB9
WASHING SOLUTION FOR BEAKERS, CYLINDERS UPTO 100ML MAX AND TUNNELS. TO BE PLACED ON D-CS1 AND D-CS2

SB14
WASHING SOLUTION FOR BEAKERS AND FLASKS FROM 250ML TO 1000ML. TO BE PLACED ON D-CS1 E D-CS2

LM46
UNIVERSAL WASHING SOLUTION FOR NARROW-NECKED GLASSWARE - 46 POSITIONS

KP60
UNIVERSAL WASHING SOLUTION FOR TEST TUBES-60 POSITIONS

LM22S
WASHING SOLUTION FOR NARROW-NECKED GLASSWARE - 22 POSITIONS. TO BE PLACED ON D-CS2

D-CS2
UNIVERSAL WASHING SOLUTION TO BE PLACED ON THE LOWER LEVEL

GW2145 TECHNICAL FEATURES	All versions
Electronic control	microprocessor
Standard programs stored	9
Customisable programs	6
Display with segments and communication	yes, 4 digits
Clock and calendar	yes
Tank internal temperature	from room temperature to 95°C
Accuracy	0,1°C
Temperature sensor in tank	n° 1 x PT 1000 CLASS B IEC 60751
Detergent and neutralizing agent dosing system	max. 1 powder dispenser, 1 liquid pumps and 1 pump as optional
Detergent level sensor	optional
Safety lock	yes, with electromagnetic release and automatic opening
Safety devices	safety thermostats, door interlock
Alarm display	30
Troubleshooting menu	yes, using PC connection
Programme editing	yes, using 6 customisable programs
AUXILIARY FUNCTIONS	
Storage of data for 250 most recently run programs	yes
RS232 serial port for PC connection	yes
RS232 serial port for printer	yes
Cycle storage	yes
Cycle file download	yes
WATER SUPPLY (PRESSURE 1,5-5 BAR)	
Cold water inlet	yes, hardness max 42°f
Demineralized water inlet	yes, < 30 µS/cm
Demineralized water booster pump	optional
Water softener incorporated	yes
Recirculation pump	200 l/min
WATER HEATING	
Electrical	3,3 kW Max
STEAM CONDENSER	no
DIMENSIONS LXDXH MM	
Outside (with built-in top)	450x620x850 (830)
Inside (gross)	370x480x620
Net weight (Kg)	56
STAINLESS STEEL	
Wash tank	AISI 316L
Exterior covering	AISI 304
ELECTRICAL POWER SUPPLY	
Max. voltage/power	1/N/PE 230V ~ 50Hz 3,3 kW
NOISE LEVEL	max 50 dB

GW1160 is a glassware washer designed to work on either one or two independent and flexible washing levels. The washing chamber measures 530x510x620 mm (168l gross). Possibility for washing and thermic disinfection (up to 95°C).

LM20
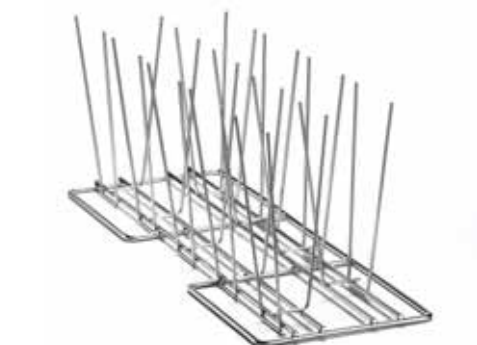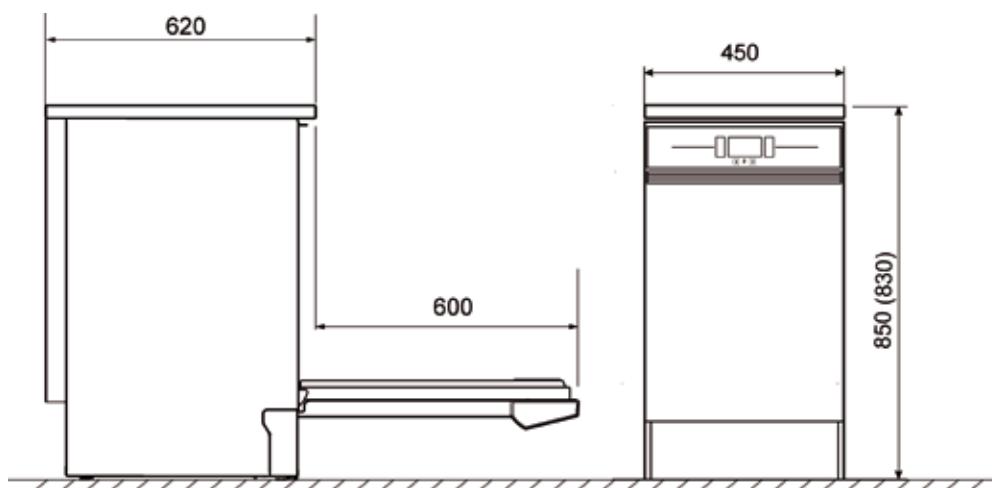UNIVERSAL WASHING SOLUTION FOR NARROW-NECKED GLASSWARE - 24 POSITIONS

KP200
TWO-LEVELS WASHING SOLUTIONS FOR TEST TUBES

SB28
WASHING SOLUTION FOR BEAKERS AND FLASKS FROM 250ML TO 1000ML. TO BE PLACED ON CS1-1 AND CS2

PB50
WASHING SOLUTION 50ML WIDE-NECKED BOTTLES. TO BE POSITIONED ON CS2

LPV40
WASHING SOLUTION FOR 40 PIPETTE -
H. MAX 49CM

LB4B
WASHING SOLUTION FOR BOTTLES OF LARGE
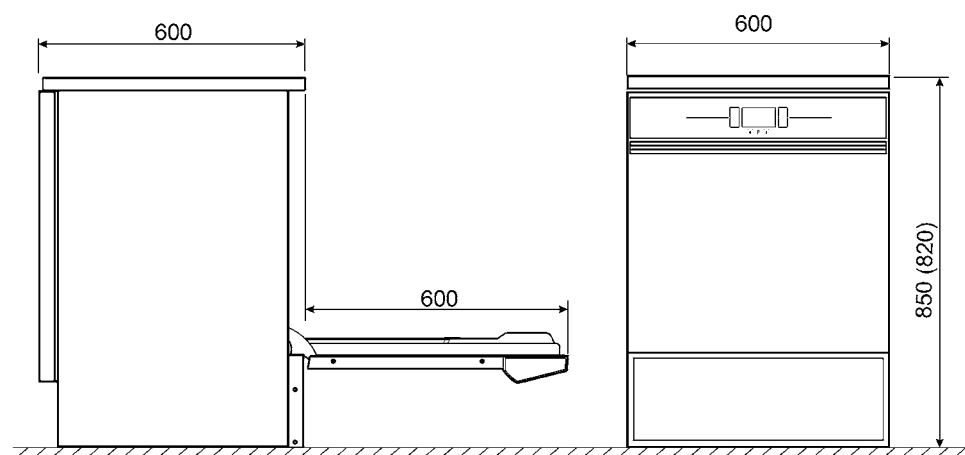DIMENSIONS

SL18
WASHING SOLUTION FOR CHROMATOGRAPHIC
PLATES

LR4
WASHING SOLUTION FOR REACTORS

GW1160 TECHNICAL FEATURES	All versions
Electronic control	microprocessor
Standard programs stored	9
Customisable programs	6
Display with segments and communication	yes, 4 digits
Clock and calendar	yes
Tank internal temperature	from room temperature to 95°C
Accuracy	0,1°C
Temperature sensors in tank	n° 1 x PT 1000 CLASS B IEC 60751
Detergent and agents dosing system	max. 1 powder dispenser,1 pump for neutralizing agent and 2 other pumps as optional
Detergent level sensor	optional
Safety lock	yes, with electromagnetic release and automatic opening
Safety devices	safety thermostats, door interlock
Alarm display	30
Troubleshooting menu	yes, using PC connection
Programme editing	yes, using 6 customisable programs
AUXILIARY FUNCTIONS	
Storage of data for 250 most recently run programs	yes
RS232 serial port for PC connection	yes
RS232 serial port for printer	yes
Cycle storage	yes
Cycle file download	yes
WATER SUPPLY (PRESSURE 1,5-5 BAR)	
Cold water inlet	yes, hardness max 42°f
Demineralized water inlet	yes, < 30 µS/cm
Demineralized water booster pump	optional
Water softener incorporated	yes
Recirculation pump	400 l/min
WATER HEATING	
Electrical	6,3 kW on three-phase version, 2,3 kW on single-phase version
STEAM CONDENSER	optional
DIMENSIONS LxDxH mm	
Outside (with built-in top)	600x605x850 (830)
Inside (gross)	530x510x620
Net weight (Kg)	74
STAINLESS STEEL	
Wash tank	AISI 316L
Exterior covering	AISI 304
ELECTRICAL POWER SUPPLY	
Max. voltage/power	1/N/PE 230V ~ 50Hz 2,8 kW 3/N/PE 400V - 50 Hz 7,0 kW
NOISE LEVEL	max 50 dB

GW4060 is a glassware washer designed to work with either one or two independent and flexible washing levels. The washing chamber measures 530x510x620 mm (168l gross). Possibility for washing, thermic and chemical disinfection (up to 95°C) and forced-air drying system with filter.

