Products and Services for Hygiene technology
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Erlen GmbH is a medium-sized, family-owned and operated manufacturing company. For more than 30 years we have been developing and producing electronic measurement, control and flow technologies for equipment construction, particularly for technical hygiene equipment. The principal business of Erlen GmbH is therefore the development and manufacture of products for combating hospital-acquired infections, in which our decades of experience have earned us a high reputation in the industry. We also develop and manufacture solutions for various industrial projects, for example:

- Microprocessor-based miniature controllers
- Sensors for special applications
- Pump systems for cleaning equipment
- Dosing of chemicals
- Testing equipment for medical technology
- Test systems for industrial quality assurance
- Mechatronic systems
- Applications for demanding consumer products

Through our increasing activity in the area of cleaning and disinfection machines, we have specialised in the manufacture of complete functional systems for this technology in unclean working areas. For this purpose, the whole company is certified to EN ISO 13485, and maintains general quality management as per DIN EN ISO 9001: 2007.

Erlen GmbH sees itself as a company led by engineers. Collaboration with the customer starts as early as the problem analysis, and the joint development of a precise requirements profile. Specialists qualified in various disciplines are available for this purpose:

- Electrical engineering/electronics
- Materials science
- Software and hardware development for integrated control systems
- Marketing engineers as a link between the client and the development department

If necessary, we supplement our team with skill partners from cooperation projects with various universities and technical colleges.

Technical modifications and errors reserved.
Convenient renovation of bedpan washer-disinfectors in hospitals and care facilities

Renovation instead of (new) investment!

When does the need to take action occur?
- when the usability of bedpan washer-disinfectors is no longer assured
- when the legal framework conditions change
- when machines operate inefficiently in financial terms
- when deficits in hygiene become evident

Avail of our more than 30 years experience in the area of bedpan cleaning and disinfection. The renovation of bedpan washer-disinfectors takes place on-site, using a conversion kit. Within 2 to 3 hours, the complete technology of the old equipment is replaced without other modifications. Around 90% of the machines sold in Germany can be renovated in this way.

The benefits to you:
- Compliance with standard DIN EN ISO 15883-1 and -3
- Hygienic security thanks to selectable A0 value and individual cleaning programmes
- Production workshops certified to EN ISO 13485: 2007
- Type-tested by TÜV-Nord
- Patented system (patent no. 19 50 98 77, Federal Republic of Germany)
- Proven in use hundreds of times over

The conversion kit from Erlen GmbH allows bedpan disinfection machines to be re-equipped to the latest state of the art. This means that old, failure-prone and therefore cost-intensive machines are given a new lease of life. The conversion kit replaces the technology of the old device without requiring significant work on stainless steel components. The functional unit is built into the disinfection machine on-site, as compact assemblies. If necessary, the washing system can also activate rim flushing in waste water outlets.
Our renovation concept

Determine the situation: Is a renovation possible?
Record the situation – validation – advice
What are the possible options?
1 Maintenance/repair, where it makes technical and financial sense
2 Complete technical overhaul of the machine on-site using the conversion kit for bedpan washer-disinfectors, in accordance with DIN EN ISO 15883-3
3 Purchase of replacement new machinery or in the case of extension work

We show you different action options, and thus offer you a transparent basis for decision-making.

The technology
What happens during renovation?
• Removal of the old technology: electronics, tank, pump, valves, control panel/display
• The following are repaired or maintained: jet blades/jets, pipework, door mechanisms
• Installation of the conversion kit into the existing inspection space: tank, pressure pump, dosing pump, steam generator, control electronics, control panel/display, valves, temperature sensors, door locking, etc.

The costs
Because renovation takes 2 to 3 hours on-site, there is almost no downtime. The machines are not dismantled, and the valuable stainless steel components are retained. For the price of a new nursing-care combination, three machines can be renovated. The running costs for maintenance, replacement parts, and repairs come to less than €200 per year (240 machine years were evaluated). Overhaul is therefore up to 70% cheaper than a new purchase.

In addition, renovation results in a noticeable reduction in energy and water consumption.

The result: A new piece of medical technology fulfilling technical, legal, and hygienic requirements, and which is efficient in terms of ecology and finance.
Our conversion kit allows almost all current bedpan disinfection machines to be upgraded to the latest state of the art.

