

## PWD 86 series

instrument washer disinfectors





## 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 Miele organization in late 2017 has provided additional boost in technological development.

CUSTOMIZATION. INNOVATION. EXCELLENCE.

# A new holistic approach for instrument reprocessing

## PWD 86 series instrument washer disinfectors

Modern surgical techniques increasingly require complex instruments. Whilst many of these can be disassembled prior to reprocessing, they not only contain lumens but also joins and other components which research has shown are hard to clean.

As a leading innovator, Steelco has developed the newly patented “Power Pulse Cleaning” technology to improve the cleaning of MIS instruments that are challenging to reprocess, thereby reducing risk and minimizing or eliminating any required manual pre-cleaning.



## Supporting you every step of the way

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.



# Safety & Performance

coming together



**Two sizes for the optimization of CSSD layouts**

available in 900 mm and 1150 mm width using the same wash racks and modules

**Same great features and performance**

modules dedicated to instruments of different surgical specialties using patented exclusive Power Pulse Cleaning technology

**Space saving concept**

fewer racks and modules allow you to save space in your busy CSSD and still get the perfect results you need

## Standard compliant

*Steelco PWD 8626 and PWD 8628 washer disinfectors* are designed and constructed to comply with the latest guidelines: 93/42/EEC and s.m.i, EN ISO 15883-1/2, CEN ISO/TS 15883-5, EN ISO 14971, IEC EN 61010-1, IEC EN 61010-2-040, EN 61326-1, EN 62304.



The increasing complexity of surgical instruments and the cleaning challenges this creates as well as the desire of customers to reduce manual pre-cleaning, were the driving force behind the research and development of Power Pulse Cleaning.



Traditionally increasing water pressure has been used to increase the water flow rate through hollow lumen instruments. However due to the physical properties of lumens, the speed of water flow is mostly increased in the middle of the lumen, whilst the soil to be removed is located on lumen walls.



Extensive research was undertaken to find the best way to overcome this challenge, with the result being the development of the exclusively available Power Pulse Cleaning technology from Steelco.

This involves the pulsing of air pressure bursts during the water flow. This generates a strong front wave that increases higher flow rates along lumen walls, and improves mechanical cleaning action on lumen walls, joins and junctions.

## Proven performance

Power Pulse Cleaning has proven its efficacy with protein analytic results type tested on complex microsurgery instruments without any prior manual pre cleaning treatment.





# Efficiency & Sustainability coming together



## Double Drying System

**The drying system** has been designed to provide optimal performance both in terms of saving process time and improve drying quality with two blowers, heating systems and HEPA filters.

HEPA filters are located immediately before the chamber so that potential particles from fan and heater elements are safely filtered out.



## Dynamic Water Loading

**Dynamic Water Loading** allows the adjustment of the water pressure and flow according to the amount and type of load and the cycle phase (clean, rinse or disinfection). Water loading is very fast and efficient as water inlets and tanks are controlled to ensure the proper temperature of water entering the chamber according to each cycle phase.



## Adaptive Speed Washing

**A variable speed pump system** allows the adjustment of water pressure and flow according to the amount and type of load and the cycle phase (clean, rinse or disinfection).

A second pump is fully dedicated to the chamber washing arms.



### Optimized for everyday use

PWD 86 series allows quick access to the high capacity chemical storage drawer with connectivity option to central dosing system

### Optimized for service

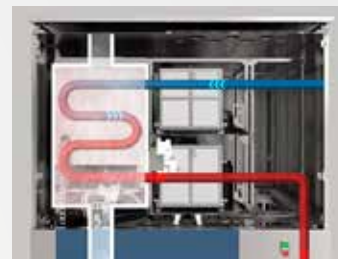
Designed for easy service and validation

Simply well engineered. The PWD 8626 and PWD 8628 have many advanced features to improve process speed and decrease lifetime running costs.

#### Steam condenser heat recovery

The ECO steam condenser absorbs heat during the drying phase to pre-heat final rinse water for the following cycle. Incoming cold demineralized water passing through a heat exchanger assists to save both heating energy and up to 50% of the cooling water per cycle\*.

\* consumptions data are referred to an average cycle with 18 minutes of drying phase



### Advanced Eco Options

PWD 86 series can be equipped with different types of built-in water tanks:

#### TH Pre Heating Tank

to speed up the process by pre heating the final rinse DI water

#### RT Recycling Tank

to recycle the final rinse water to be used in the following washing cycle

#### CT Combi Tank

to speed up the process and recycle the final rinse water

The combination of the different tank options allows you to reach the optimal configuration, as **efficiently** and as **fast** as you need (see compatibility chart - page 14)



## As fast as you need it!

#### Cycle time

Reduced cycle time for each load type without compromising cleaning and disinfection results whilst saving energy and water consumption.