LM40DS
WASHING SOLUTION FOR NARROW-NECKED
GLASSWARE TILL 49CM IN HEIGHT

LPM2020DS
WASHING SOLUTION FOR 20 TEST TUBES AND 20
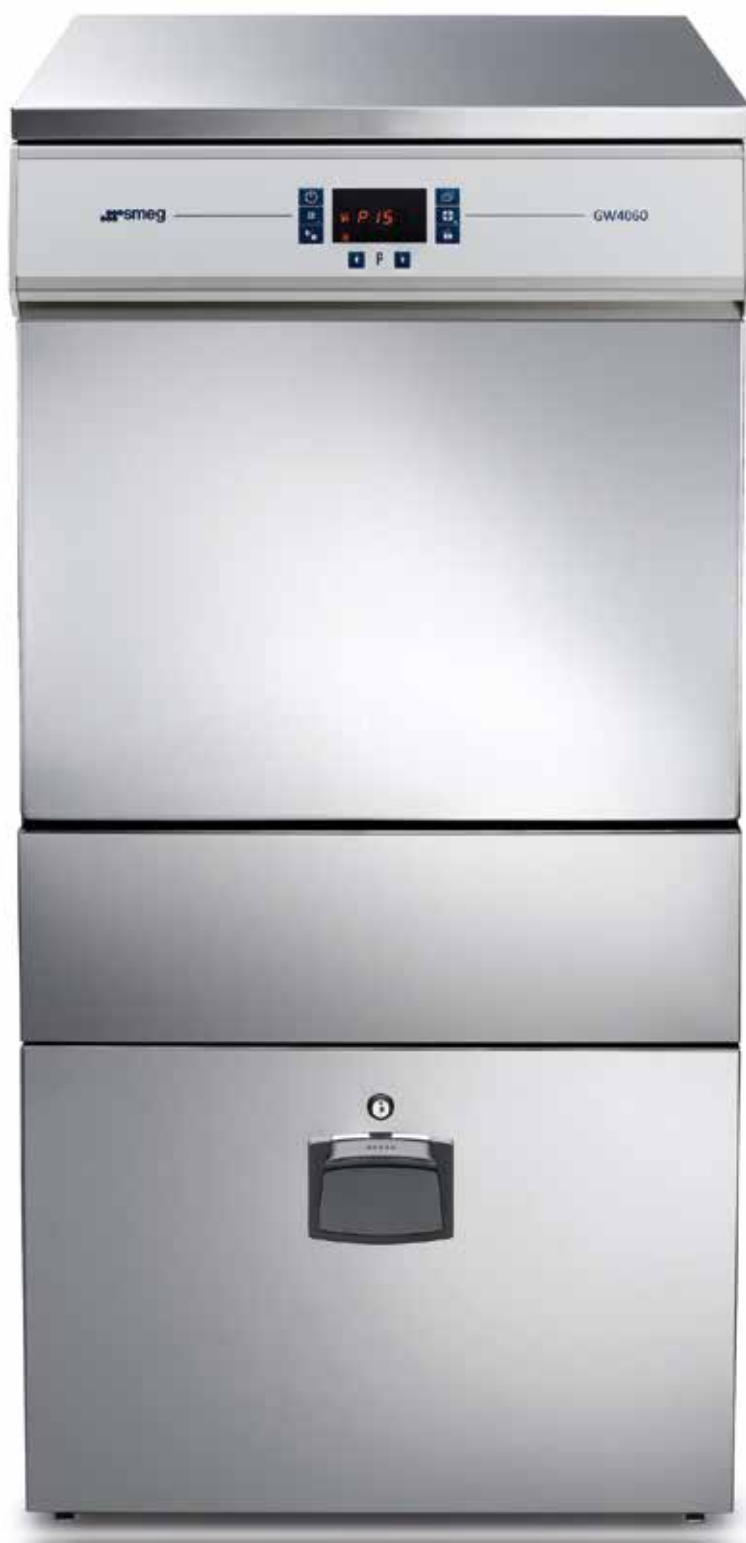NARROW-NECKED GLASSWARE

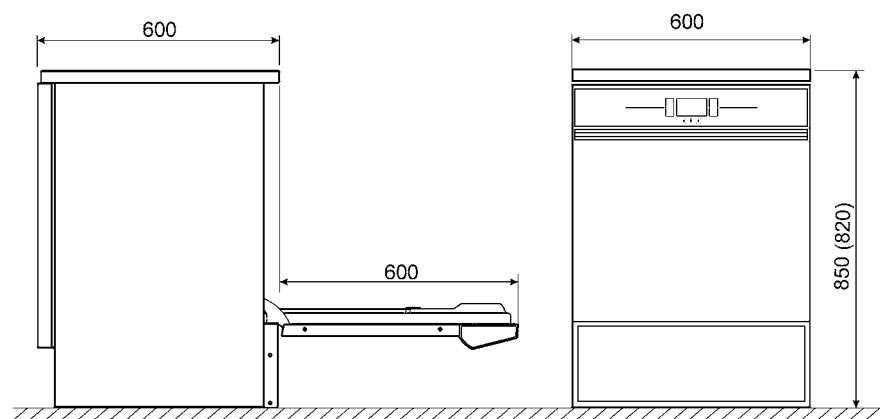## LPT100DS
WASHING SOLUTION FOR 100 PIPETTES TILL
45CM IN HEIGHT

SB25
WASHING SOLUTION FOR BEAKERS AND FLASKS
TILL 500ML. TO BE PLACED ON CS1-1 AND CS2

GW4060 TECHNICAL FEATURES	All versions
Electronic control	microprocessor
Standard programs stored	9
Customisable programs	6
Display with segments and communication	yes, 4 digits
Clock and calendar	yes
Tank internal temperature	from room temperature to 95°C
Accuracy	0,1°C
Temperature sensors in tank	n° 1 x PT 1000 CLASS B IEC 60751
Detergent and agents dosing system	max. 1 powder dispenser,1 pump for neutralizing agent and 2 other pumps as optional
Detergent level sensor	optional
Safety lock	yes, with electromagnetic release and automatic opening
Safety devices	safety thermostats, door interlock
Alarm display	30
Troubleshooting menu	yes, using PC connection
Programme editing	yes, using 6 customizable programs
AUXILIARY FUNCTIONS	
Storage of data for 250 most recently run programs	yes
RS232 serial port for PC connection	yes
RS232 serial port for printer	yes
Cycle storage	yes
Cycle file download	yes
DRYING SYSTEM	
Drying fan	yes
Drying heating element	0,8 kW
Prefilter class C 98%	yes
HEPA filter class S 99,999%	optional
WATER SUPPLY (PRESSURE 1,5-5 BAR)	
Cold water inlet	yes, hardness max 42°f
Demineralized water inlet	yes, < 30 µS/cm
Demineralized water booster pump	optional
Water softener incorporated	yes
Recirculation pump	400 l/min
WATER HEATING	
Electrical	6,3 kW on three-phase version, 2,3 kW on single-phase version
STEAM CONDENSER	sì
DIMENSIONS LxDxH mm	
Outside (with built-in top)	600x605x850 (830)
Inside (gross)	530x510x620
Net weight (Kg)	77
STAINLESS STEEL	
Wash tank	AISI 316L
Exterior covering	AISI 304
ELECTRICAL POWER SUPPLY	
Max. voltage/power	1/N/PE 230V ~ 50Hz 2,8 kW 3/N/PE 400V - 50 Hz 7,0 kW
NOISE LEVEL	max 50 dB

GW4190 is a glassware washer designed to work from one to two independent and flexible washing levels. The washing chamber measures 530x510x620 mm (168l gross). Possibility for washing, thermic and chemical disinfection (up to 95°C) and forced-air drying system with filter. Integrated compartment for the detergents.

LPV40DS
WASHING SOLUTION FOR 40 PIPETTES

LM20DS
UNIVERSAL WASHING SOLUTION FOR NARROW-NECKED GLASSWARES - 24 POSITIONS
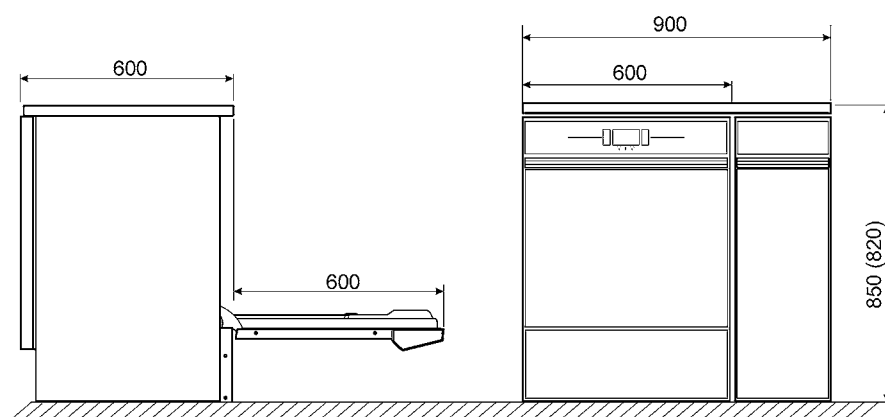
LB32DS
WASHING SOLUTION FOR BOTTLES

PD70I
WASHING SOLUTION FOR PETRI DISHES

GW4190 TECHNICAL FEATURES	All versions
Electronic control	microprocessor
Standard programs stored	9
Customisable programs	6
Display with segments and communication	yes, 4 digits
Clock and calendar	yes
Tank internal temperature	from room temperature to 95°C
Accuracy	0,1°C
Temperature sensors in tank	n° 1 x PT 1000 CLASS B IEC 60751
Detergent and agents dosing system	max. 1 powder dispenser,1 pump for neutralizing agent and 2 other pumps as optional
Detergent level sensor	optional
Safety lock	yes, with electromagnetic release and automatic opening
Safety devices	safety thermostats, door interlock
Alarm display	30
Troubleshooting menu	yes, using PC connection
Programme editing	yes, using 6 customizable programs
AUXILIARY FUNCTIONS	
Storage of data for 250 most recently run programs	yes
RS232 serial port for PC connection	yes
RS232 serial port for printer	yes
Cycle storage	yes
Cycle file download	yes
DRYING SYSTEM	
Drying fan	yes
Drying heating element	0,8 kW
Prefilter class C 98%	yes
HEPA filter class S 99,999%	optional
WATER SUPPLY (PRESSURE 1,5-5 BAR)	
Cold water inlet	yes, hardness max 42°f
Demineralized water inlet	yes, < 30 µS/cm
Demineralized water booster pump	optional
Water softener incorporated	yes
Recirculation pump	400 l/min
WATER HEATING	
Electrical	6,3 kW on three-phase version, 2,3 kW on single-phase version
STEAM CONDENSER	optional
DIMENSIONS LxDxH mm	
Outside (with built-in top)	900x605x853 (830)
Inside (gross)	530x510x620
Net weight (Kg)	105
STAINLESS STEEL	
Wash tank	AISI 316L
Exterior covering	AISI 304
ELECTRICAL POWER SUPPLY	
Max. voltage/power	1/N/PE 230V ~ 50Hz 2,8 kW 3/N/PE 400V ~ 50Hz 7,0 kW
NOISE LEVEL	max 50 dB

PROFESSIONAL LINE

GW3060, GW4090, GW6290, GW6010, GW7010, GW7015

GW3060 is a glassware washer designed to work with either one or two independent and flexible washing levels. The washing chamber measures 530x510x620 mm (168l gross). Possibility for washing, thermic and chemical disinfection (up to 95°C).

LM40
WASHING SOLUTION FOR NARROW-NECKED
GLASSWARE TILL 49 CM IN HEIGHT

LBT5
INJECTION WASHING SOLUTION FOR BOTTLES UP
TO 5L. DIAM.MAX. 180X500H MM, NECK DIAM.
MAX 80MM.

CP192
WASHING SOLUTION FOR TEST TUBES TILL 192
MM IN HEIGHT

CPB2
WASHING SOLUTION FOR WINE-TASTING
GLASSES MAX. 240MM IN HEIGHT. SUITABLE
FOR WASHING TILL 14 WINE-GLASSES.

LM80
TWO LEVELS WASHING SOLUTION WITH INJECTION. 68 SPIGOTS FOR GLASSEWARE UP TO 225MM MAX IN HEGHT

LPT100
WASHING SOLUTION FOR 100 PIPETTES UPTO 45CM IN HEIGHT

LPM2020
MIXED WASHING SOLUTION FOR TEST TUBES (MAX. 550MM IN HEIGHT), NARROW-NECKED GLASSWARES UPTO MAX. 490MM IN HEIGHT
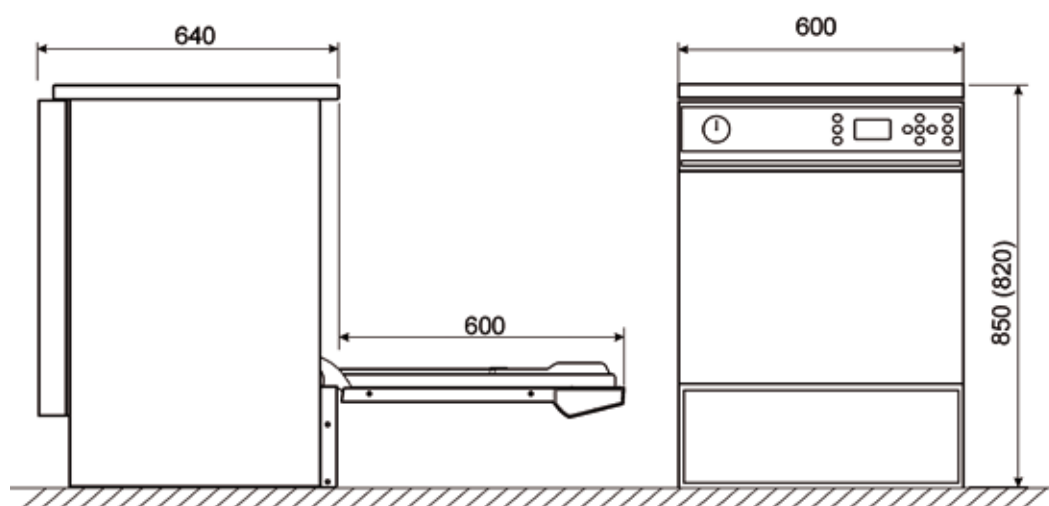