Simple, quick, and clean
The conversion of the bedpan disinfectors takes place on-site through the installation of a patented conversion kit. Old failure-prone and cost-intensive machines are fitted with a modern, energy-saving steam disinfection system, and thus brought up to the latest state of the art. Chemical machines are converted to thermal machines. The complete technology of the old machine is thus replaced within a few hours. The valuable stainless steel components are retained, and mechanical conversion or structural changes to the care combination are unnecessary.

The functions at a glance
- automatic thermal self-disinfection of all water-bearing components – no germ contamination from cooling back (confirmed by expert report)
- dual A0 value monitoring
- continuous steam flow to reach any desired level for A0 values
- A0 values can be set as desired (ex-works setting in accordance with RKI recommendation: 600)
- Calibratable temperature sensors
- Overflow protection for washing chambers
- Safety locking in the case of an error
- Validated renovation process
- Optionally available with rim flushing function/ WC flushing via switching valve
- Control system tested against EN 61010: 2002/2004
- Software evaluation in accordance with EN 60335-1/A1
Components

- Stainless steel submersible pump
- Stainless steel tank with cleaning pump
- Control electronics/LC control panel
- Circulation pump/dosing pump
- Tank sensor/temperature sensor
- Cable set/locking unit
- Steam generator
- Solenoid valve set
- Suction lance
- Heating system
- Optionally available with rim flushing (model UTD-R) for automatic cleaning of sinks

The technology

UTD: simple version suitable for most applications; enables compliance with EN ISO 15883-3 through its regular automatic self-disinfection of the system – germ recontamination of the goods after the disinfection phase is thus almost completely excluded.

UTD-R: With additional technology to provide rim flushing for waste water outlets.

UTD-E: Version for demanding tasks, e.g. in the intensive area. In addition to the UTD functions, more disinfection jets can be powered by means of a more powerful pump.

Dual-protected A0 value monitoring

The new UTD conversion kit is equipped with a particularly secure measurement method for monitoring the A0 value: The disinfection temperature in the washing chamber is monitored by two sensors independent of one another. One of them is read by the control system, and the other by the control panel’s microprocessor. If there is a significant deviation between the two determined A0 values, an alarm is created.

Water and energy consumption

<table>
<thead>
<tr>
<th>Programme</th>
<th>Cold water</th>
<th>Hot water</th>
<th>Energy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short programme</td>
<td>11.7 litres</td>
<td>9.3 litres</td>
<td>0.22 kWh</td>
</tr>
<tr>
<td>Normal programme</td>
<td>14.4 litres</td>
<td>9.4 litres</td>
<td>0.24 kWh</td>
</tr>
<tr>
<td>Intensive programme</td>
<td>21.2 litres</td>
<td>10.6 litres</td>
<td>0.20 kWh</td>
</tr>
</tbody>
</table>

Machine tested:

ZK chamber (ISO75) with UTD no. 12/11-3889, control system 121/11 version 2.9

Starting conditions:
- Cold water: 15.6 °C, hot water: 62.6 °C
- Ambient temperature: 20.5 °C
- Loaded with: 1 bedpan
- Set parameters: A0 value: 600 (approx. 720 to 750 is achieved)

Technical data

- Voltage: 230 V
- Power rating: 3,000 W
- Fuse: separate 16 A fuse
- Protection class: /Protection class: IP 20
- Hot water temperature: max. 70 °C
- Pressure range water inflow: 100 to 1,000 kPa
- Dimensions (H x L x B): max. 440 x 490 x 300 mm
- Weight (empty): 16.5 kg
- Disinfection: thermal 80 to 95 °C
- Noise generation: max. 70 dBA

Our recommendation for the best results:

ERKUREX-STECKURON inhibits scale, and works as a dispersing agent and rinse aid for treating boiler water during thermal disinfection. ERKUREX-STECKURON is pH-neutral and non-toxic. Its level of biological degradation and elimination in waste water is > 90%.

- Suitable for all commercially available cleaning and disinfection machinery
- Outstanding water-softening and protection against lime scale
- High cleaning effect and outstanding fleck-free rinsing
- Only small amounts required
- Pleasant odour