# Flexibility & Control

coming together

Modules dedicated to instruments of different surgical specialties can be easily inserted into a base wash rack. RFID scanning of the modules selects the optimal cleaning and disinfection cycle from the washer's stored program database, choosing the best program to ensure maximum cleaning and disinfection efficacy whilst reducing cycle time, water usage and energy consumption.

Patented technology **exclusively available from Steelco.**



## Ideal washing performance

Modules dedicated to instruments of different surgical specialties and Power Pulse Cleaning module

## Optimized chemical use and reduction of water and energy consumption

Flexible Loading System management is fully integrated with the other advanced functions of the PWD 86 series such as Adaptive Speed Washing and Dynamic Water Loading giving you unmatched efficiency of the washing and disinfection processes.

## Space saving concept

A few basic racks and modules will allow you to save space in your busy CSSD and get the perfect combination you need

- 10 basic racks
- 11 modules for injection washing
- over 50 inserts and accessories
- ... Combinations matching your needs



## Intelligent cycle selection

Information from the automatic RFID scanning of the composition of the washing rack after the washer door closes is transferred to the washer disinfectant control panel and checked in the database of validated configurations to select the optimal cycle.





So much more than just a complete range of configurable loading options with validated solutions for various surgical specialties and robotic surgery instruments.

Easy and intuitive to use with automatic program selection assists you to achieve optimal results whilst helping you save time and energy. Steelco's way to make your busy day just a little bit easier.



A610



A608



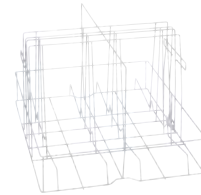
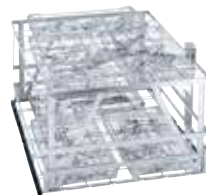
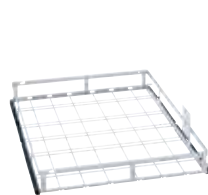
A607

A624



A504

Example of module combination for microsurgery sets based on A504 basic rack including Power Pulse module



Example of configurations for generic instruments or containers based on A500 basic rack



Example of configurations for orthopaedic or anaesthesia sets based on A503 basic rack



Example of configurations for microsurgery sets based on A501 basic rack (also allowing the use of the Power Pulse module)

## Attention to detail

### Microfiltration on modules

In addition to the advanced sump water filtration that eliminates the recirculation of small debris exceeding 0,2 mm, modules for eye and microsurgery hollow instruments can be equipped with a large surface, tool free removable, fine mesh filter (0,063 mm).