LB16
WASHING SOLUTION FOR NARROW NECK BOTTLES (MAX 1000ML) AND GRADUATED MEASURING CYLINDERS (MAX 495MM)

GW3060 TECHNICAL FEATURES	All versions
Electronic control	3 microprocessors + 1 (optional communication card)
Standard programs stored	20
Customisable programs	10 (expandable to 50)
Backlit graphic LCD display	128 x 64 pixels
Clock and calendar	yes
Tank internal temperature	from room temperature to 95°C
Accuracy	0,1°C
Temperature sensors in tank	n° 1 x PT 1000 CLASS B IEC 60751
Detergent and agents dosing system	max. 1 powder dispenser,1 pump for neutralizing agent and 3 other pumps as optional
Detergent level sensor	optional
Safety lock	yes, with electromagnetic release and automatic opening
Safety devices	safety thermostats, door interlock
Alarm display	80
Troubleshooting menu	yes, using PC connection
Program editing	yes, using customizable programs
Display languages	Italian, English, French, German, Russian, Spanish, Turkish and Polish
AUXILIARY FUNCTIONS	
External sensor duct	optional
Waste water separation solenoid valve control	optional
Storage of data for 250 most recently run programs	yes
RS232 serial port for PC connection	yes
RS232 serial port for printer	yes
Cycle storage	yes
Cycle file download	yes
WATER SUPPLY (PRESSURE 1,5-5 BAR)	
Cold water inlet	yes, hardness max 42°f
Demineralized water inlet	yes, < 30 µS/cm
Demineralized water booster pump	optional
Water softener incorporated	yes
Recirculation pump	400 l/min
WATER HEATING	
Electrical	6,3 kW
STEAM CONDENSER	optional
DIMENSIONS LxDxH mm	
Outside (with built-in top)	600x640x850 (830)
Inside (gross)	530x510x620
Net weight (Kg)	86
STAINLESS STEEL	
Wash tank	AISI 316L
Exterior covering	AISI 304
ELECTRICAL POWER SUPPLY	
Max. voltage/power	3/N/PE 400V ~ 50Hz 7,0 kW
NOISE LEVEL	max 50 dB

GW4090 is a glassware washer designed to work from one to two independent and flexible washing levels. The washing chamber measures 530x510x620 mm (168L gross). Possibility for washing, thermic and chemical disinfection (up to 95°C) and forced-air drying system with filter. Integrated compartment for the detergents.

LPM2010DS
MIXED WASHING SOLUTION FOR TEST TUBES, PIPETTES AND NARROW-NECKED GLASSWARE - 20 +10 POSITIONS

LR4DS
WASHING SOLUTION FOR REACTORS OF MAX 3L

PB1000
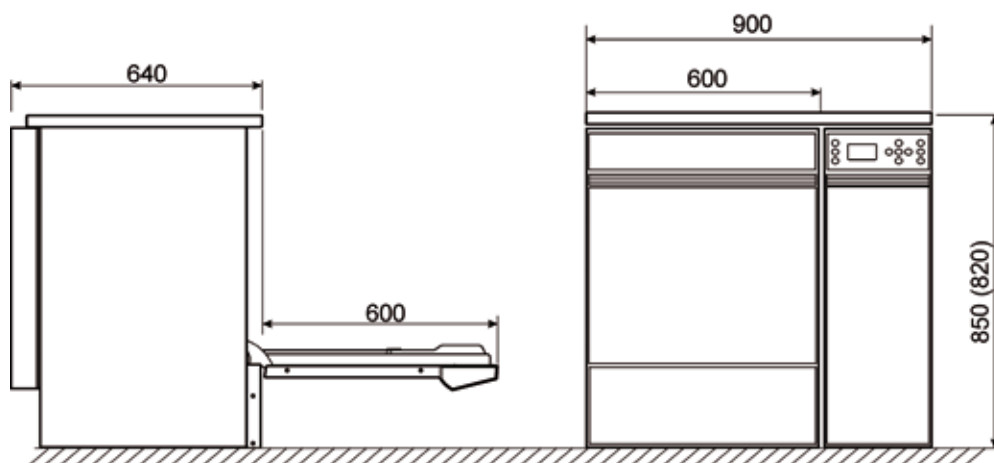WASHING SOLUTION FOR 16 BOTTLES WITH A LARGE SIZE NECK – MAX CAPACITY 1000ML

SB30
WASHING SOLUTION FOR MAX 30 BEAKERS, BEUTE UP TO 500ML AND CYLINDERS

GW4090 TECHNICAL FEATURES	All versions
Electronic control	3 microprocessors + 1 (optional communication card)
Standard programs stored	20
Customisable programs	10 (expandable to 50)
Backlit graphic LCD display	128 x 64 pixels
Clock and calendar	yes
Tank internal temperature	from room temperature to 95°C
Accuracy	0,1°C
Temperature sensors in tank	n° 1 x PT 1000 CLASS B IEC 60751
Detergent and agents dosing system	max. 1 powder dispenser,1 pump for neutralizing agent and 3 other pumps as optional
Detergent level sensor	optional
Safety lock	yes, with electromagnetic release and automatic opening
Safety devices	safety thermostats, door interlock
Alarm display	80
Troubleshooting menu	yes, using PC connection
Program editing	yes, using customizable programs
Display languages	Italian, English, French, German, Russian, Spanish, Turkish and Polish
AUXILIARY FUNCTIONS	
External sensor duct	optional
Waste water separation solenoid	optional
valve control	yes
Storage of data for 250 most recently run programs	yes
RS232 serial port for PC connection	yes
RS232 serial port for printer	yes
Cycle storage	yes
DRYING SYSTEM	
Drying fan	yes
Drying heating element	2,5 kW
Prefilter class C 98%	yes
HEPA filter class S 99,999%	optional
WATER SUPPLY (PRESSURE 1,5-5 BAR)	
Cold water inlet	yes, hardness max 42°f
Demineralized water inlet	yes, < 30 µS/cm
Demineralized water booster pump	optional
Water softener incorporated	yes
Recirculation pump	400 l/min
WATER HEATING	
Electrical	6,3 kW
STEAM CONDENSER	optional
DIMENSIONS LxDxH mm	
Outside (with built-in top)	900x640x850 (830)
Inside (gross)	530x510x620
Net weight (Kg)	110
STAINLESS STEEL	
Wash tank	AISI 316L
Exterior covering	AISI 304
ELECTRICAL POWER SUPPLY	
Max. voltage/power	3/N/PE 400V ~ 50Hz 7,0 kW
NOISE LEVEL	max 50 dB

GW6290 is a glassware washer designed to work from one to three independent and flexible washing levels. The washing chamber measures 680x670x1020mm (465L gross). Integrated compartment for the detergents.
Possibility for washing, thermic and chemical disinfection (up to 95°C) and forced-air drying system with filter.

L680
INJECTION WASHING SOLUTION UP TO
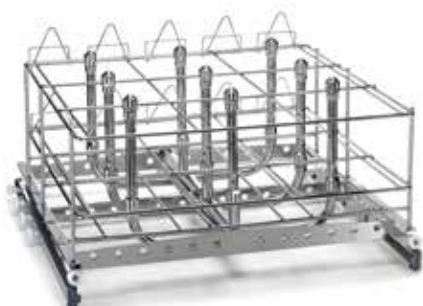76 MEDIUM AND SMALL GLASSWARE

L685CIL
WASHING SOLUTION FOR MAX 12
GRADUATED MEASURING CYLINDERS
 FROM 500ML TO 2000ML

C65-I
INJECTION WASHING
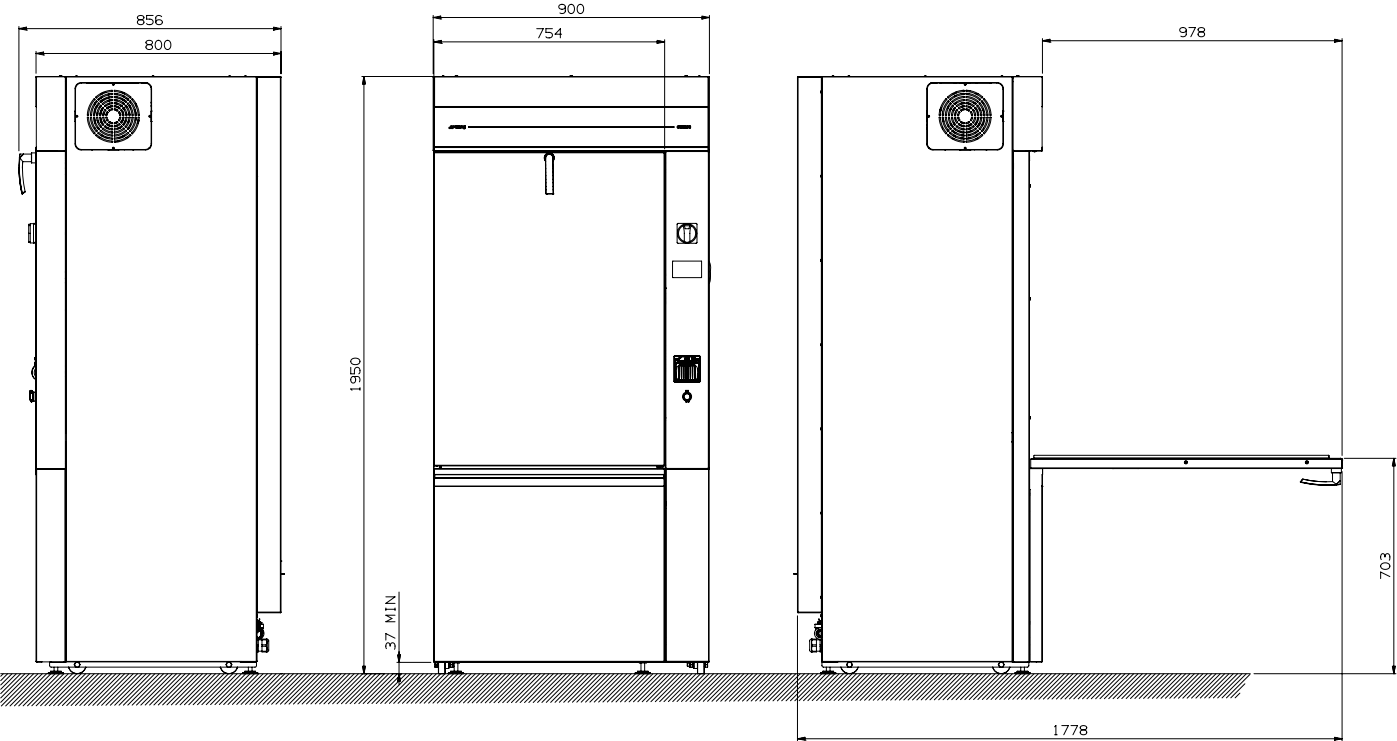SOLUTION FOR 9 BOTTLES
(LARGE SIZE)

