Driven by customer needs

Steelco is a leading infection control solution provider, supplying the healthcare, laboratory research and pharma sectors. Active in over 90 countries, Steelco has equipped numerous world renowned hospitals and counts among its customers household names in the laboratory, pharmaceutical, and industrial sectors.

Steelco devices are classified CE Medical Device (Community rule 93/42/CEE) code nr. 0051.

Steelco Endoscope Washers are designed and constructed to comply with the latest European Standard EN ISO 15883-1/4, drying cabinets are in compliance with EN 16442:2014.
The new standard for maximum safety in endoscope reprocessing

Working in close collaboration with leading endoscope reprocessing centres, Steelco developed the ARES system to best meet the current and future needs of clinicians.

+ **Workflow**
  To maximize efficiency whilst decreasing the risk of cross contamination

+ **Fast processes**
  To minimize the time between endoscope use, cleaning and storage

+ **Fully compliant with the standards**
  Designed to comply with latest standards and traceability functionality

+ **Ergonomic and user friendly**
  Created around operators to assist them in their daily work routines

+ **Traceability**
  Different levels of traceability systems available according to user requirements
Complete solutions

The first step of providing the right solution is understanding individual customer needs and offering the best solution based on current and future workflow and workloads.

EPW 100
Automated system to assist manual cleaning

EW series
Automated endoscope reprocessors for different size departments
Transport solutions
Safe transport solutions for endoscopes and accessories

Traceability

ED series
Aseptic vertical and horizontal endoscope storage
Process Traceability

**Level 1**
Paper cycle record keeping

**Level 2**
SteelcoData
- Electronic cycle record keeping

**Level 3**
SteelcoData ARES
- Electronic cycle record keeping
- Full traceability system

Legend:
- Information communication and process control
- Stop
- Warning
- Elapsed time
- Total digital monitoring of all cycle phases
- Network
- Internal messages
- Digital communication
- Process flow
- Print flow
- Archiving
Steelco equipment can be configured to provide data to the level required by customers for monitoring the reprocessing of flexible endoscopes.

**Key functions:**
- Printed cycle verification
- Remote online equipment monitoring

**Remote online equipment monitoring:**

**Traceability information**
- Records of manual cleaning
  - instrument recognition
  - operator
  - patient
  - clinician
- Manual cleaning:
  - instrument
  - operator
  - leak testing
- Automated reprocessing:
  - endoscope recognition
  - correct connection
  - pressure leak
  - cycle monitoring
  - pressure monitoring
  - flow monitoring
  - user alert to parameter deviations
- Drying and storage:
  - Endoscope recognition
  - Scope start and end storage data
  - Any parameter deviations

**Time between different phases**
- Offsite service of instrument

SteelcoData ARES gives you full traceability of flexible endoscope reprocessing.
EPW 100
Automated system to support manual cleaning

EPW assists operators during manual cleaning phase by leak testing endoscopes, flushing and rinsing channels, eliminating the risk of stress induced injuries and providing a permanent record of the process that can be printed, transferred to a USB stick or integrated into SteelcoData ARES.

- **Leak testing**
- **Elimination of repetitive strain injury risk of flushing and rinsing with a syringe**
- **Identification of operator and endoscope using barcode**
- **Traceability of critical parameters of manual cleaning process**
- **Organic residue testing facility**
- **Automatic dosing of correct detergent**
- **Controlled correct pressure and volume during flushing and rinsing phases**
- **Residual detergent risk eliminated through automated flushing**

Intuitive and simple to use

- Automated user prompts with operator and scope recognition
- Step by step user guide
Main functions:

- Leakage test connection
- Detergent inlet connection
- Detergent dosing connection
- Channels connections for instrument flushing
- USB connection
- Built in printer for cycle traceability
- Instrument and operator identification through bar code reader. Friendly HMI.

Sinks and furniture for manual cleaning

Different sized sinks and furniture specifically designed to assist manual cleaning are available.

- **99911264**
  - LxDxH: 2000x700x950 mm
  - Sink LxW: 1850x250 mm

- **99911265**
  - LxDxH: 1200x700x950 mm
  - Sink LxW: 1050x300 mm

- **99911266**
  - LxDxH: 500x700x950 mm
Steelco AERs have been designed to **fully comply with ISO 15883 standard** regarding low temperature washing and high level disinfection of flexible endoscopes.

**Individual channel monitoring** for pressure and flow according to individual scope parameters to achieve correct cleaning and disinfection.

Available in single or pass through double door versions for the rapid reprocessing in under 30 minutes of either 2 or 3 flexible endoscopes or up to 9 bronchoscopes.

Ergonomic instrument connectivity and integrated transport solutions simplify operator handling.

