



## **DS 610 G2 Series**

A range of 12 DIN tray capacity instrument washer disinfectors for clinics and mid-sized CSSDs



# Customization. Innovation. Excellence.

### **Driven by customer needs**

Steelco is a leading infection control solution provider, supplying the healthcare, laboratory research and pharma sectors. Active in over 100 countries, Steelco has equipped numerous world renowned hospitals and counts among its customers household names in the laboratory, pharmaceutical and industrial sectors.

Driven by customer feedback, Steelco develops, manufactures and supplies solutions that maximize infection control, safety, optimize processes and minimize costs. Already a leader in innovation in areas such as automation, the integration within the Miele organization has provided additional boost in technological development.

Steelco provides technical service and user training courses at the Steelco Academy as well as at customer sites.

Our optional remote diagnostics capabilities and worldwide team of factory trained engineers ensure that you receive the service support you need to cost effectively maximize the uptime of your equipment.







## DS 610 G2 Series Washer disinfectors

The DS 610 G2 range of medium capacity (12 DIN) washer disinfectors offers flexible and scalable solutions to meet the reprocessing needs of clinics and sterilization centers. The range, developed to limit water and energy consumption, includes configurations dedicated to high productivity and focuses on washing process efficiency. As a result, the savings of reduced water consumption, chemicals, and staff time can exceed 50% when compared to current processes.

The DS 610 G2 Series offers a complete treatment of washing, thermal disinfection, and drying with HEPA 14 filtered forced hot air. The washing system with a variable speed pump adjusts the circulation pressure and water consumption according to the cycle phase and the type of load.

Steelco washer disinfectors offer versatility, safety, quality, and process traceability with low operating costs.



DS 610 G2



Single or pass-through drop down manual door/s capacity 12 DIN trays

chamber volume 253 liters



**DS 610 SL G2** 



Single or pass-through automatic sliding down door/s, capacity 12 DIN trays

chamber volume 255 liters

# Key Advantages a winning combination



#### Process efficiency

Steelco washer disinfectors are engineered to offer best-in-class solutions for reducing energy and water consumption giving users the lowest operating costs per load.



#### Speed is important

Our focus is to provide customers with the fastest possible washing and disinfection processes in compliance with international and local standards. Check DS 610 G2 options for time and energy saving.



#### Processes under control

The high-quality colour touch display, in combination with Wi-Fi & Ethernet connection, ensures intuitive operator interaction and excellent control over the entire process. In addition, SteelcoData Live allows remote visualisation of both real-time and historic device performance.







### Plug and Play

Despite its 12 DIN capacity, the DS 610 G2 Series is conceived as a compact and "plug and play" device needing just an electrical supply, water inlets, and a drain.

It is designed to overcome architectural limitations such as door passages or lifts and is provided with a plinth on rolls for easy transfer and positioning. Designed for clinics and mid sized CSSDs, the sliding door model is forseen for loading and unloading automation.



Maximum flexibility combined with intuitive use

The modular wash rack system offers both specialization and high flexibility when loading the washer disinfector.



A full range of transfer trolleys, conveyors, and passthrough windows or hatches complete the system to optimise your workflow.



Steelco and Miele R&D work together to develop innovative solutions that can improve cycle efficiency and safety whilst reducing process time and utility consumption.



# Efficiency & Sustainability coming together





### **Unrivaled levels of efficiency**

Reduction of energy and water consumption with the lowest operating costs per load.

The variable speed pump allows adjusting circulation pressure (maximum performance when needed) and water consumption (water conservation when possible). Washing performance is therefore always optimal and can be accurately monitored.





# Design & Performance coming together



### Speeding up the cycle while saving time and energy

Thanks to the availability of the Fast Cycle option's pre-heated tank, it is possible to save time and to have the reprocessed items available sooner without diminishing quality.

The heating-up time of the final rinse phase can be reduced by 80% in average use conditions.

### Forced, filtered air drying

The forced and heated air drying allows for perfectly dry goods. A HEPA H14 filter unit grants contamination-free results.





### Top quality materials, devices made to last

Chamber, spray arms, and sump filters are made from high-grade, electro-polished stainless steel AISI 316 L; a guarantee for cleanliness, long-term reliability, and easy recycling of the product at the end of life. The washer disinfector is also provided with a stainless steel frame.

# Information & Control coming together

The large 7" touch screen control panel facilitates device control with bright, easy-to-read information even from a distance.

The well-thought-out and user-friendly designed touch screen is consistent throughout the portfolio of Steelco devices, supporting intuitive operation and reliable processes.