LP6
SOLUZIONE DI LAVAGGIO PER
100 PIPETTE DI ALTEZZA MASSIMA
DI 450MM

856

800

900

754

978

1950

37 MIN

703

1778

GW6290 TECHNICAL FEATURES	All versions
Electronic control	microprocessor
Standard programs stored	20
Customisable programs	20
Display	touch screen graphic display TFT color (4.3''with capacitive sensing)
Clock and calendar	yes
Tank internal temperature	from room temperature to 95°C
Accuracy	0,1°C
Temperature sensors in tank	n° 2 x PT 1000 CLASS B IEC 60751
Detergent and agents dosing system	max. n° 5, 2 installed pumps
Detergent level sensor	optional, max n° 5
Safety lock	yes
Water heating	electrical – 18kW
Steam connection	no
Steam condenser	no
Alarm display	yes, acoustic and visible
Troubleshooting menu	yes
Program editing	yes, using customizable programs
Display languages	Italian, English, French, German, Russian, Spanish and Portuguese
AUXILIARY FUNCTIONS	
External sensor duct	no
Traceability	storage of data for 100 most recently run programs
RS232 serial port	yes
Cycle file download	yes
Cycle storage	yes
LAN connection	optional
Dirty/clean side printer	optional
Interior lights	optional
Water quality control(conductivity sensor)	optional
Sprayers speed control (heaven and background)	no
Automatic recognition cart	no
Pressure sensor circuit washing	optional
DRYING SYSTEM	
Drying fan	yes, n° 2 dryers - 220 m^3 /h
Drying heating element	yes
Prefilter class C 98%	yes
HEPA filter class S 99,999%	optional
WATER SUPPLY (PRESSURE 1,5-5 BAR)	
Cold water inlet	yes, hardness max 42°f
Hot water inlet	yes, hardness max 10°f, max t 60°C
Demineralized water inlet	yes, < 30 µS/cm / 5 -8 ph, t max 60°C
Cold water booster pump	yes
Demineralized water booster pump	no
External water softner	outside, optional
Recirculation pump	n° 2 pumps of 600 l/min
DIMENSIONS LxDxH mm	
Outside (with built-in top)	900 x 800 x 1940mm - drop down door
Inside (gross)	670 x 650 x 1020mm
Net weight (Kg)	280
STAINLESS STEEL	
Wash tank	AISI 316L
Exterior covering	AISI 304
ELECTRICAL POWER SUPPLY	
Max. voltage/power	3/N/PE 400V - 50 Hz 18 kW
NOISE LEVEL	Max 66 dB

GW6010 is a glassware washer designed to work with one to five independent and flexible washing levels. Drop down door in glass. The washing chamber measures 550 x 620 x 685mm. Integrated compartment for the detergents.
Possibility for washing, thermic and chemical disinfection (up to 95°C) and forced-air drying system with filter.

CLB510
CUSTOMIZABLE WASHING SOLUTION UP TO 5 LEVELS. MODULES TO BE CHOSEN BY THE CUSTOMER

INS56U4140
56 POSITIONS UNIVERSAL MODULE WITH VARIOUS PLASTIC SUPPORTS TO BE PLACED FOLLOWING THE HEIGHT OF THE GLASSWARE.
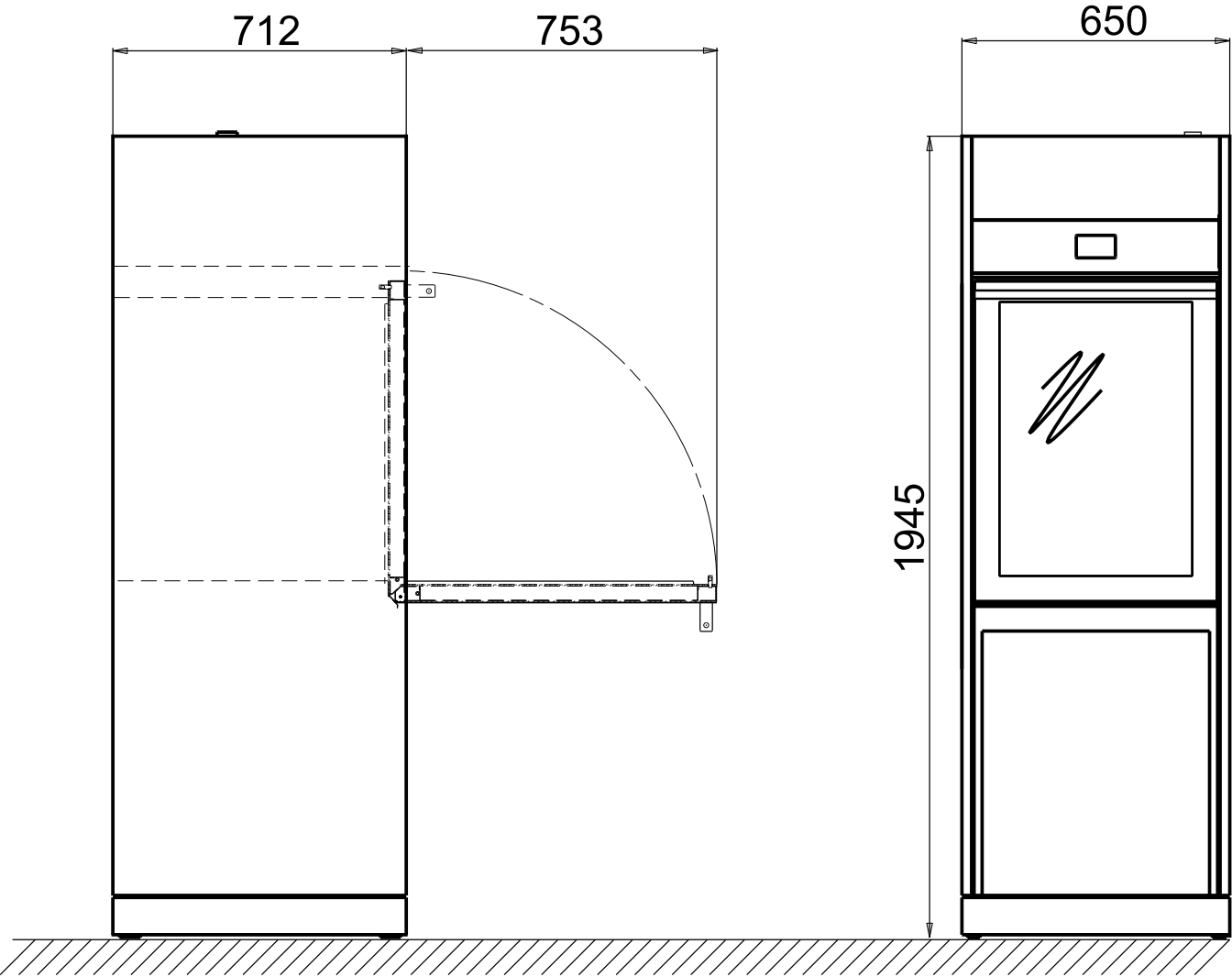

INSLP28U4140
MIXED WASHING SOLUTION FOR PIPETTES (MAX 70 POSITIONS) AND DIFFERENT GLASSWARE.

DIS-WD6010
TROLLEY FOR ERGONOMICALLY LOADING AND UNLOADING GLASSWARE WASHER.

712

753

650

1945

GW6010 TECHNICAL FEATURES	All versions
Electronic control	microprocessor
Standard programs stored	20
Customisable programs	20
Display	touch screen graphic display TFT color (4.3''with capacitive sensing)
Clock and calendar	yes
Tank internal temperature	from room temperature to 95°C
Accuracy	0,1°C
Temperature sensors in tank	n° 2 x PT 1000 CLASS B IEC 60751
Detergent and agents dosing system	max. n° 4, 2 installed pumps
Detergent level sensor	optional, max n° 4
Safety lock	yes
Water heating	electrical – 12kW
Steam connection	optional
Steam condenser	optional
Alarm display	yes, acoustic and visible
Troubleshooting menu	yes
Program editing	yes, using customizable programs
Display languages	Italian, English, French, German, Russian, Spanish and Portuguese
AUXILIARY FUNCTIONS	
External sensor duct	optional
Traceability	storage of data for 100 most recently run programs
RS232 serial port	yes
Cycle file download	yes
Cycle storage	yes
LAN connection	optional
Dirty/clean side printer	optional
Interior lights	optional
Water quality control(conductivity sensor)	optional
Sprayers speed control (heaven and background)	optional
Automatic recognition cart	optional
Pressure sensor circuit washing	optional
DRYING SYSTEM	
Drying fan	yes, 220 m^3 /h
Drying heating element	yes
Prefilter class C 98%	yes
HEPA filter class S 99,999%	optional
WATER SUPPLY (PRESSURE 1,5-5 BAR)	
Cold water inlet	yes, hardness max 42°f
Hot water inlet	yes, hardness max 10°f, max t 60°C
Demineralized water inlet	yes, < 30 µS/cm / 5 -8 ph, t max 60°C
Cold water booster pump	optional
Demineralized water booster pump	optional
External water softner	outside, optional
Recirculation pump	600 l/min
DIMENSIONS LxDxH mm	
Outside (with built-in top)	900 x 800 x 1940mm - drop down door
Inside (gross)	550x 620x 685mm
Net weight (Kg)	280
STAINLESS STEEL	
Wash tank	AISI 316L
Exterior covering	AISI 304
ELECTRICAL POWER SUPPLY	
Max. voltage/power	3/N/PE 400V - 50 Hz 12 kW
NOISE LEVEL	< 66 dB

GW7010 is a glassware washer designed to work with one to five independent and flexible washing levels. External sliding door in glass. The washing chamber measures 550 x 620 x 685mm. Integrated compartment for the detergents.
Possibility for washing, thermic and chemical disinfection (up to 95°C) and forced-air drying system with filter.

LCB610
UNIVERSAL BASIC CARRIER FOR
GLASSWARE OF VARIOUS SIZES

COCI42
WASHING SOLUTION FOR GRADUATED
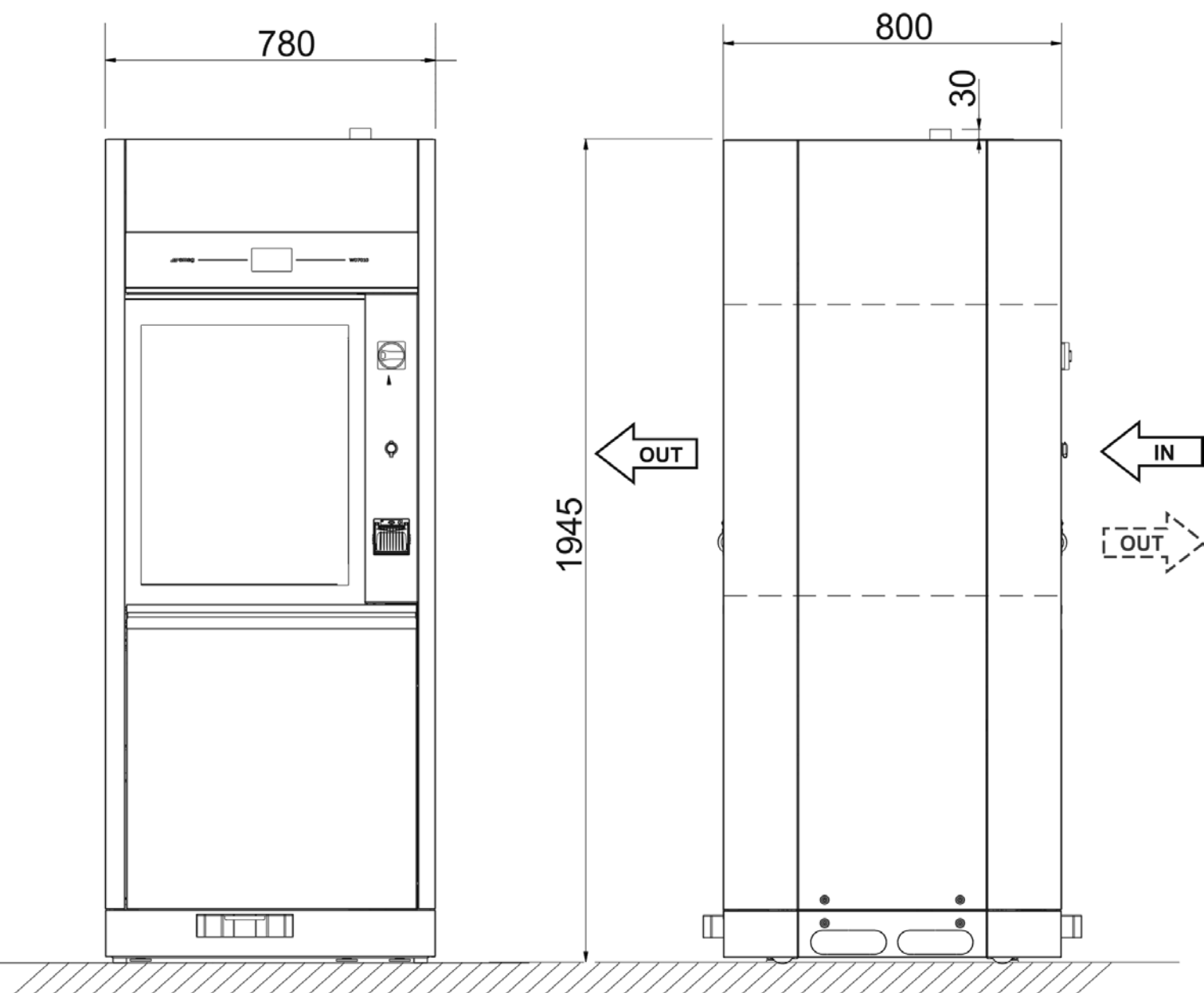MEASURING CYLINDERS TO BE POSITIONED
TO LCB610