Low water and chemical consumption with a small footprint, yet with easy operator and service access, means lowest possible operating costs and best capacity to space ratio.

Dual stage water filtration system down to 0.1 microns for endotoxin removal and disinfection of all water protects against contamination. Filters are decontaminated during the self disinfection program of the machine, thereby enhancing filter life expectancy.

**ARES**
Flexible endoscope reprocessors

**EW series**
Automated endoscope reprocessing cycle

Purging before and after each cycle with sterile air

**EW 2**

**EW 2 - S series**
Capacity - 2 scopes
Dedicated wash carts for 2 flexible endoscopes or 4 video bronchoscopes or 8 fiberscopes/cystoscopes

Easy loading
Slide and rotate design for easy connection of channels even in tight workspaces

Loading on transport trolley

Endoscope sleeve holder
To maximize contact between external endoscope surface and chemistries

Capacity - 2 or 3 scopes
Universal wash carts for 2 or 3 flexible endoscopes, 6 or 9 videobronchoscopes, fiberscopes or cystoscopes

Workflow optimization
Dedicated mesh trays are compatible with Steelco ED series of drying cabinets

Easy Loading
Sliding drawers allows easy single handed connection

Chemistries
The independently validated cleaning efficacy and high level decontamination results achieved by the ARES flexible endoscope reprocessor range are dependent on the use of Steelco chemistries, which provide cost effective rapid cycles. Using non-validated chemistries contravenes standards, can compromise cleaning efficacy, decontamination, and may cause damage to both equipment and endoscopes.

Connection scheme
Colour coded connections for easy identification of individual channels.
Complete workflow solutions

Steelco offers complete workflow solutions for different department sizes and layouts, to maximize efficiency and safety.

Stainless steel transport cart

For the transport of up to 4 endoscope containers or up to 6 stainless steel trays and storage of white and red endoscope bags. Top can be used as work surface. A version with frontal door is also available.
Safe Case
Safe Case enables reprocessing in accordance with ISO 15883 standards of TEE probes. The electronic control unit and connection cable are protected in a hermetically sealed case, whilst the distal tube that requires washing and high level non-thermal disinfection is exposed.

Adaptors and Connectors
To ensure connection compatibility with numerous different scopes from leading manufacturers, Steelco offers a connection guide and range of different adaptors and connectors so that you do not need to worry about connectivity.

Steelco’s Q-Water BSK
Professional water sampling kit for bacterial check, provides a ready, easy to use assembled sterile kit to enable water samples to be taken in a controlled environment to minimise the risk of accidental sample contamination.
Accessories for EW 2, EW 2 S series and Drying Cabinets

C961 stainless steel tray compatible with AER, transport cart and drying cabinet
C565 insert to avoid endoscopic instrument overlapping contact points
9991504 storage cassette compatible with transport cart and drying cabinet
ED100030 soiled (red) endoscope transport bag
ED100031 clean (white) endoscope transport bag

EW 2 - Washing carts

C558 rotating wash cart for ergonomic loading of 2 flexible endoscopes even in restricted areas
C559 wash cart with removable mesh trays for 2 flexible endoscopes
C563 wash cart for up to 20 rigid scopes with luer lock connections
C560 wash cart suitable for the simultaneous treatment of 4 videobronchoscopes/cystoscopes or 8 fiberscopes/cystoscopes with separate control.
C279 transport trolley.
C568 wash cart suitable for transport cassettes.
C572 wash cart suitable for SAFE CASE for transesophageal probes.
## Technical data

<table>
<thead>
<tr>
<th>AERs</th>
<th>EW 2</th>
<th>EW 2 2S</th>
<th>EW 2 3S</th>
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<tbody>
<tr>
<td><strong>Compliance with standards</strong></td>
<td></td>
<td></td>
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<tr>
<td>EN ISO 15883-1 &amp; EN ISO 15883-4</td>
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<td>European machine directive 2006/42/EC and medical device directive 93/42/EEC</td>
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<td>Independent testing of high level disinfection claims</td>
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<td>• 1x3</td>
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<td>○</td>
<td>○</td>
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<tr>
<td>SteelcoData ARES software for paperless total process traceability - on line equipment monitoring</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<td>400V 3-+N 50Hz</td>
<td>400V 3-+N 50Hz</td>
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<td>6050</td>
<td>6050</td>
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<td>Power pack recommended for glutaraldehyde cycle</td>
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<td>○</td>
<td>○</td>
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<td>Cold, warm and demineralized water connections with filtering up to 0.1 μm</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Compressed air (medical grade)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>● = Standard</td>
<td>○ = Optional</td>
<td>- = Not available</td>
<td></td>
</tr>
</tbody>
</table>

![Technical data diagram]
Endoscope drying and storage cabinets

Both vertical hanging and horizontal basket or container storage options available in single or double door pass through versions with left or right hand door swings.