### A user-friendly interface

Operators are supported at every step with clear and easy to understand operation tasks. Operators can be recognised and select cycle programs.

The touch screen panel displays highly visible cycle status and alarm messages.



### Cycle data storage

Cycle data is stored and available from the integrated printer. Data is sent to a centralized traceability system if the device is connected to the network.

### **User access levels**

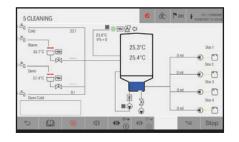
User access is split into 5 levels to ensure that only trained staff have access to specific functions: operator, department manager, service technician at the customer's site, authorized service technician, and manufacturer.

### **Technical service mode**

The washer disinfectors are designed to streamline maintenance. An easy-to-read synoptic panel allows for an in-depth overview of machine and component status speeding up service interventions.

# Washing performance and final rinse quality check

The HMI displays washing pressure and water conductivity parameters during relevant process phases.







### **Network connectivity**

Wi-Fi and Ethernet connections are standard for machine performance and cycle data collection via SteelcoData Live software. In addition, a USB port allows the download of raw cycle data, washing programs, parameters, and machine software updates.

The LAB 610 G2 is natively ready to connect with a cloud environment.



### **SteelcoData Live**

A web-based software enables to view in real-time machine performance, cycle data, and alarms with historical records.

#### Software features:

- + Stores utility consumption when available from devices
- Device cycle and alarm monitoring and data management with different authorisation levels
- + Respects HL7 standard
- + Reliable information and data entirety
- Traceability and backward traceability of user activities and material handling

- + Real-time analysis
- + Efficiency improvement tools
- + Workstations can display only activities in the specific user's area of competence
- + Effective information sharing with customers
- + Can be integrated with other client software systems



# Wash carts, modules and connectors



**Flexible Loading System** allows preparation of instruments in single modules and a facilitated loading of the carts, improving safety and ergonomics.



**C1802** wash cart is a system's basic unit. It can be equipped with additional modules and levels as shown below.

The following pages illustrate the most common set-ups and introduce standard configurations and accessories for instruments connection.

C1802 wash cart configurability leads to further benefit of spaces optimisation, usually employed for the specialist cart storage, reducing footprint inside ambiences.

### Modules and additional levels



**C1802** 3 levels wash cart with connections for injection modules



C1804
Additional level with spray arm



**C1806** Module to reprocess MIS instruments with length up to 480 mm / 18.90"

11 connections



**C1816** Module to reprocess nr. 22 hollow dental instruments



**C1808** Module to reprocess ophtalmological instruments with length up to 480 mm / 18.90"

18 connections



**C1809** Power Pulse Cleaning module for 11 MIS instruments, length up to 500 mm / 19.68"



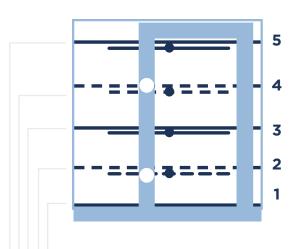
**C1805** Module to reprocess MIS instruments with length up to 400 mm / 15.75"

6 connections

# **Configuration examples**

### Configuration Guide

Removable level with washing arm Fixed level with washing arm



### **Possible combination of modules:**

1 x **C1806\*** or 2 x **C1805** 

1 x C1804 or 1 x C1804 + 2 x C1805

1 x C1806\* or 2 x C1805

1 x C1804 or 1 x C1804 + 2 x C1805

 $1 \times$  C1809 or +  $2 \times$  C1805













**42 connections** for hollow instruments

+ 2 DIN trays







3 x **C1805** 











29 connections for hollow instruments

+ 4 DIN trays





**36** connections for hollow instruments

+ 4 DIN trays



<sup>\*</sup> Not compatible when upper removable level is present

# Wash carts, modules and connectors



**Flexible Loading System** allows preparation of instruments in single modules and a facilitated loading of the carts, improving safety and ergonomics.



**C1817** wash cart is a system's basic unit. It can be equipped with additional modules and levels as shown below.

The following pages illustrate the most common set-ups and introduce standard configurations and accessories for instruments connection.

C1817 wash cart configurability leads to further benefit of spaces optimisation, usually employed for the specialist trolleys storage, reducing footprint inside ambiences.