Technical modifications and errors reserved.
# Equipment characteristics

## Series CT 100 bedpan cleaning and disinfection machines

<table>
<thead>
<tr>
<th>Components</th>
<th>CT 100S (1.70)</th>
<th>CT 100S (1.43)</th>
<th>CT 100S WC</th>
<th>CT 100 Compact</th>
<th>CT 100 TI</th>
<th>CT 100 ENS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casing, washing chamber, and tank in 1.4301 stainless steel</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Approval pursuant to EN 15883-1 and 15883-3</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<tr>
<td>A0 value can be set as desired</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Dual A0 monitoring with alarm</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Thermal self-disinfection of system</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Washing programmes can be set as desired</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<tr>
<td>Temperature sensors can be calibrated</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Tank overflow protection in the washing chamber</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Plain language display</td>
<td>●</td>
<td>●</td>
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<td>●</td>
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<td>Plain language display</td>
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<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
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<td>●</td>
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<td>●</td>
<td>●</td>
</tr>
<tr>
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<td>●</td>
<td>●</td>
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<td>●</td>
<td>●</td>
</tr>
<tr>
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<td>●</td>
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</tr>
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<td>●</td>
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<td>●</td>
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</tr>
<tr>
<td>Tank overflow protection in the washing chamber</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Plain language display</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

### Technical modifications and errors reserved.
A convenient, standing unit for discerning customers. The mechanics can be accessed via a lockable, double-shelled door. The continuous internally located handle creates a high-quality steel furniture look. It is possible to extend the machine to create a nursing care combination.

Product information:
Bedpan cleaning and disinfection system for cleaning and disinfecting all types of care utensils in a single work cycle. Approval pursuant to DIN EN 15883-1 and -3. Cleaning is carried out by means of decentralised thermal disinfection, and includes a water softening device using a rinse aid. Automatic door locking and monitoring ensure operator safety.

A high level of operating convenience is achieved by one-touch keys for 3 programmes:
- Short cycle for 3 urine bottles (with reduced water consumption)
- Normal cycle for bed pans or commode buckets plus 1 urine bottle
- Intensive cycle, specially designed for heavy soiling

The display provides in plain language all the information required for care and maintenance (operating instructions, error messages, servicing, and achieved A0 values). In addition, the system carries out a self-disinfection programme at freely-selectable intervals, to fulfil the guidelines set out in DIN EN ISO 15883-3.

All the technical components, with the exception of the pumps and steam generators, are designed in 24 volt technology. This low voltage makes it possible to inspect, for example, the door contact, the dosing pump or the solenoid valves while the appliance is in operation, without risk of injury. It is possible to program customer-specific requests for the operation of the cleaning programmes and service checks in a user-friendly manner, either via the control panel or a PC interface - including of course modifying the desired A0 values. The internal recording of processes and automatic maintenance requests ensures operational safety. As a standard feature, the machine can be locked to prevent unauthorised operation.

The standard ten-jet rinsing system provides superb cleaning results without shadow zones, thanks to its tried and tested jet blade and its ceiling and urine-bottle nozzles.
Standing unit

**CT 100 S 1.45**

Standing unit for all applications in hospital and nursing facilities. The reduced overall height of 1,450 mm allows this unit to be placed under wall-mounted cabinets. It is possible to extend this to create a nursing care combination. The mechanics can be accessed via the lockable upper cover.

**Product information:**
Bedpan cleaning and disinfection system for cleaning and disinfecting all types of care utensils in a single work cycle. Approval pursuant to DIN EN 15883-1 and -3.

For product information see CT 100 S 1.70

### Technical data for standing units CT 100 S 1.70 and 1.45:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>CT 100 S 1.70</th>
<th>CT 100 S 1.45</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage / Power rating</td>
<td>230 V / 3000 W</td>
<td>230 V / 3000 W</td>
</tr>
<tr>
<td>Fuse</td>
<td>separate 16 A fuse</td>
<td>separate 16 A fuse</td>
</tr>
<tr>
<td>Protection class / Protection type</td>
<td>I / IP 20</td>
<td>I / IP 20</td>
</tr>
<tr>
<td>Hot water temperature</td>
<td>max. 70 °C</td>
<td>max. 70 °C</td>
</tr>
<tr>
<td>Pressure range for water inflow</td>
<td>100 to 1,000 kPa</td>
<td>100 to 1,000 kPa</td>
</tr>
<tr>
<td>Disinfection</td>
<td>Thermal 80 to 95 °C</td>
<td>Thermal 80 to 95 °C</td>
</tr>
<tr>
<td>Pump capacity</td>
<td>450 W (standard) – 650 W (“E” model)</td>
<td>450 W (standard) – 650 W (“E” model)</td>
</tr>
<tr>
<td>Noise generation</td>
<td>max. 70 dBA</td>
<td>max. 70 dBA</td>
</tr>
</tbody>
</table>