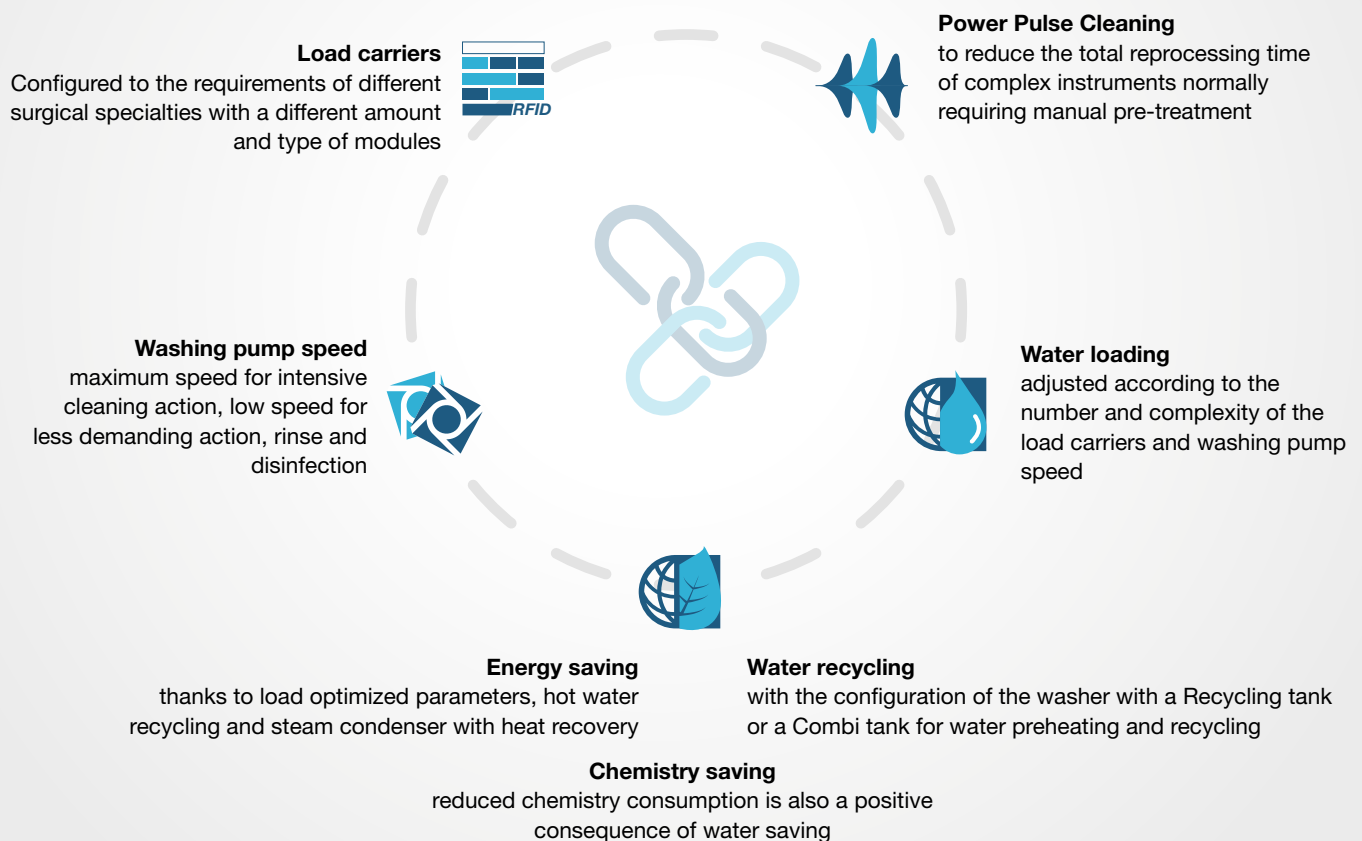


# Efficiency & Sustainability coming together



## PWD 86 series combined advantages

The combination of the variable speed with a double pump system, modular load carriers and RFID recognition provides improved cleaning performance, reduced water and energy consumption to an unparalleled level, helping your CSSD to meet its sustainability goals.

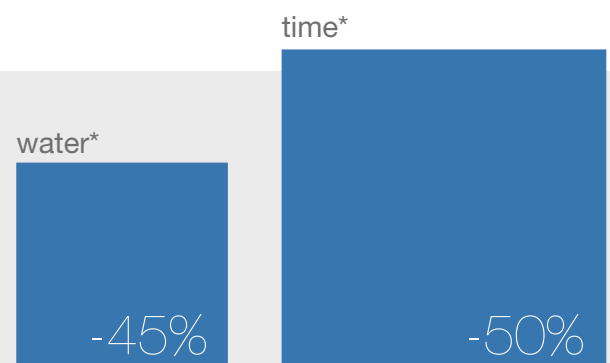


## Efficient, fast and eco friendly

PWD 8626 and PWD 8628 are super efficient, fast and eco friendly when properly combining interlinked options.

Ask Steelco how you also could achieve these savings!

\* savings are referred to a treatment cycle on a PWD 8628 with pre heating tank, recycling tank and Power Pulse Cleaning on complex microsurgery instruments.

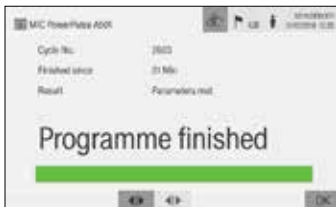


# Limitless information & User friendly coming together

## Large HMI with user friendly graphics

7" colour touch displays are integrated in the glass front panel of the washer and installed on both loading and unloading sides.

HMI screens graphics are easy to interpret without compromising the flexibility and capabilities of the machine and process. Process monitoring is intuitive with color coded messages to quickly identify the cycle status.



## RFID user recognition

The control system provides up to 8 user levels for daily use, programming or service activities. Users can also identify themselves by RFID cards.

## RFID Automatic wash rack and modules recognition

The washing rack composition is automatically scanned and recognized for simple and safe process operation.