- Independently validated to retain microbiology integrity up to 720 hours
- Compatible with all brands of endoscopes
- Storing of up to 18 endoscopes vertically and 16 horizontally
- Warm sterile Hepa filtered air with indirect UV treatment for optimal drying of the outside of endoscopes and connection to internal channels
- From printer option for hard copies to full traceability options with Steelco Data

Aseptic storage

Steelco’s ED series has been independently validated by European certified laboratories for maintaining aseptic integrity up to 720 hours providing you with greater flexibility in the storage of your endoscopes.
High capacity models for up to 9 or 18 endoscopes connection

Easy to use connector for all major endoscope brands

Sliding holder design for easy access from either side of the cabinet in a compact footprint

Guides to ensure correct hanging, avoid damage and provide correct airflow around and through endoscopes

High capacity models up to 8 or 16 endoscope connections

Horizontal storage with stainless steel trays or plastic containers

Channel connectivity
- automatic with plastic cassettes
- manual with stainless steel trays and universal connector
  or with stainless steel trays and direct connection to EW S series endoscope washer connecting system
Optimal conditions for storage

Following effective cleaning and decontamination in an automated endoscope processor, maintaining the microbiological integrity of endoscopes during storage is fundamental in reducing cross infection risks. Steelco ensures this in a number of ways:

**Sterile air filtering**

The ED range is fitted with HEPA H 14 filters for maximum safety. Access for changing the filters is easy through the front panel of the dryers.

- Built in medical grade air compressor
- Flow rates monitored in individual scopes

**UV light treatment**

Indirect UV light treatment is used for air treatment to minimize the risk of cross contamination.

**Traceability**

Manual, barcode or RFID tag input for operator and scope identification.

**Control software**

Software monitors the performance of the drying cabinet with colour coded status alerts and individual cycle data for each instrument for all machine parameters. Instrument identification is possible using barcode reader or RFID reader.
Drying and storage cabinet dimensions

<table>
<thead>
<tr>
<th>ED 200</th>
<th>ED 200 S - ED 250</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>D</td>
</tr>
<tr>
<td>ED .../1</td>
<td>mm</td>
</tr>
<tr>
<td></td>
<td>inches</td>
</tr>
<tr>
<td>ED .../2</td>
<td>mm</td>
</tr>
<tr>
<td></td>
<td>inches</td>
</tr>
<tr>
<td>ED .../3</td>
<td>mm</td>
</tr>
<tr>
<td></td>
<td>inches</td>
</tr>
<tr>
<td>ED .../4</td>
<td>mm</td>
</tr>
<tr>
<td></td>
<td>inches</td>
</tr>
</tbody>
</table>

Drying cabinets

Compliance with standards
EN 16442:2014 controlled environment storage cabinet for disinfected thermolabile endoscopes
• • • independent testing of aseptic storage claims

Instrument connectivity
number of flexible endoscopes independently monitored flow rate
8 or 16
compatibility with EW S series endoscope washer connecting system
- • • automated endoscope recognition and historic data monitoring
- • •
UV light air disinfection
- • •

Door configuration options
storage type
horizontal horizontal vertical
front access for service and filter and UV change
• • •

Control system and traceability
touch screen 5.7" graphic LCD display
• • •
Barcode or RFID use, scope recognition
○ ○ ○
integrated printer
○ ○ ○
ethernet port
• • ○
SteelcoData software for paperless traceability and on line equipment monitoring
○ ○ ○
SteelcoData ARES software for paperless total process traceability and on line equipment monitoring
○ ○ ○

Utilities
standard electrical connection, others available on request
230V~/~/50Hz
230V~/~/50Hz
230V~/~/50Hz

Drying and storage capacity

<table>
<thead>
<tr>
<th>ED 200</th>
<th>ED 200 S - ED 250</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizontal</td>
<td>Up to 8</td>
</tr>
<tr>
<td>Vertical</td>
<td>Up to 9</td>
</tr>
<tr>
<td>Storage</td>
<td>Up to 16</td>
</tr>
</tbody>
</table>

Endoscopes per model cabinet

- = Standard    ○ = Optional    - = Not available
Flusher disinfectors

Dental washer disinfectors

Washer disinfectors for central sterile supply departments

Steam sterilizing autoclaves

Laboratory glassware washer disinfectors

Washing and sterilizing systems for lifescience and pharmaceutical applications

ARES - flexible endoscope automated reprocessing system

Washing and sterilizing systems

for lifescience and pharmaceutical applications

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