### Requirements at installation location:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>CT 100 S 1.70</th>
<th>CT 100 S 1.45</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water connection</td>
<td>Hot and cold water connection: 3/4” external thread, flat seal All water connections to be fitted with stop valve Outlet DN 90 or 100</td>
<td></td>
</tr>
<tr>
<td>Electrical connection</td>
<td>Plug 230 V/16 A Earth leakage circuit-breaker with rated residual current max. 30 mA Electrical installation in accordance with DIN IEC/VDE</td>
<td></td>
</tr>
</tbody>
</table>
### Components

<table>
<thead>
<tr>
<th>CT 100 S (1.70)</th>
<th>CT 100 S (1.45)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casing, washing chamber, and tank in 1.4301 stainless steel</td>
<td>● ●</td>
</tr>
<tr>
<td>Approval pursuant to EN 15883-1 and 15883-3</td>
<td>● ●</td>
</tr>
<tr>
<td>A0 value can be set as desired</td>
<td>● ●</td>
</tr>
<tr>
<td>Dual A0 monitoring with alarm</td>
<td>● ●</td>
</tr>
<tr>
<td>Thermal self-disinfection of system</td>
<td>● ●</td>
</tr>
<tr>
<td>Washing programmes can be set as desired</td>
<td>● ●</td>
</tr>
<tr>
<td>Temperature sensors can be calibrated</td>
<td>● ●</td>
</tr>
<tr>
<td>Tank overflow protection in the washing chamber</td>
<td>● ●</td>
</tr>
<tr>
<td>Plain language display</td>
<td>● ●</td>
</tr>
<tr>
<td>Safety locking in the case of an error</td>
<td>● ●</td>
</tr>
<tr>
<td>Control system tested in accordance with EN 61010: 2002/2004</td>
<td>● ●</td>
</tr>
<tr>
<td>Software evaluation in accordance with EN 60335-1/A1</td>
<td>● ●</td>
</tr>
<tr>
<td>Power supply 230 Volt/16 A/3 KW</td>
<td>● ●</td>
</tr>
<tr>
<td>Low voltage valves</td>
<td>● ●</td>
</tr>
<tr>
<td>Infinitely variable thermal disinfection with continuous steam flow</td>
<td>● ●</td>
</tr>
<tr>
<td>DN 90 outlet (vertical or horizontal as desired)</td>
<td>● ●</td>
</tr>
<tr>
<td>Siphon monitoring</td>
<td>● ●</td>
</tr>
<tr>
<td>Floor wetness sensor</td>
<td>● ●</td>
</tr>
<tr>
<td>Collection pipe</td>
<td>● ●</td>
</tr>
<tr>
<td>Steam-tight washing chamber with circumferential seal</td>
<td>● ●</td>
</tr>
<tr>
<td>Connection to in-house or central steam</td>
<td>● ●</td>
</tr>
<tr>
<td>Dosing system for grease remover or intensive cleaner</td>
<td>● ●</td>
</tr>
<tr>
<td>&quot;E&quot; high performance cleaning system with stainless steel rotary jets and controlled pressure distribution</td>
<td>● ●</td>
</tr>
<tr>
<td>Wall mounting</td>
<td>● ●</td>
</tr>
<tr>
<td>&quot;R&quot; rim flushing function via switching valve</td>
<td>● ●</td>
</tr>
<tr>
<td>RAL powder coating</td>
<td>● —</td>
</tr>
<tr>
<td>Wash hand basin</td>
<td>— —</td>
</tr>
<tr>
<td>Cover with ridged edge</td>
<td>— —</td>
</tr>
<tr>
<td>Single lever mixer tap</td>
<td>— —</td>
</tr>
<tr>
<td>Prepared for WC installation</td>
<td>— —</td>
</tr>
<tr>
<td>Flushing system for WC</td>
<td>— —</td>
</tr>
<tr>
<td>Waste water outlet at side, with cover</td>
<td>● ●</td>
</tr>
<tr>
<td>in 450 mm width</td>
<td>● ●</td>
</tr>
<tr>
<td>in 500 mm width</td>
<td>● ●</td>
</tr>
<tr>
<td>Operation via separate tank system *1</td>
<td>● ●</td>
</tr>
<tr>
<td>Single lever mixer tap for the cover</td>
<td>● ●</td>
</tr>
<tr>
<td>*1 Option for 500 mm width</td>
<td>● ●</td>
</tr>
</tbody>
</table>