## Cycle and instrument traceability

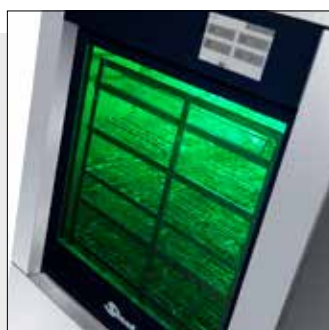
Full history cycle traceability, compatible with SteelcoData Pro instrument traceability systems.



# Process monitoring... at a glance

## Light in the chamber

Washer/cycle status is also easily shown by the change of color of the chamber light.







# Smart design & Reliability

coming together

## Hygienic design

The washing chamber is designed and constructed with smooth edges and corners, removing areas where soil could accumulate and lead to bacterial growth.

## Robot system welding technology

Starting with highest grade stainless steel sheet, chambers are completely made by robots with maximum precision and quality.

## Smart sump water filtration

The PWD 86 series sump fine filter mesh reduces the size of the debris that can recirculate to less than 0.2 mm only and eliminates the need to equip the rotating washing arms with open ends for inspection and cleaning access thereby saving time.

The collection of debris on the specially designed inclined filter surface allows self-cleaning during draining, forcing debris into the drain during each cycle drain phase, with the benefit of reduced manual filter maintenance, thereby saving time.



Simply better engineered



# Customization, Innovation, Excellence

coming together

Whether you are just wishing to replace a single small machine or assistance in designing and equipping a large central CSSD, Steelco's subsidiaries and factory trained distributors are here to help you make the best decision possible that works for you and then support you every step of the way.



## Retrocompatibility

PWD 8626 and PWD 8628 are straightforward replacement for old washer disinfectors.

Previous generation Miele PG 8528 washer disinfectors wash racks and transfer trolleys are also compatible with both PWD 8626 and PWD 8628.





## Technical data

Model name	PWD 8626	PWD 8628
<b>Washer disinfectors</b>		
Double pass through model	•	•
Full glass doors sliding up	•	•
For installation as a single unit or in barrier	•	•
Width [mm]	900	1150
Depth [mm]	990	990
Height [mm]	2500	2500
<b>Chamber</b>		
Material	1.4404/316L	1.4404/316L
Useable chamber width [mm]	650	650
Useable chamber depth [mm]	800	800
Useable chamber height [mm]	675	675
Chamber volume [l]	351	351
<b>Load capacity</b>		
Max. number of DIN 1/1 mesh trays	18	18
Max. number of loading levels	6	6
<b>Process</b>		
Flexible Loading System - automatic RFID scanning of wash cart and modules	•	•
Power Pulse Cleaning	○	○
Dynamic Water Loading	•	•
Adaptive pump pressure	•	•
Steam condenser	○	○
Steam condenser heat recovery	○	○
<b>Heating system</b>		
Electrical heating system	•	•
Electrical/steam heating system	○	○
<b>Advanced ECO options</b>		
TH - Heated tank / Pre-heating tank	-	○
RT - Recycling tank	-	○
CT - Combi tank	○	-
<b>Chemical dosing</b>		
Chemical dosing pumps included as standard [No.]	2	2
Chemical dosing pumps available as option [No.]	4	4
Chemical canisters capacity [No. x l]	4x5 or 2x5 + 1x10	4x10
<b>Process monitoring</b>		
Spray arm rotation monitoring	•	•
Conductivity sensor	•	•
<b>Drying and ventilation</b>		
Electrically heated forced air drying - HEPA H14 filtered	○	○
Steam condenser	○	○
Steam condenser with heat recovery	○	○



## Technical data

Model name	PWD 8626	PWD 8628
<b>Control system and traceability</b>		
Touch screen graphic LCD display on loading and unloading side	7"	7"
Integrated printer	o	o
Ethernet port for network communication	•	•
3 color chamber light according to machine status	•	•
<b>Service access</b>		
Front access for service, no maintenance corridor	•	•
<b>Loading accessories/automations</b>		
Load transfer trolley	o	o
Loading/unloading automation	o	o

• = Standard    o = Optional    - = Not available



## Loading solutions

A full range of transfer trolleys, infeed and outfeed conveyors and rack return hatches or windows is available to be combined and match your perfect workflow layout.



## Service

Wherever you are located, a factory trained and experienced service team ensures efficient installation, commissioning, technical support.



**Miele** Group Member

ARES - flexible endoscope automated reprocessing system



Dental washer disinfectors

Flusher disinfectors

Steam sterilizing autoclaves



Washer disinfectors for central of sterilization departments

Laboratory glassware washer disinfectors



Washing and sterilizing systems for life science and pharmaceutical applications

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\* Only for products listed into the 170714123 MDD certificate