CLB210
CUSTOMIZABLE WASHING SOLUTION UP TO
2 LEVELS. MODULES TO BE CHOSEN BY THE
CUSTOMER

DIS-WD7010
TROLLEY FOR ERGONOMICALLY LOADING AND
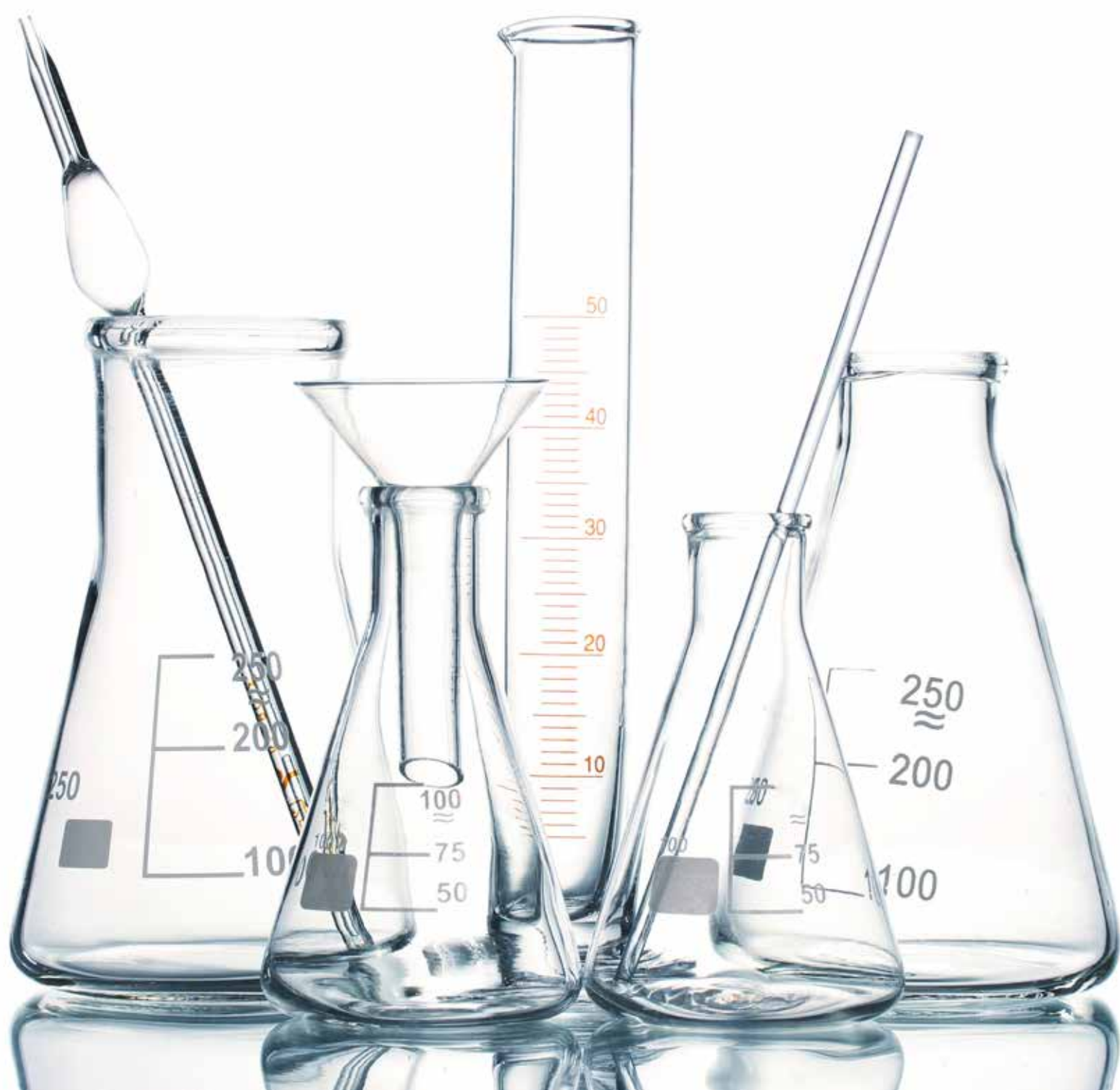UNLOADING GLASSWARE WASHER

GW7010 TECHNICAL FEATURES	All versions
Electronic control	microprocessor
Standard programs stored	20
Customisable programs	20
Display	touch screen graphic display TFT color (4.3''with capacitive sensing)
Clock and calendar	yes
Tank internal temperature	from room temperature to 95°C
Accuracy	0,1°C
Temperature sensors in tank	n° 2 x PT 1000 CLASS B IEC 60751
Detergent and agents dosing system	max. n° 4, 2 installed pumps
Detergent level sensor	optional, max n° 4
Safety door block	yes
Water heating	electrical – 12kW
Steam connection	optional
Steam condenser	optional
Alarm display	yes, acoustic and visible
Troubleshooting menu	yes
Program editing	yes, using customizable programs
Display languages	Italian, English, French, German, Russian, Spanish and Portuguese
AUXILIARY FUNCTIONS	
External sensor duct	optional
Traceability	storage of data for 100 most recently run programs
RS232 serial port	yes
Cycle file download	yes
Cycle storage	yes
LAN connection	optional
Dirty/clean side printer	optional
Interior lights	optional
Water quality control(conductivity sensor)	optional
Sprayers speed control (heaven and background)	optional
Automatic recognition cart	optional
Pressure sensor circuit washing	optional
DRYING SYSTEM	
Drying fan	yes, 220 m^3 /h
Drying heating element	yes
Prefilter class C 98%	yes
HEPA filter class S 99,999%	optional
WATER SUPPLY (PRESSURE 1,5-5 BAR)	
Cold water inlet	yes, hardness max 42°f
Hot water inlet	yes, hardness max 10°f, max t 60°C
Demineralized water inlet	yes, < 30 µS/cm / 5 -8 ph, t max 60°C
Cold water booster pump	optional
Demineralized water booster pump	optional
External water softner	outside, optional
Recirculation pump	600 l/min
DIMENSIONS LxDxH mm	
Outside (with built-in top)	780x800x1950 mm - slide door
Inside (gross)	550 x 620 x 685 mm
Net weight (Kg)	300
STAINLESS STEEL	
Wash tank	AISI 316L
Exterior covering	AISI 304
ELECTRICAL POWER SUPPLY	
Max. voltage/power	3/N/PE 400V - 50 Hz 12 kW
NOISE LEVEL	Max 66 dB

GW7015 is a glassware washer designed to work from one to various levels for washing glassware of high dimensions. The washing chamber measures 626x812x820mm (417 l gross). Integrated compartment for the detergents.
Possibility for washing, thermic and chemical disinfection (up to 95°C) and forced-air drying system with filter

GW7015 TECHNICAL FEATURES	All versions
Electronic control	microprocessor
Standard programs stored	20
Customisable programs	20
Display	touch screen graphic display TFT color (4.3''with capacitive sensing)
Clock and calendar	yes
Tank internal temperature	from room temperature to 95°C
Accuracy	0,1°C
Temperature sensors in tank	n° 2 x PT 1000 CLASS B IEC 60751
Detergent and agents dosing system	max. n° 5, 2 installed pumps
Detergent level sensor	optional, max n° 5
Safety door block	yes
Water heating	electrical – 20kW
Steam connection	optional
Steam condenser	optional
Alarm display	yes, acoustic and visible
Troubleshooting menu	yes
Program editing	yes, using customizable programs
Display languages	Italian, English, French, German, Russian, Spanish and Portuguese
AUXILIARY FUNCTIONS	
External sensor duct	optional
Traceability	storage of data for 100 most recently run programs
RS232 serial port	yes
Cycle file download	yes
Cycle storage	yes
LAN connection	optional
Dirty/clean side printer	optional
Interior lights	optional
Water quality control(conductivity sensor)	optional
Sprayers speed control (heaven and background)	optional
Automatic recognition cart	optional
Pressure sensor circuit washing	optional
DRYING SYSTEM	
Drying fan	yes, 440 m³ /h
Drying heating element	yes
Prefilter class C 98%	yes
HEPA filter class S 99,999%	optional
WATER SUPPLY (PRESSURE 1,5-5 BAR)	
Cold water inlet	yes, hardness max 42°f
Hot water inlet	yes, hardness max 10°f, max t 60°C
Demineralized water inlet	yes, < 30 µS/cm / 5 -8 ph, t max 60°C
Cold water booster pump	optional
Demineralized water booster pump	optional
External water softner	outside, optional
Recirculation pump	n°2 pumps of 600 l/min
DIMENSIONS LxDxH mm	
Outside (with built-in top)	780x800x1950 mm - slide door
Inside (gross)	626x812x820mm
Net weight (Kg)	320
STAINLESS STEEL	
Wash tank	AISI 316L
Exterior covering	AISI 304
ELECTRICAL POWER SUPPLY	
Max. voltage/power	3/N/PE 400V - 50 Hz 20 kW
NOISE LEVEL	max 66 dB

ACCESSORIES

BASIC LINE E PROFESSIONAL LINE

D-CS1

UPPER LEVEL BASKET

Basic upper basket with sprayer
for the GW2145 series.
Suitable for glassware
treatment

D-CS2

LOWER LEVEL BASKET

Basic lower basket with sprayer
for the GW2145 series.
Suitable for glassware
treatment

CS1-1

UPPER LEVEL BASKET

Basic upper basket with
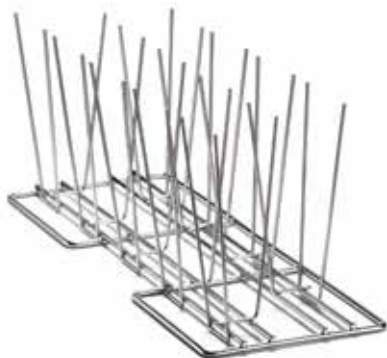sprayer. Suitable for glassware
treatment

CS2

LOWER LEVEL BASKET

Basic lower basket. Suitable for
glassware treatment.