- **Device and batch documentation with DataBox**
  - ● ●
- **EuroCompakt software and interface for PC-supported machine monitoring**
  - ● ●

**Key:**
- ● Basic version
- ● Option
- — Not possible

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**Dimensions of CT 100 S 1.70**

- Height: 1700 mm
- Width: 500 mm
- Depth: 450 mm

**Dimensions of CT 100 S 1.45**

- Height: 1450 mm
- Width: 500 mm
- Depth: 450 mm

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Technical modifications and errors reserved.
The worktop version provides the opportunity to combine the cleaning machine and the worktop. The cover is fitted with a circumferential ridged edge. The machine can be extended to include drainage for waste water along with an integrated flushing ring, thus forming a nursing care combination. Wash hand basins and free-standing fittings are also available as options. The mechanics can be accessed via a double-walled, lockable inspection door. The machine’s internally located handle makes this an ideal piece of furniture for working rooms in nursing care facilities.

**Product information:**

Bedpan cleaning and disinfection system for cleaning and disinfecting all types of care utensils in a single work cycle. Approval pursuant to DIN EN 15883-1 and -3. Cleaning is carried out by means of decentralised thermal disinfection, and includes a water softening device using a rinse aid. Automatic door locking and monitoring ensure operator safety.

A high level of operating convenience is achieved by one-touch keys for 3 programmes:

- **Short cycle for 3 urine bottles (with reduced water consumption)**
- **Normal cycle for bed pans or commode buckets plus 1 urine bottle**
- **Intensive cycle, specially designed for heavy soiling**

The display provides in plain language all the information required for care and maintenance (operating instructions, error messages, servicing, and achieved A0 values). In addition, the system carries out a self-disinfection programme at freely-selectable intervals, to fulfil the guidelines set out in DIN EN ISO 15883-3.

All the technical components, with the exception of the pumps and steam generators, are designed in 24 volt technology. This low voltage makes it possible to inspect, for example, the door contact, the dosing pump or the solenoid valves while the appliance is in operation, without risk of
injury. It is possible to program customer-specific requests for the operation of the cleaning programmes and service checks in a user-friendly manner, either via the control panel or a PC interface - including of course modifying the desired A0 values. The internal recording of processes and automatic maintenance requests ensures operational safety. As a standard feature, the machine can be locked to prevent unauthorised operation.

The standard ten-jet rinsing system provides superb cleaning results without shadow zones, thanks to its tried and tested jet blade and its ceiling and urine-bottle nozzles.

### Technical data for standing units CT 100S 1.70 and 1.45:

- **Voltage:** 230 V / Power rating: 3000 W
- **Fuse:** separate 16 A fuse
- **Protection class:** I / Protection type: IP 20
- **Hot water temperature:** max. 70°C
- **Pressure range for water inflow:** 100 to 1,000 kPa
- **Disinfection:** Thermal 80 to 95°C
- **Pump capacity:** 450 W (standard) – 650 W ("E" model)
- **Noise generation:** max. 70 dBA

### Requirements at installation location:

- **Water connection:** Hot and cold water connection:
  - 3/4" external thread, flat seal
  - All water connections to be fitted with stop valve
  - Outlet DN 90 or 100
- **Electrical connection:**
  - Plug 230 V/16 A
  - Earth leakage circuit-breaker with rated residual current max. 30 mA
  - Electrical installation in accordance with DIN IEC/VDE

### Components CT 100 TI

- **Casing, washing chamber, and tank in 1.4301 stainless steel**
- **Approval pursuant to EN 15883-1 and 15883-3**
- **All value can be set as desired**
- **Dual A0 monitoring with alarm**
- **Thermal self-disinfection of system**
- **Washing programmes can be set as desired**
- **Temperature sensors can be calibrated**
- **Tank overflow protection in the washing chamber**
- **Plain language display**
- **Safety locking in the case of an error**
- **Control system tested in accordance with EN 61010: 2002/2004**
- **Software evaluation in accordance with EN 60335-1/A1**
- **Power supply 230 Volt/16 A/3 KW**
- **Low voltage valves**
- **Infinitely variable thermal disinfection with continuous steam flow**
- **DN 90 outlet (vertical or horizontal as desired)**
- **Siphon monitoring**
- **Floor wellness sensor**
- **Collection pipe**
- **Steam-light washing chamber with circumferential seal**
- **Connection to in-house or central steam**
- **Dosing system for grease remover or intensive cleaner**
- **"E" high performance cleaning system with stainless steel rotary jets and controlled pressure distribution**
- **Wall mounting**
- **"R" rim flushing function via switching valve**
- **RAL powder coating**
- **Wash hand basin**
- **Cover with ridged edge**
- **Single lever mixer tap**
- **Prepared for WC installation**
- **Flushing system for WC**
- **Waste water outlet at side, with cover**
- **in 450 mm width**
- **in 500 mm width**
- **Operation via separate tank system**
- **Single lever mixer tap for the cover**
- **Option for 500 mm width**