### **Modules and additional levels**



**C1817** 2 levels wash cart with intermediate shelf with washing arm



**C1819**Module for orthopaedic drills



**C1804**Additional level with spray arm



**C1820** Module for intubation and masks **8 positions** 



C1821 Module for intubation material
8 positions



**C1830** Baby bottles basket **18 positions** 



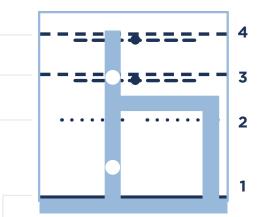
**C1831** Mesh tray with lid for baby bottles dummies and rings **36 positions** 

### Configuration Guide

Removable level with washing arm Fixed level with washing arm











#### **Possible combination** of modules:

- 2 x **C1830** or
- 2 x **C1819** or
- 2 x **C1820** or
- 2 x **C1821**
- 2 x **C1830** or
- 2 x **C1819\*** or
- 2 x C1821
- 1 x C1804
- 1 x **C1804** or
- $1 \times C1804 + 2 \times C1831$

# Wash cart for robotic surgery instruments

### C1815

Wash cart for daVinci Xi series robotic surgery instruments and endoscope. Suitable for hosting Summit Medical Handheld Camera and either Single Scope 2.0 or Single Scope Plus Trays.

Steelco provides reprocessing solution for other brand robotic surgical instruments as well with dedicated or modular wash carts. Ask Steelco for the most up-todate validated reprocessing solutions.





The daVinci trademarks and logos are registered trademarks of Intuitive Surgical, Inc.,



<sup>\*</sup> Not compatible when upper removable level is present

## **Fixed levels** wash carts



### C1801

6 levels wash cart with washing arms.

Up to 12 DIN 1/1 trays.

2 levels wash cart with

Dedicated to OP theatre



#### Useful space: **ABCDE**~60 mm / 2.3" ~ 65 mm / 2.5"



C1814

washing arms.

shoes/cloas.

**Useful space: ABCD** ~ 85 mm / 3.3"



~ 80 mm / 3.1"



### **Useful space:**

**A B** ~ 185 mm / 7.2" **c** ~ 175 mm / 6.8"

### C1812

5 levels wash cart with washing arms.

**Up to 10 DIN 1/1 trays.** Up to 5 SPRI I trays.



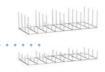
### C1810

3 levels wash cart with washing arms.

Up to 6 DIN 1/1 trays Up to 3 SPRI I trays.



C1842 multi-use holder for bowls, trays and cassettes, high pins.



C1841 multi-use holder for bowls. trays and cassettes, low pins.



Useful space: **A** ~ 120 mm / 4.7"

**B C** ~ 130 mm / 5.1"

~ 100 mm / 3.9"

### C1811

4 levels wash cart with washing arms.

Up to 8 DIN 1/1 trays.



**Useful space:** 

**A B** ~ 300 mm / 11.8"



C1825: insert with 30 supports for OP theatre shoes/clogs or anaesthesia items.



C1826: insert with 15 supports for OP theatre shoes/clogs or anaesthesia items.



**C1828**: insert with 12 supports for big sizes OP theatre shoes/ clogs.

### Removable levels C1803

5 levels wash cart with washing arms.

**Up to 10 DIN 1/1 trays.** Up to 5 SPRI I trays.

The levels are removable.



#### Useful space:

**A** ~ 93 mm / 3.6"

**BCD** ~ 80 mm / 3.1" ~ 75 mm / 2.9"

~ 290 mm / 11.41"

~ 450 mm / 17.71" ΙK ~ 380 mm / 14.9"

~ 650 mm / 25.59"

# Specialized wash carts





### C1813

3 levels MIS wash cart provided with 2 washing arms.

#### Overall size WxDxH:

559x608x566 mm 22x23.94x22.28"

#### **Useful space:**

**A** ~ 76 mm / 2.99"

**B** ~ 63 mm / 2.48"







### C1818

Anaesthesia wash cart provided with:

- 12 supports for breathing tubes
- 4 Injector nozzle for breathing bag
- 10 Injector nozzle for intubation materials
- 3 Holder for silicone breathing tubes

#### Overall size WxDxH:

559x608x576 mm / 22x23.94x22.68"

# Flex cart for bulky items

The single level wash cart C1822 can be equipped with dedicated inserts for any needs to clean DIN containers, hospital clogs, kidney dishes.



### C1822

Single level wash cart suitable for inserts.

**Useful height:** 672mm/26,45"

Overall size WxDxH:

559x608x343 mm / 22x23.94x13.50"

Materials: S.S. AISI 304, plastic components.