SB9

9 POSITION INSERT

Made of stainless steel, it is suitable for washing beakers and cylinders of max. 100 ml and funnels. Occupies 1/2 of the D-CS1/D-CS2 baskets.
Dimensions: W x D x H = 420 x 145 x 160 mm

An insert for 14 positions is also available (**SB14**).
Dimensions: W x D x H = 422 x 146 x 184 mm

SB15

15 POSITION INSERT

Made of stainless steel, it is suitable for washing beakers and flasks. For use in combination with standard CS1-1 and CS2 baskets of 16 items and is made of stainless steel.
Recommended for flasks with a capacity of up to 1000 ml.
Dimensions: W x D x H = 400 x 195 x 115 mm

SB28

28 POSITION INSERT

Made of stainless steel, it is suitable for washing beakers and flasks. For use in combination with standard CS1-1 and CS2 baskets and LM20 insert.
It has a capacity for 16 items and is made of stainless steel.
Recommended for flasks with a capacity of up to 1000 ml.
Dimensions: W x D x H = 400 x 195 x 185 mm

SB30

30 POSITION INSERT

Made of stainless steel, it is suitable for washing beakers of any size. For use in combination with standard CS1-1 and CS2 baskets and LM20 insert.
It has a capacity of 30 items and is made of stainless steel.
Recommended for flasks with a capacity of up to 500ml.
Dimensions: W x D x H = 400 x 195 x 150 mm

An insert for 25 positions is also available (**SB25**).

COMPATIBLE
WITH ALL
GLASSWASHERS

CSK1

1-LEVEL SMALL GLASSES
AND OBJECTS INSERT

It is suitable for washing
glasses and objects of small
dimensions.level

Dimensions: L x D x H 450 x 450 x 55mm, mesh 5 x 5mm
Space needed: entire washer

CSK2

½ LEVEL SMALL GLASSES
AND OBJECTS INSERT

It is suitable for washing glasses and objects of
small dimensions.

Dimensions : L x D x H 450 x 225 x
55mm, mesh 5 x 5mm
Space needed: half of a washer level

SERIE "CP"

¼ LEVEL TEST TUBE INSERT

Compartment suitable for test tubes up to 160. Accessory
composed by 3 compartments and a lid. Different sizes
depending on the test tubes model.
Space needed: 1/4 of a washer level

CP105: test tubes up to 75 mm in height
CP132: test tubes up to 105 mm in height
CP192: test tubes up to 165 mm in height
CP222: test tubes up to 200 mm in height

PB50

BOTTLE INSERT

Suitable for holding 56 50 ml wide-necked bottles
(screw cap GL32 ISO4796 or ground cap DIN
12038 or non-standard cap).
Max. bottle size: diam. 46 mm - h 87 mm.

PB100 (not in photo) suitable for holding 32 100 ml wide-necked bottles (screw cap GL45 ISO4796 or ground cap DIN 12038 or non-standard cap).
Max. bottle size: diam. 56 mm - h 100 mm.

PB500

BOTTLE INSERT

Suitable for holding 21 500 ml wide-necked bottles (screw cap GL32 ISO4796 or ground cap DIN 12038 or non-standard cap).
Max. bottle size: diam. 86 mm - h 177 mm.

PB250 (not in photo) suitable for holding 25 250 ml wide-necked bottles (screw cap GL45 ISO4796 or ground cap DIN 12038 or non-standard cap).
Max. bottle size: diam. 70 mm - h 138 mm.

PB1000

BOTTLE INSERT

Suitable for holding 16 1000 ml wide-necked bottles
(screw cap GL45 ISO4796 or ground cap DIN 12038
or non-standard cap).
Max. bottle size: diam. 101 mm - h 225 mm.

PV105

SLIDES INSERT

Microscope slide insert made of stainless steel.
Suitable for positioning 105 standard
microscope slides.

Dimensions l x d x h = 220x143x60 mm.

SL6

PLATE INSERT

It is suitable for washing up to Olympus-type
plate for optical recognition of the blood unit.
Hinged lid included.

Dimensions l x d x h = 485x145x80 mm.

SL9

CHROMATOGRAPHIC PLATES INSERT

Made of stainless steel, it is suitable for
washing chromatographic plates.
Capacity of 9 items.
It takes up 1/2 the space of a standard
basket.

SL18

CHROMATOGRAPHIC PLATES
INSERT

Made of stainless steel, suitable for washing
20x20 standard chromatographic plates.
Capacity of 18 items.
The guides are shaped in such a way that the
support points are outside the working surface.

COMPATIBLE
WITH ALL
GLASSWASHERS

SERIE "PD"

DIFFERENT DIMENSIONS PETRI DISH INSERT

PD70S - 40 items, 50-70 mm positioned on the upper level CS1-1.
PD100S - 38 items, 70-120 mm positioned on the upper level CS1-1.
PD70I 40 items, 50-70 mm positioned on the lower level CS2.
PD100I - 38 items, 70-120 mm positioned on the lower level CS2.

SERIE "PF"

DIFFERENT DIMENSIONS
MESHES

PF1/2, PF1/2, ½ space of CS2 or CS1-1
PF1, whole CS1-1
PF2, whole CS2
D-PF1, whole D-CS1-1
D-PF2, whole D-CS2

SA3

DIFFERENT
DIMENSIONS
HOLDING NETS

RC1 net covering a whole carrier,
RC1/2 net covering ½ carrier,
RC1/4 net covering 1/4 carrier

SERIE "U"

SPIGOTS OF DIFFERENT
DIMENSIONS

Injection spigots available in the following versions:
- spigot for 6% and 12% butyrometers
- Nylon spigot for pipettes
- Spigots for glassware with the following heights:
 90, 110, 140, 160, 180, 220, 240, 260 mm.

Suitable as spare parts on carriers already in use or to equip customizable carriers.

LPM24

PIPETTES/FLASK WASHING
CARRIER

Mixed stainless-steel flask/pipette carriage with 12+12 positions, suitable for washing narrow-necked glassware up to 490 mm in height. Fitted with the following nozzles: 4 x U6240, 2 x U6220, 2
x U4160, 2 x U4140, 2 x U3110, 12 x LB40. Maximum glassware height of 490 mm and positioning on the D-CS2 rack lower level.

LM24

FLASK WASHING INSERT

Universal 24-position stainless steel flask washer, suitable for washing narrow-necked glassware up to 490 mm in height. Fitted with the following nozzles: 6 x U6240, 5 x U6220, 6 x U4160, 5 x U4140, 2 x U3110. Positioning on the D-CS2 rack lower level.

LM22S

FLASK WASHING INSERT

Universal 22-position stainless steel flask washer, suitable for washing narrow-necked glassware up to 225 mm in height. Fitted with the following nozzles: 12 x U4140, 5 x U3110, 5 x U390, positioning on the D-CS1 rack upper level.

LM46

UNIVERSAL FLASK WASHING
CARRIER– 46 POSITIONS

Suitable for washing narrow-necked glassware up to 220 mm in height. Upper basket insert equipped with the following nozzles: 12 x U4140 (140 mm), 6 x U390 (90 mm), 6 x U3110 (110 mm). Lower basket insert equipped with the following nozzles: 6 x U4140 (140 mm), 2 x U390 (90 mm), 2 x U3110 (110 mm), 2 x U6220 (220 mm), 2 x U6240 (240 mm), 2 x U6260 (260 mm), 2 x U4180 (160 mm), 6 x U4160 (160 mm), 1 x UC6 (curved).
Positioned on the rack levels of D-CS1 e D-CS2. Made of stainless steel.

COMPATIBLE
GW0160
GW1160
GW4060
GW4190
GW3060
GW4090

LM20DS

UNIVERSAL FLASK WASHING CARRIER

Stainless steel carrier for washing and drying narrow-necked glassware up to 490 mm in height. Fitted with 20 nozzles and half the carrier space is free for mixed glassware suitable for a 1/2 basket accessory. Positioned on the lower level.
LM20 (not shown in the photo): version without drying system connection.

LM40DS

UNIVERSAL NARROW-
NECKED GLASSWARE
WASHING CARRIER

Stainless-steel carrier for washing and drying narrow-necked glassware up to 490 mm in height, flasks, round-bottom flasks and graduated cylinders of various sizes. Positioned on the lower level.
LM40 (not shown in the photo): version without drying system connection.

LM40SDS

UNIVERSAL NARROW-NECKED
GLASSWARE WASHING CARRIER

Stainless-steel carrier for washing narrow-necked glassware up to 225 mm in height. Carrier with 40 spigots with the same height. Positioned on the upper level.
LM40S (not shown in the photo): version without drying system connection.

LM80DS

UNIVERSAL NARROW-NECKED
GLASSWARE WASHING CARRIER

Stainless-steel carrier for washing narrow-necked glassware up to 225 mm in height. Carrier with 80 spigots with the same height. Positioned on two levels.
LM80 (not shown in the photo): version without drying system connection.

N.B. The models with drying system connection (DS versions) are specific for GW4090, GW4190 and GW4060 glassware washers.

LB4BDS

BOTTLE WASHING CARRIER

Stainless steel trolley for washing large glass items with drying system connection. Suitable for washing 2 x 10 L bottles or 4 x 5 L bottles Fitted with 8 special spigots. Positioned on the lower level.
LB4 (not shown in the photo): version without drying system connection

LBT5DS

BOTTLE WASHING CARRIER

Stainless steel carrier for large glass items washing with drying system connection.
Suitable for washing and drying of five 5-litre bottles (diam. 180 x h.500mm, max neck diameter 80 mm).
Fitted with 5 special spigots. Positioned on the lower level.
LBT5 (not shown in the photo). Version without drying system connection.

LB8DS

BOTTLE WASHING CARRIER

Stainless steel carrier for washing large glass items with drying system connection. Suitable for washing 8 bottles of maximum 50 cm in height. Fitted with 8 U6260 spigots and 8 special spigots.
Positioned on the lower level.
LB8 (not shown in the photo): version without drying system connection.

LB16DS

BOTTLE WASHING CARRIER

Stainless steel carrier for washing 16 narrow or wide-necked bottles of 250-1000 ml (max. diam. 101 mm, h 450mm) or graduated cylinders (diam. max. 101 mm - h 495 mm).
Positioned on the lower level.
LB16 (not shown in the photo): version without drying system connection.

N.B. The models with drying system connection (DS versions) are specific for GW4090, GW4190 and GW4060 glassware washers.

COMPATIBLE
GW0160
GW1160
GW4060
GW4190
GW3060
GW4090

LB16SDS

BOTTLE WASHING CARRIER

Stainless steel carrier for washing 16 narrow or wide-necked bottles of 250-1000 ml (max. diam. 101 mm, h 250mm). Positioned on the upper level.
LB16SDS ((not shown in the photo): version without drying system connection. LB16I code: same carrier for the lower level

LB32DS

BOTTLE WASHING CARRIER

Stainless steel carrier for washing large glass items with drying system connection. Suitable for washing 32 narrow or wide-necked bottles of 250-1000 ml, max. diam. 101 mm, H.245 mm. Positioned on 2 levels.
LB32 (not shown in the photo): version without drying system connection.

LB1-20DS

WASHING CARRIER FOR BOTTLE OR DRUM

Stainless steel carrier for washing universal large glass items and suitable for washing one large bottle and/or drum with drying system connection. Bottle maximum dimensions diameter 300 x h. 350 mm
Positioned on lower level.

N.B. The models with drying system connection (DS versions) are specific for GW4090, GW4190 and GW4060 glassware washers.

LPM2010DS

MIXED INJECTION CARRIER FOR FLASKS, PIPETTES AND TEST TUBES

Stainless steel carrier for washing flasks, pipettes and test tubes with drying system connection. Suitable for washing and drying of 10 pipettes up to 55 cm + 20 narrow-necked glass items + ¼ free space to be filled with a CP series test tube basket.
Positioned on the lower level.
LMP2010 (not shown in the photo): version without drying system connection.

LPM2020DS

MIXED INJECTION CARRIER FOR FLASKS AND PIPETTES

Stainless steel carrier for mixed washing of flasks and pipettes with drying system connection.
Suitable for washing and drying 20 pipettes up to 550 mm in height and 20 narrow-necked glassware with a maximum height of 49 cm. Positioned on the lower level.
LPM20/20 (not shown in the photo): version without drying system connection.