### Device and batch documentation with DataBox

- **and matrix printer for on-the-spot documentation**
- **EuroCompakt software and interface**
- **for PC-supported machine monitoring**

### Key:

- **Basic version**
- **Option**
- **Not possible**

Technical modifications and errors reserved.
Compact low height machine

CT 100 Compact

This washer-disinfector fits even into very small niches, and can also be moved around easily. It can be installed under existing worktops, thus further reducing the space required. This model is specifically designed with care facilities for the elderly in mind, also with respect to the sensitive pricing issue in this area. It is possible to extend the model to include drainage for waste water with a flushing ring.

Product information:
Bedpan cleaning and disinfection system for cleaning and disinfecting all types of care utensils in a single work cycle. Approval pursuant to DIN EN 15883-1 and -3.
Cleaning is carried out by means of decentralised thermal disinfection, and includes a water softening device using a rinse aid. Automatic door locking and monitoring ensure operator safety.

A high level of operating convenience is achieved by one-touch keys for 3 programmes:
- Short cycle for 3 urine bottles (with reduced water consumption)
- Normal cycle for bed pans or commode buckets plus 1 urine bottle
- Intensive cycle, specially designed for heavy soiling

The display provides in plain language all the information required for care and maintenance (operating instructions, error messages, servicing, and achieved A0 values). In addition, the system carries out a self-disinfection programme at freely-selectable intervals, to fulfil the guidelines set out in DIN EN ISO 15883-3.

All the technical components, with the exception of the pumps and steam generators, are designed in 24 volt technology. This low voltage makes it possible to inspect, for example, the door contact, the dosing pump or the solenoid valves while the appliance is in operation, without risk of injury. It is possible to program customer-specific requests for the operation of the cleaning programmes and service checks in a user-friendly manner, either via the control panel or a PC interface - including of course modifying the desired A0 values. The internal recording of processes and automatic maintenance requests ensures operational safety. As a standard feature, the machine can be locked to prevent unauthorised operation.

The standard ten-jet rinsing system provides superb cleaning results without shadow zones, thanks to its tried and tested jet blade and its ceiling and urine-bottle nozzles.
Technical data for standing units CT 100 S 1.70 and 1.45:

- **Voltage:** 230 V / Power rating: 3000 W
- **Fuse:** separate 16 A fuse
- **Protection class:** I / Protection type: IP 20
- **Hot water temperature:** max. 70°C
- **Pressure range for water inflow:** 100 to 1,000 kPa
- **Pump capacity:** 450 W (standard) – 650 W (“E” model)
- **Noise generation:** max. 70 dBA

**Requirements at installation location:**

- **Water connection:** Hot and cold water connection: 3/4” external thread, flat seal
- **Outlet DN 90 or 100**
- **Electrical connection:** Plug 230 V / 16 A
  - Earth leakage circuit-breaker with rated residual current max. 30 mA
  - Electrical installation in accordance with DIN IEC/VDE

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### Components

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<td>Infinitely variable thermal disinfection with continuous steam flow</td>
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<td>Steam-tight washing chamber with circumferential seal</td>
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<tr>
<td>Option for 500 mm width</td>
</tr>
</tbody>
</table>

- **Device and batch documentation with DataBox and matrix printer for on-the-spot documentation |
  - EuroCompakt software and interface for PC-supported machine monitoring |

**Key:**

- ● Basic version
- ● Option
- — Not possible

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Technical modifications and errors reserved.
Standing unit with which WC can be integrated

**CT 100 S WC**

This model can be fitted with a WC. An integrated cistern is already fitted as standard. The seat-height is designed in accordance with the needs of the disabled. The machine can therefore be integrated in a space-saving manner in patients’ bathrooms. In this way, faeces are disposed of in close proximity to their place of origin, thus complying with current hygienic and aesthetic standards. On request, this model can be adjusted to suit existing room concepts, with powder coating in different colours. The machine can be installed as a free-standing unit, or integrated into an installation wall.