**C1824** insert: up to 3x 150 mm high DIN containers with lids.



**C1825**: insert with 30 supports for OP theatre shoes/ clogs or anaesthesia items.



**C1826**: insert with 15 supports for OP theatre shoes/ clogs or anaesthesia items.

# Practicality & effectiveness even in the smallest details!

The images represent only a few examples of the advanced design of Steelco accessories.



Swivel anti-torsion hose system for easy instrument port connection avoiding water flow restrictions.





Holders with varying contact points for full instrument washing coverage

# C1802 & C1817 Modules composition

### C1809

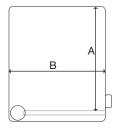


#### Overall size WxDxH:

530x600x91 mm / 20.86x23.62x3.58"

#### **Useful space:**

**A** 500 mm / 19.68" **B** 490 mm / 19.29"



#### **Items supplied:**

11 silicone hoses with Luer Lock connection

**50** x **E 476**. holders for micro-instruments. Ø 4 to 8 mm. for use in mesh travs with a 5 mm grid

**50** x **E 479**, holders for micro instruments with Ø 4 mm, for use in mesh trays with a 5 mm grid

### C1805



#### Items supplied:

1 x A 855. silicone hose with M Luer Lock adapter for F Luer Lock, length 160 mm

2 x E 362, blind stoppers

1 x E 447. F Luer Lock adapters for M Luer

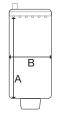
#### Overall size WxDxH:

227x521x93 mm / 8.93x20.51x3.66"

#### **Useful space:**

**A** 403 mm / 15.86"

**B** 215 mm / 8.46"



### 1 x E 449. M Luer Lock adapters for F Luer

2 x E 452, injector nozzle, 60 mm long, Ø

1 x E 472, spring clamp for injector jets Ø

### C1806

**Items supplied:** 

jets, H. 152 mm

13 x 65 mm

Instruments open



2 x A 856, silicone hoses with M Luer Lock

adapter for F Luer Lock, length 300 mm

2 x E 456 Spring stay to hold MIS-

1 x E 454 Ø 8,0mm injection nozzle, radial

1 x E 464 Holder f. E 454 injector nozzles Ø

#### Overall size WxDxH:

530x539x79 mm / 20.86x21.22x3.11"

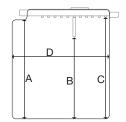
#### **Useful space:**

A 480 mm / 18.90"

**B** 383 mm / 15.08"

C 480 mm / 18.90"

**D** 470 mm / 18.50"



#### 1 x E 336, irrigation sleeve, length 121 mm, Ø 11 mm

2 x E 362, blind stoppers

**6** x **E 442** irrigation sleeves for instruments Ø 4 - 8 mm, 121 mm long, Ø 11 mm, cap with aperture Ø 6 mm

 $1 \times E 443$ , sleeve for instruments  $\emptyset 8 - 8.5$ mm, length 121 mm, Ø 11 mm, cap with aperture Ø 10 mm

### C1808



#### Items supplied:

2 x A 856, silicone hoses with M Luer Lock adapter for F Luer Lock, length 300 mm

10 x A 855, silicone hoses with M Luer Lock adapter for F Luer Lock, length 160 mm

1 x **E 362**, blind stoppers

3 x E 449, M Luer-Lock adapters for F Luer-

1 x E 452, injector nozzle, 60 mm long, Ø 2.5

#### Overall size WxDxH:

530x539x79 mm / 20.86x21.22x3.11"

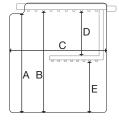
#### Useful space:

**A** 477 mm / 18.78"

**B** 480 mm / 18.90"

C 468 mm / 18.42" **D** 236 mm / 9.29"

**E** 203 mm / 7.99"



1 x A 800, reusable tubular filter, length 405 mm. Ø 22.5 mm

11 x E 447. F Luer-Lock adapters for M Luer

11 x E 517, M Luer-Lock adapters for F Luer Lock

10 x E 476. holders for micro-instruments. Ø 4 to 8 mm, for use in mesh trays with 5 mm grid

10 x E 477, holders for micro-instruments, for use in mesh trays with 5 mm grid

### 16

C1816



Overall size WxDxH:

189x523x85 mm / 7.44x20.59x3.34"

Items supplied:

22 x A 803, supports for dental contra-angles, hand pieces and turbines

C1819

Overall size WxDxH:

245x518x239 mm / 9.64x20.39x9.40"

Items supplied:

6 extension sleeves for bone marrow drills

C1820



Overall size WxDxH:

143x518x352 mm / 5.62x20.39x13.85"

Items supplied:

**8** x **E 466** injector nozzles for breathing bag

**Optional** accessories

	ADEE	A OFF	4 800	4 907	A 017	<b>Q</b>	# A 016
	A 855	A 856	A 800	A 803	A 813	A 814	A 816
C1805	•	•		•	•	•	
C1806	•	•	•				•
C1808	•	•	included by default				
C1809	•	•	•				
C1816	•	•	included by				

C1821



Overall size WxDxH:

149x518x143 mm / 5.86x20.39x5.62"

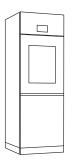
Items supplied:

8 x A 833 injector nozzles

	44	4,4	4141		I		
	E 476	E 477	E 479	E 499	E 790	E 791	E 362
C1805	•	•	•		•	•	•
C1806	•	•	•		•	•	•
C1808	•	•	•		•	•	•
C1809	•	•	•	•	•	•	•
C1816	•	•	•		•	•	•

# **Capacity and Dimensions**

Layouts and configurations



Model	Chamber (WxDxH) - mm			Litres	Overall (WxDxH) - mm		
Single door							
DS 610 G2	570	610	728	253	650	700	1940
DS 610 SL G2	5/0	615	720	255	650	700	1940
Double door							
DS 610 G2	570	610	728	253	650	700	1940
DS 610 SL G2		615		255			

Loading height: 850 mm above finished floor.

# **Transfer trolleys** & loading automations

Being designed to meet the needs of medium-sized clinics and sterilization centers, the DS 610 G2 presents a complete range of solutions for handling washing trolleys featuring details focused on improving the ergonomics of use. In addition, the system includes double-door hatches, windows, and buffer conveyors for wash racks return.









**T647** height adjustable transfer trolley

**T641** fixed height transfer trolley

## **Technical Data**

Models, main features and options

	DS 610 G2	DS 610 SL G2
Compliance with standards		
CE marked Medical Device, notified body code nr. 0051, following MDR (2017/745/UE) and applicable standard such as EN ISO 15883-1/-2/-5	•	•
Chamber and door		
Nr. of doors	1 or 2	1 or 2
Door opening	Hinged	Sliding down
Door operation	Manual	Automatic
Load capacity		
Number of 1/1 standard DIN trays	up to 12	up to 12
Chemical dosing		
2x Maintenance free liquid chemical dosing pumps controlled by flowmeters	•	•
Drying		
HEPA H14 filtered electrically heated hot air drying	•	•
Control system and traceability		
Color touch screen HMI	7"	7"
Automatic wash cart type recognition and washing program assignment	•	•
WiFi and Ethernet port for digital traceability (via SteelcoData software)	•	•
Chamber light	•	•
Sustainability & Performance		
Single water pre-heating tank (Fast Cycle configuration)	0	0
Steam condenser	0	0
Process quality		
Final rinse water quality monitoring (conductivity meter, data recorded)	0	0
Machine connections and technical area		
Inlet water connections	3	3
Built-in water softener	0	0
Drain pump	0	0
Full frontal access for service	•	•

• = Standard • = Option • = Not available







# Customization. Innovation. Excellence.

#### STEELCO - Miele Group Member

Headquarters: Via Balegante, 27 - 31039 Riese Pio X (TV) - Italy Ph. +39 0423 7561 Fax +39 0423 755528 info@steelcogroup.com www.steelcogroup.com

Branches:

STEELCO AUSTRIA Wals-Siezenheim, Austria info-at@steelcogroup.com STEELCO BELGIUM Mollem, Belgium info-be@steelcogroup.com

STEELCO BENELUX Vianen, Netherlands info-benelux@steelcogroup.com

STEELCO CHINA Shanghai, China info-cn@steelcogroup.com

STEELCO FRANCE Paris, France info-fr@steelcogroup.com STEELCO GERMANY Gütersloh, Germany info-de@steelcogroup.com

STEELCO HUNGARY Budapest, Hungary info-hu@steelcogroup.com

STEELCO MEXICO CDMX, Mexico info-mx@steelcogroup.com

STEELCO NORDIC Kgs. Lyngby, Denmark info-nordic@steelcogroup.com STEELCO NORGE Nesbru, Norway info-no@steelcogroup.com

STEELCO SPAIN Madrid, Spain info-es@steelcogroup.com

STEELCO SWITZERLAND Spreitenbach, Switzerland info-ch@steelcogroup.com

STEELCO USA West Palm Beach, USA info-usa@steelcogroup.com