LR4DS

REACTORS WASHING CARRIER

Stainless steel trolley for washing and drying four 3/5-way reactors of maximum 3 litres or up to 12 narrow-necked glass items. Fitted with 20 U6260 nozzles.
Positioned on the lower level.
LR4 (not shown in the photo): version without drying system connection.

LT20DS

WASHING CARRIER FOR FISCHER BOTTLES

Stainless steel carrier with drying system connection for washing and drying of 12 Fischer bottles and graduated cylinders with a maximum height of 55 cm. 6 positions for injection washing of narrow-necked glassware. Fitted with 18 spigots. Positioned on the lower level.
LT20 (not shown in the photo): version without drying system connection.

N.B. The models with drying system connection (DS versions) are specific for GW4090, GW4190 and GW4060 glassware washers.

LPV40DS

PIPETTES WASHING CARRIER

Stainless steel carrier for washing and drying volumetric pipettes up to 55 cm in length. 20 positions for pipettes of 55 cm in height and 20 positions for pipettes and/or flasks of 45-49 cm in height.
LPV40 (not shown in the photo): version without drying system connection.

LPT100DS

PIPETTES WASHING CARRIER

Stainless steel carrier for washing and drying 100 pipettes with a capacity of 1 to 20 ml and a height up to 450 mm. The pipette washing disc is fitted into the carrier to allow fast loading and unloading access.
LPT100 (not shown in the photo): version without drying system connection.

KP100DS

TAPERED AND CYLINDRICAL TEST TUBE CARRIER

Stainless steel carrier with drying system connection for washing of tapered and cylindrical test tubes by internal injection. It has a maximum capacity of 100 test tubes. Positioned on the upper washing level.
KP200DS (not shown in the photo): same carrier on two washing levels with a maximum capacity of 200 test tubes.
KP100 (not shown in the photo): version without drying system connection.
KP200 (not shown in the photo): version without drying system connection.

LB40DS

BUTYROMETER WASHING CARRIER

Stainless steel carrier for butyrometer washing with drying system connection. Suitable for washing and drying of 40 butyrometers. Specify the type of butyrometer in the order. Positioned on the upper level.
LB40 (not shown in the photo): version without drying system connection.

N.B. The models with drying system connection (DS versions) are specific for GW4090, GW4190 and GW4060 glassware washers.

C61

1ST LEVEL BASIC CARRIER

Stainless steel first level basic carrier with grid. It is suitable for positioning various glassware up 790mm in height. The C61 basic carrier is also used to position the injection systems (L685/L680/L690) on level 1. The injector inserts are inserted into the guide rails of the C61: in this case, the maximum height of glass items must be 720mm.

C62

2ND AND 3RD LEVEL BASIC CARRIER

Stainless steel second and third level basic carrier with rotating sprayer. It is used on its own and is suitable for positioning glassware up to 360mm in height.

C63

2ND AND 3RD LEVEL BASIC CARRIER

Telescopic carrier for injection systems. The support is used to position the injection systems on levels 2 and 3. Suitable for positioning injection inserts (L680/685/690) directly in turn into the guide rails. Its flexibility allows the injection systems to be completely removed to simplify loading the glassware. Glass items max height 390mm.

COMPATIBLE
GW6290

L680

UNIVERSAL GLASSWARE INSERT

Injection stainless steel insert for washing a max of 76 small and medium glass items. Spigots at the same height of 140 mm. Preferential use of the insert on the 1st or 2nd level over the specific carriers.

L685

UNIVERSAL GLASSWARE INSERT

Injection stainless steel insert for washing a max of 76 small and medium glass items. Spigots of differing heights make it possible to optimise loading of different sized glassware. This spigot configuration allows the system to be used on the 1st or 2nd level over the specific carriers.

L690

UNIVERSAL GLASSWARE INSERT

Injection stainless steel insert for washing a max of 86 small glass items. Spigots at the same height of 110 mm. Preferential use of the insert on the 1ST, 2nd, 3rd level over the specific carriers.

LP6

PIPETTES WASHING INSERT

Suitable for washing pipettes with max in height 450mm and 8.5mm as maximum diameter.
It easily hooks into the hydraulic grip positioned on L680 and L685

COMPATIBLE
GW6290

C65-I

MIXED INJECTION CARRIER FOR BIG DIMENSIONS GLASSWARES

Injection stainless steel carrier for big dimensions glass items with drying system connection. Suitable for washing 9 bottles with max dimensions: diam. 175mm and in height 285 mm.
Positioned on the lower level.
C65S (not shown in the photo): same carrier for the upper level

C636-I

MIXED INJECTION CARRIER FOR BOTTLES

Injection stainless steel carrier with drying system connection for washing max 36 narrow or wide-necked bottles of 250-1000 ml (max. diam. 90 mm, h 285mm).
Positioned on the lower level.
C636S (not shown in the photo): same carrier for the upper level.

LM6-5

DRUM INJECTION CARRIER

Injection stainless steel carrier with drying system connection.
For washing from 1 to 5 drums of different dimensions. The customer can customize the carrier thanks to the spigots of variable height and the repositionable rails.

L685CIL

INJECTION CARRIER FOR CYLINDERS

Injection stainless steel carrier for washing 12 graduated cylinders max from 500ml to 2000ml.
Positioned on the lower level.
L690CIL (not shown in the photo): Suitable for washing a max of 36 graduated cylinders from 300ml to 700ml.
Positioned on the lower level.

COMPATIBLE
GW6010
GW7010

CLB210

MULTIFUNCTIONAL BASIC CARRIER

Multifunctional basic carrier to insert a maximum of two inserts (not included) chosen by the customer.

CLB310

MULTIFUNCTIONAL BASIC CARRIER

Multifunctional basic carrier to insert a maximum of three inserts (not included) chosen by the customer.

CLB510

MULTIFUNCTIONAL BASIC CARRIER

Multifunctional basic carrier to insert a maximum of five inserts (not included) chosen by the customer.

LCB610

MULTIFUNCTIONAL BASIC CARRIER

One level multifunctional basic carrier to insert a maximum of two collectors (one any ½ surface). Suitable for different big dimensions glass items.

INSLP28U4140

MIXED INJECTION INSERT

Injection insert specifically for glassware washing thanks to 28 nozzles measuring 140 mm and pipettes (max. 70), through a special manifold with 70 positions.
To be placed on the "CLB" series carriers

INS12U4180DV

INJECTION INSERT WITH PARTITIONS

Injection insert with 12 adjustable partitions and perimeter frame for better glassware positioning. Suitable for washing 12 bottles of max. 1L or 6L 2L flasks. To be placed on the "CLB" series carriers
INS12U4180 (not shown in the photo): same insert without partitions and perimeter frame.

INS20U4180DV

INJECTION INSERT WITH PARTITIONS

Injection insert with 20 adjustable partitions and perimeter frame for better glassware positioning. Suitable for washing 20 bottles of max. 1L. To be placed on the "CLB" series carriers
INS20U4180 (not shown in the photo): same insert without partitions and perimeter frame.

INS56U4140

INJECTION INSERT

Injection insert with 56 positions for small-medium dimensions glassware. Furnished with 56 spigots of 140mm in height with two dimensions plastic support for a better lodge of the items. To be placed on the "CLB" series carriers
INS56U4180 (not shown in the photo): same insert with spigots of 180mm in height.
INS56U390 (not shown in the photo): same insert with spigots of 90mm in height.

INSPLAV10

WASHING INSERT

Washing level for "CLB" series carriers. Spraying arm included. Suitable to lodge different inserts and glass items.

COCI42

COLLECTOR FOR GRADUATED CYLINDERS OF LARGE DIMENSIONS

Collector for washing 4 graduated cylinders from 500 ml up to 2000 ml.
Suitable for positioning on half the trolley LCB610

COBE63

COLLECTOR FOR FLASKS

Collector for washing 6 flasks of up to 2 litres (max. diameter: 140 mm) or three 6-litre flasks (max. diameter 188 mm).
Fitted with 6 nozzles and plastic supports in two sizes for optimal glassware positioning.
Suitable for positioning on half the trolley LCB610.

SB50

INSERT FOR FLASKS AND BEAKERS

Insert for flasks and beakers up to 250ml max. Suitable for positioning on half INSPLAV10.

WASHING CONFIGURATION

BASIC LINE E PROFESSIONAL LINE

COMPATIBLE
GW2145

TWO SPRAYING LEVELS

This configuration has two washing levels with spray arms where supports for all types of glassware can be located (beakers, test tubes, flasks, plates and various other materials).
Photo:
D-CS1 upper basket: SB9 straight line support for beakers and flasks to the left, SB14 spring tine support to the right. Each support occupies ½ the rack for machines with width of 45 cm.
D-CS2 lower basket: SB28 universal spring support for beakers and flasks, standard on 60-cm models, occupying all the lower base but cannot be positioned on the upper rack.

TWO SPRAYING LEVELS

This configuration has two washing levels with spray arms for all types of glassware.
Photo:
D-CS1 upper basket: it is fitted with 2 supports equipped with compartments (CP192 and CP222) to wash test tubes.
D-CS2 lower basket: SB9 insert for beakers and flasks to the left, SB14 spring support to the right. Each support occupies ½ the rack for machines with width of 45 cm to optimise the load on the rack.

ONE INJECTION LEVEL

This configuration is suitable for washing narrow-necked glassware of different sizes
Photo:
The LM24 is secured to the lower D-CS2 basket using two special fastenings. This solution is suitable for washing narrow-necked glassware of different sizes with a capacity of 24 items and a maximum height of glassware of 500 mm.

COMPATIBLE
GW0160
GW1160
GW4060
GW4190
GW3060
GW4090

TWO SPRAYING LEVELS

This configuration has two washing levels with spray arms for different types of glassware.
Photo:
CS1-1 upper basket: it is fitted with RC1/2 net in the right side for the support of various glass items. On the left side: test tube accessory.
CS2 lower basket: SB28 insert on the right and SB30 on the left for washing beakers, flasks, plates and various other materials.

ONE MIXED INJECTION LEVEL

This configuration has one mixed injection washing level suitable for washing narrow-necked glassware and pipettes.
Photo:
Carrier LPM2020: this system allows simultaneously washing narrow-necked glassware (flasks, beakers, round-bottom flasks) and 20 pipettes.
Specific carriers for laboratories which clean many different types of glassware at the same time.

ONE INJECTION LEVEL

This configuration has one injection washing level suitable for washing narrow-necked glassware.
Photo:
LM40 carrier: universal injection carrier as it optimises washing of narrow-necked glassware of different sizes.
It has a capacity of 40 items and can wash both large items and small flasks or bottles.

ONE INJECTION LEVEL

This configuration has one washing level suitable for washing glassware of large dimensions
Photo:
Carrier C61 with injection insert L685 (76 spigots available)

TWO INJECTION LEVELS

This configuration has two injection washing level suitable for washing glassware of small and medium dimensions.
Photo:
Level 1: C61 basic trolley with L680 direct injection system.
Maximum useful height 260 mm, 76 spigots.
Level 2: C63 telescopic support with L685 direct injection system.
Maximum useful height 440 mm, 76 spigots.