**Product information:**
Bedpan cleaning and disinfection system for cleaning and disinfecting all types of care utensils in a single work cycle. Approval pursuant to DIN EN 15883-1 and -3. Cleaning is carried out by means of decentralised thermal disinfection, and includes a water softening device using a rinse aid. Automatic door locking and monitoring ensure operator safety.

A high level of operating convenience is achieved by one-touch keys for 3 programmes:
- **Short cycle** for 3 urine bottles (with reduced water consumption)
- **Normal cycle** for bed pans or commode buckets plus 1 urine bottle
- **Intensive cycle**, specially designed for heavy soiling

The display provides in plain language all the information required for care and maintenance (operating instructions, error messages, servicing, and achieved A0 values). In addition, the system carries out a self-disinfection programme at freely-selectable intervals, to fulfil the guidelines set out in DIN EN ISO 15883-3.

All the technical components, with the exception of the pumps and steam generators, are designed in 24 volt technology. This low voltage makes it possible to inspect, for example, the door contact, the dosing pump or the solenoid valves while the appliance is in operation, without risk of injury. It is possible to program customer-specific requests for the operation of the cleaning programmes and service checks in a user-friendly manner, either via the control panel or a PC interface - including of course modifying the desired A0 values. The internal recording of processes and automatic
Components

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Technical data for standing units CT 100 S 1.70 and 1.45:

- **Voltage:** 230 V / **Power rating:** 3000 W
- **Fuse:** separate 16 A fuse
- **Protection class:** I / **Protection type:** IP 20
- **Hot water temperature:** max. 70°C
- **Pressure range for water inflow:** 100 to 1,000 kPa
- **Disinfection:** Thermal 80 to 95°C
- **Pump capacity:** 450 W (standard) – 650 W ("E" model)
- **Noise generation:** max. 70 dBA

Requirements at installation location:

- **Water connection:** Hot and cold water connection:
- 3/4" external thread, flat seal
- All water connections to be fitted with stop valve
- Outlet DN 90 or 100

- **Electrical connection:** Plug 230 V/16 A
- Earth leakage circuit-breaker with rated residual current max. 30 mA
- Electrical installation in accordance with DIN IEC/VDE

Technical modifications and errors reserved.
This system replaces existing old machines through the complete replacement by the unit, consisting of flushing system and disinfection chamber. The slide-in model is pre-assembled and fully tested, and is fitted onto an existing base under an existing worktop. The overall width is variable – 700, 750 or 900 mm – thus catering for all the dimensions customary in the industry.

Product information:
Bedpan cleaning and disinfection system for cleaning and disinfecting all types of care utensils in a single work cycle. Approval pursuant to DIN EN 15883-1 and -3. Cleaning is carried out by means of decentralised thermal disinfection, and includes a water softening device using a rinse aid. Automatic door locking and monitoring ensure operator safety.

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- Approval pursuant to EN 15883-1 and 15883-3
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- Thermal self-disinfection of system
- Washing programmes can be set as desired
- Temperature sensors can be calibrated
- Tank overflow protection in the washing chamber
- Plain language display
- Safety locking in the case of an error
- Control system tested in accordance with EN 61010: 2002/2004
- Software evaluation in accordance with EN 60335-1/A1
- Power supply 230 Volts/16 A/3 KW
- Low voltage valves
- Infinitely variable thermal disinfection with continuous steam flow
- DN 90 outlet (vertical or horizontal as desired)
- Siphon monitoring
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- Steam-tight washing chamber with circumferential seal
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  - in 450 mm width
  - in 500 mm width
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  - Single lever mixer tap for the cover
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Device and batch documentation with DataBox and matrix printer for on-the-spot documentation

EuroCompakt software and interface for PC-supported machine monitoring

Key:
- ● Basic version
- ○ Option
- — Not possible

Technical modifications and errors reserved.
Thermoelectric monitoring of bedpan washer-disinfectors

The monitoring of the disinfection performance of thermal devices is a compulsory duty for the operator. Increasing hygiene risks mean that this requirement is becoming an important practical element with respect to the servicing of these cleaning and disinfection machines. We provide you with a solution to fulfil these obligations with ease.

**TempLogger II**

With the second generation of Templogger, the mandatory monitoring of the disinfection performance of cleaning and disinfection machines can be carried out with ease, with the support of a PC. The set comprises a calibrated measuring device, software, and at least two sensors. These are pre-installed at defined locations on the care utensils (bed pans/urine bottles). A maximum of 8 sensors can be connected at the same time. The flat ribbon cable from the sensors can be guided through the seal of the washing chamber door, or through the existing measurement port. The machine and location data for the machine being monitored are input in the screen of the application. Feedback is displayed in real time in the form of a temperature curve on the screen. A0 values can be predefined as the target values. In the event of failure to meet targets, the system issues alerts for the measuring channels in question. The data collected is saved as an image file and can be further processed.

Technical modifications and errors reserved.
Additional options for CT 100 series and UTD conversion kit

Depending on the installation location, the operation of bedpan washer-disinfectors is subject to various requirements, whether it is the full documentation of the hygiene-relevant processes or the comprehensive programming of the machine functions via a PC. For systems from Erlen GmbH, we have created an option which fulfils these requirements:

Recording of process data and monitoring of hygiene using DATA-Box & DATA-Print

The electronic Databox and Dataprint evaluation unit documents the processes taking place in the machine. All the relevant data is transferred from the control system to the Databox, and is then processed. A serial batch number is automatically assigned. In detail, the following data is collected:
- Machine number and batch number
- Start and end time of the washing cycle
- Type of programme executed
- Target temperature
- A0 value achieved, and the result (OK/abort) and any error messages. Using a conventional USB connection, this data can be read out to a PC and further processed. The associated software makes available a table for printing, saving, or exporting into other data formats, for example MS Excel. Thanks to the built-in printer on the front side (DATA-Print), a receipt is issued after every flushing process, detailing the significant events and the success or failure of the process. Thanks to our partnership with HSD, the leading provider for batch documentation and sterile goods management, the values from the Databox can be input into the HSD-ProzessDATA database solution, to enable professional hygiene monitoring.

EURO-Compact Interface and Service programme

The models equipped with Euro-Compact controllers (CT100 series, UTD conversion kit) can be completely interrogated and configured via a PC interface. The set consists of a data cable, the interface, and the underlying PC software. This service programme enables individual cleaning and disinfecting programmes to be created, the retrieval of error and warning messages, and the individual control of all inputs and outputs. The integrated maintenance programme provides a template for technical control in accordance with manufacturer’s specifications.
What does service mean to Erlen GmbH?
In contrast to many of our competitors, our understanding of service is the appropriate care and maintenance of your machines so that no breakdowns occur in between service intervals.

We are a one-stop-shop which provides the service for all medical and hygiene machinery in your undertaking.
- Bedpan washer-disinfectors
- Patient lifters
- Nursing/lifting bath tubs
- Electrical/mechanical care beds
- Electrical/mechanical patient beds
- ... and additional medical technology requirements

What do our services include?
- Visual inspection
- Function testing
- Monitoring the availability and correct dosing of operational and auxiliary materials, as well as consumed materials
- Monitoring of operating parameters
- Adjustment of operating parameters
- Monitoring of safety parameters
- Replacement of simple wearing parts
- Creation of legally required test protocols (monitoring of safety and effectiveness, e.g. in accordance with BGV (German Health & Safety guidelines), German Medical Devices Operator Ordinance – MPBetreibV)
- Repair and renovation
Engineering services and technology with that special focus!

IDEA · INNOVATION · INTEREST: If you have an idea for the future of your undertaking – we help you to implement the innovation in terms of technology. We exactly match your interests with our options: from conception, to development, to production – everything from a single source.

NETWORK · BENEFITS · NEUTRALITY: We maintain a close network with technology companies having different specialities, as well as technical colleges and institutes. Particular benefits for you: our experience in the area of medical technology and the foodstuffs industry. For more than 30 years we have been developing and producing measurement, control and flow technologies, plus system solutions for cleaning and disinfection machinery, as well as packaging machinery. We are certified to EN ISO 13485 and DIN EN ISO 9001:2007. Our neutrality and discretion with respect to other companies working in the market permit us a role as a universal partner for development and manufacture.

THOROUGHNESS · ATTENTIVENESS · THE WHOLE SYSTEM: We do not just develop against the requirements document; instead we first of all give you our complete attention: What do you wish to achieve with your product, what is the business model behind it? We approach your problem with thoroughness during its implementation, and we take into account the application as a whole system!

That special focus: ALL THE PARTIES AT ONE TABLE! We integrate contact partners from all areas of our company, including the company management. Regardless of how detailed a technical solution may appear, its effects must always be taken into account. With us, you won’t find departments and functions; what you will find are partners!