	DIRECT INJECTION SYSTEMS	MAXIMUM HEIGHT OF GLASSWARE (mm)				ROTATING SPRAYER SYSTEM	MAXIMUM HEIGHT OF GLASSWARE (mm)			
3° LEVEL	C63_L690 Telescopic base injection system	130	390	130	720	C62 Telescopic base with rotating sprayer	95	360	95	790
2° LEVEL	C63_L680 Telescopic base injection system	180		510		C62 Telescopic base with rotating sprayer	170		640	
1° LEVEL	C61_L685 Telescopic base injection system	220	220			C61 Telescopic base with rotating sprayer at the bottom of the wash tank	390	340		

	A	B	C	D	E	TOP
E						95
D					65	185
C				97	184	310
B			64	185	277	400
A		180	275	395	485	610
BOTTOM	16	210	305	425	515	640

Some of the possibilities of washing on multiple levels with injection inserts			
Insert code	Nozzle height	Simultaneous positioning on multiple levels	Compatibility systems
INS56U390	90 mm	3 levels: 1°AB + 2°CD, 3°E-TOP	1° level interchangeable with the insert INS56U4140
INS56U4140	140 mm	3 levels: 1°AB + 2°BD+ 3°D-TOP	2° 3° level interchangeable with the insert INS56U390
INS56U4180	180 mm	2 levels: 1°AC +2°C-TOP	2° level interchangeable with the inserts INS56U4140 or INS56U390
INS28U6260	260 mm	2 levels: 1°A + 2°C	2° level interchangeable with the insert INS56U4180

TWO MIXED LEVELS:

In the configuration of CLB510 there are two washing levels, with and without injection, suitable for positioning medium and small glassware.
Level 1: Basic mesh with CP222 supports for test tubes and SB50 supports for flasks and beakers.
Level 2: INS56U4180 insert for injection washing of various glassware. Nozzles with maximum height 180mm.

ONE MIXED LEVEL:

One-level configuration of LCB610. This may vary depending on the manifolds inserted.
In the photo:
in the foreground, COBE63 collector suitable for positioning up to 69 flasks of max.
In the background, collector COCI42, for washing large cylinders.
The user can modify the collector according to the glass items to be washed, ensuring maximum flexibility.

WATER
TREATMENT

Water quality is a key factor in achieving high quality washing results, especially in specific sectors such as pharmaceuticals. Each small glassware washer has an integrated water softener that can reduce the hardness of mains water, but sometimes it is not enough, requiring the installation of an additional softener upstream. For large machines (GW6290, GW6010, GW7010, GW7015), the softener is always external and optional. Smeg always recommends carrying out the last rinse step with demineralised water to remove any remaining impurities from the treated glassware

WP3000

RESIN COLUMN WATER PURIFIER

The WP3000 water purifier is used to produce deionised water at 0.8-1 µS/cm, suitable for the final rinsing of glassware washers. The system uses can also retain silica. When the resins run out, they can simply be replaced with the MI700WP kit. The resin cartridge is made from stainless steel, as is the entire machine. It is available with a tap to sample water for different uses. Net capacity of cartridge: 15 litres. Dimensions: l x d x h = 300x600x850 mm.

MI700WP

Anion/cation mixed bed resins kit for the WP3000 water purifier. Total exchange capacity 42700 litres/°F* end of cycle at 5µS/cm (*Hardness in French degrees). Supplied with used resin disposal bag.

WS SERIES

WATER TREATMENT SYSTEMS

The WS series of appliances are technological water softeners capable of eliminating lime scale from water. Available in versions with flow rates of up to 2200 litres/hour, the models are fitted with an electronically controlled head which can be programmed depending on the hardness of the water. They provide backflow regeneration based on the volume of water (bearing in mind the resin saturation rate) and proportional brine to optimise water and salt consumption.

	WS11EB	WS14EB	WS17EB
MAXIMUM FLOW RATE	1800 l/h (43 l/min)	2000 l/h (43 l/min)	2200 l/h (43 l/min)
NOMINAL FLOW RATE	1500 l/h (43 l/min)	1600 l/h (43 l/min)	1800 l/h (43 l/min)
RESIN CAPACITY IN LITRES	11	14	17
EXCHANGE CAPACITY (m3/°F)	66	84	102
CYCLE CAPACITY AT 40°F	1650	2250	2700
PROGRAMMABLE RESIDUAL HARDNESS	0-10° F	0-10° F	0-10° F
REGENERATING AGENT TYPE	NaCl SALT	NaCl SALT	NaCl SALT
REGENERATING AGENT CONSUMPTION	1.0 kg/cycle	1.2 kg/cycle	1.8 kg/cycle
DIMENSIONS ØxH (mm)	300 x 470 x 660	300 x 470 x 815	300 x 470 x 1070
SALT TANK DIMENSIONS L x P x H (mm)	integrated	integrated	integrated
CAPACITY LITRES (SALT)	about 20	about 30	about 40
CONNECTIONS	1"	1"	1"

DETERGENTS

The use of specific chemical products is essential to obtain accurate glass washing. Detergents and neutralizing agents are especially studied by answering all kind of different type of washing needs.
Quality of the result, consumption decrease and environment safeguard.

ACID

1

ph 1,5

LIQUID ACID NEUTRALISERS

ACIDGLASS P2

2

LIQUID ACID NEUTRALISERS

ph 2,4

Strong acid neutralizer.
Application field: analysis with
phosphates, petrochemistry and
when demineralized water is not
used during the final rising.
Package: 5 liter container.

3

ACIDGLASS C2

4

Weak organic acid neutralizer. Application
field: water analysis, pharmaceutics,
chemistry analysis in general.
Package: 5 liter container.
Phosphates free.

5

6

7

8

9

10

ALKALINE DETERGENTS

DETERLIQUID I2

11

ALKALINE DETERGENTS

DETERLIQUID SP2

Alkaline liquid detergent hydroxide
potassium based-products. Application field:
complex dirty, petrochemistry included.
Package: 5 liter container.

12

Universal alkaline liquid detergent.
Application field: water analysis and
pharma sector.
Package: 5 liter container. Phosphates free.

ph 12,65

ph 12,1: 13,1

13

ALKALINE DETERGENTS

DETERGLASS

ph 13,1

ALKALINE DETERGENTS

14

Alkaline detergent in powder. Application
field: general and organic chemistry. To
avoid in case of analysis of the waters
or in the pharma sector. Package: 5 liter
container.

DETERLIQUID C2

ph 14

Universal alkaline liquid detergent. Application field:
organic and general chemistry and pharma sector.
Package: 5 liter container.
Phosphates free.

BASIC

MACHINE TECHNICAL FEATURES **BASIC LINE**

	GW0160	GW2145	GW1160	GW4060
INTERNAL DIMENSIONS (LXDXH mm)	530X510X620	370X480X620	530X510X620	530X510X620
EXTERNAL DIMENSIONS (LXDXH mm)	600X605X850(830 with built in top)	450X620X850(830 with built in top)	600X605X850(830 with built in top)	600X605X850(830 with built in top)
STANDARD PROGRAMMES STORED	7	9	9	9
MODIFIABLE PROGRAMS	0	6	6	6
DETERGENT DOSING SYSTEM	Powder dispenser or peristaltic pump			
NEUTRALIZING DOSING SYSTEM	Peristaltic pump			
MAX NR. OF PERISTALTIC PUMPS	2	2	3	3
DETERGENT CABINET	no			
DISPLAY	With segments and communication led icons			
CONTROL PANEL	Membrane keyboard			
STEAM CONDENSER	no	no	optional	optional
DRYING SYSTEM	Thermodynamic	Thermodynamic	Thermodynamic	Forced hot air through "drying system"
PRE-FILTER CLASS C	n.a.	n.a.	yes	yes
COLD WATER SUPPLY	yes			
HOT WATER SUPPLY	no	optional	optional	optional
DEMINERALIZED WATER SUPPLY	yes			
INTEGRATED WATER SOFTENER	yes			
WASHING PUMP	400l/min	200l/min	400l/min	400l/min
CUNDUCTIVITY CONTROL	n.a.			
NET WEIGHT (KG)	72	61	74	77
CONFORMITY	Look at conformity declaration			
SUPPLY/MAX POWER	1/N/PE/230V-50Hz-2.8kW As an alternative: 3/N/PE/400v-50Hz-7.0kW	1/N/PE/230V-50Hz-3.3kW	1/N/PE/230V-50Hz-2.8kW As an alternative: 3/N/PE/400V-50Hz-7.0kW	1/N/PE/230V-50Hz-2.8kW As an alternative: 3/N/PE/400V-50Hz-7.0kW
POSSIBILITY OF 60 HZ SUPPLY	yes			
EQUIPPED WITH PLUG	no	yes	no	no

90

	GW4190	GW3060	GW4090
INTERNAL DIMENSIONS (LXDXH mm)	530X510X620	530X510X620	530X510X620
EXTERNAL DIMENSIONS (LXDXH mm)	900X605X850(830 with built in top)	600X640X850(830 with built-in top)	900X640X850(830 with built in top)
STANDARD PROGRAMMES STORED	9	20	20
MODIFIABLE PROGRAMS	6	10 (expandable to 50)	10 (expandable to 50)
DETERGENT DOSING SYSTEM	Powder dispenser or peristaltic pump	Powder dispenser or peristaltic pump	Peristaltic pump
NEUTRALIZING DOSING SYSTEM	Peristaltic pump		
MAX NR. OF PERISTALTIC PUMPS	3	4	4
DETERGENT CABINET	no		
DISPLAY	With segments and communication led icons	Backlit graphic LCD display 128x64 pixel	Backlit graphic LCD display 128x64 pixel
CONTROL PANEL	Membrane keyboard		
STEAM CONDENSER	Optional		
DRYING SYSTEM	Forced hot air through "drying system"	Thermodynamic	Forced hot air through "drying system"
PRE-FILTER CLASS C	yes	n.a.	yes
COLD WATER SUPPLY	yes		
HOT WATER SUPPLY	yes		
DEMINERALIZED WATER SUPPLY	yes		
INTEGRATED WATER SOFTENER	yes		
WASHING PUMP	400l/min		
CUNDUCTIVITY CONTROL	n.a.	optional	optional
NET WEIGHT (KG)	105	76	110
CONFORMITY	Look at conformity declaration		
SUPPLY/MAX POWER	1/N/PE/230V-50Hz-2.8 KW As an alternative: 3/N/PE/400V-50Hz-7.0KW		
POSSIBILITY OF 60 HZ SUPPLY	yes		
EQUIPPED WITH PLUG	no		

	GW6290	GW6010	GW7010	GW7015
INTERNAL DIMENSIONS (LXDXH MM)	680X670X1020	550X620X685	550X620X685	626X812X820
EXTERNAL DIMENSIONS (LXDXH MM)	900X800X1940	650X720X1950	780X800X1950	900X990X1950
STANDARD PROGRAMMES STORED	20	20	20	20
MODIFIABLE PROGRAMS	20	20	20	20
DETERGENT DOSING SYSTEM	Peristaltic pump			
NEUTRALIZING DOSING SYSTEM	Peristaltic pump			
MAX NR. OF PERISTALTIC PUMPS	5	4	4	5
DETERGENT QUANTITY CONTROL	optional			
DETERGENT CABINET	yes			
DISPLAY	TFT colour graphic touch display (4.3" with capacitive sensing)			
CONTROL PANEL	128x64 pixel			
STEAM CONDENSER	no	optional	optional	optional
DRYING SYSTEM	Forced hot air through "Intelligent dry" system			
PRE-FILTER CLASS C	yes			
HEPA FILTER CLASS S 99,999%	optional			
COLD WATER SUPPLY	si			
HOT WATER SUPPLY	si			
DEMINERALIZED WATER SUPPLY	si			
INTEGRATED WATER SOFTENER	external, optional			
WASHING PUMP	2 pumps, 600l/min each one	600l/min	600l/min	2 pumps, 600l/min each one
CUNDUCTIVITY CONTROL	optional			
NET WEIGHT (KG)	282	300 (depending on the version)		320
CONFORMITY	Look at conformity declaration			
SUPPLY/MAX POWER	3P/N/PE 50Hz			
POSSIBILITY OF 60 HZ SUPPLY	yes			
EQUIPPED WITH PLUG	no			

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INSTRUMENTS