

PRODUCT SPECIFICATION

# DEKO 25 X2

## Washer Disinfector

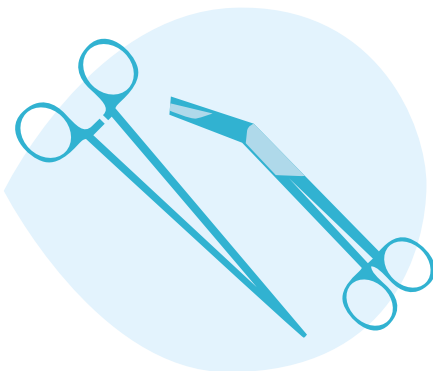


Preventing infections since 1976.

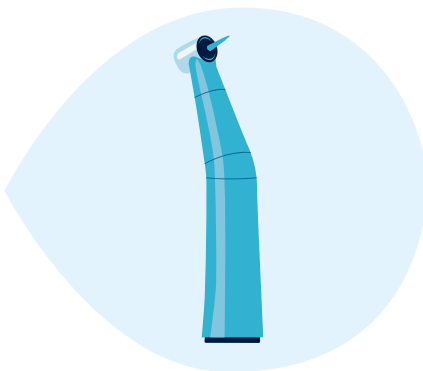
**DEKO**  
MEDTECH

# Intended use

The DEKO 25 X2 Washer Disinfector is designed for automatic cleaning and thermal disinfection of reusable surgical and MIS instruments, dental instruments, rigid scopes, anaesthetic and respiratory equipment, hollowware, glassware, rubber and plastic goods and other similar and related equipment used in medical and laboratory applications.



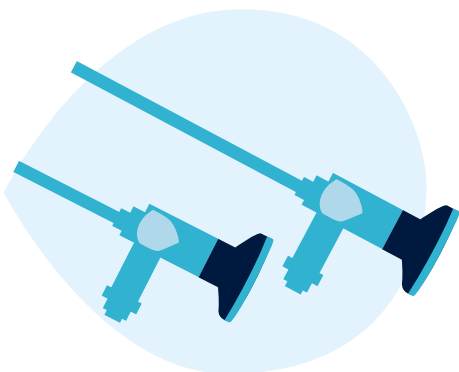
Reusable surgical and MIS instruments



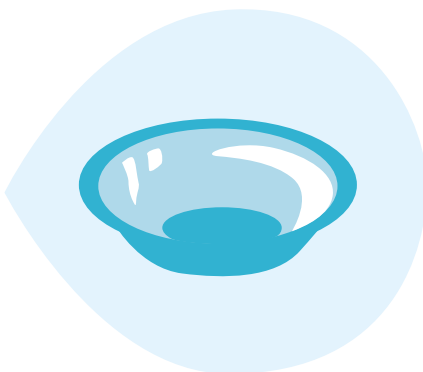
Dental instruments



Glassware



Rigid scopes



Hospital bowls and other plasticware



Anaesthetic and respiratory equipment

# Main Features

DEKO 25 X2 offers excellent washing and disinfection process quality for smaller clinics, laboratories and special care units. Pre-set programs in accordance with EN ISO 15883 and individually programmable controls for optimized cleaning performance.



## **Brilliance in a small package**

Thanks to its design, DEKO 25 X2 suits diverse installation locations. Ergonomic to use whether placed on top or beneath counter or on a special base cabinet.

## **Monitored washing results**

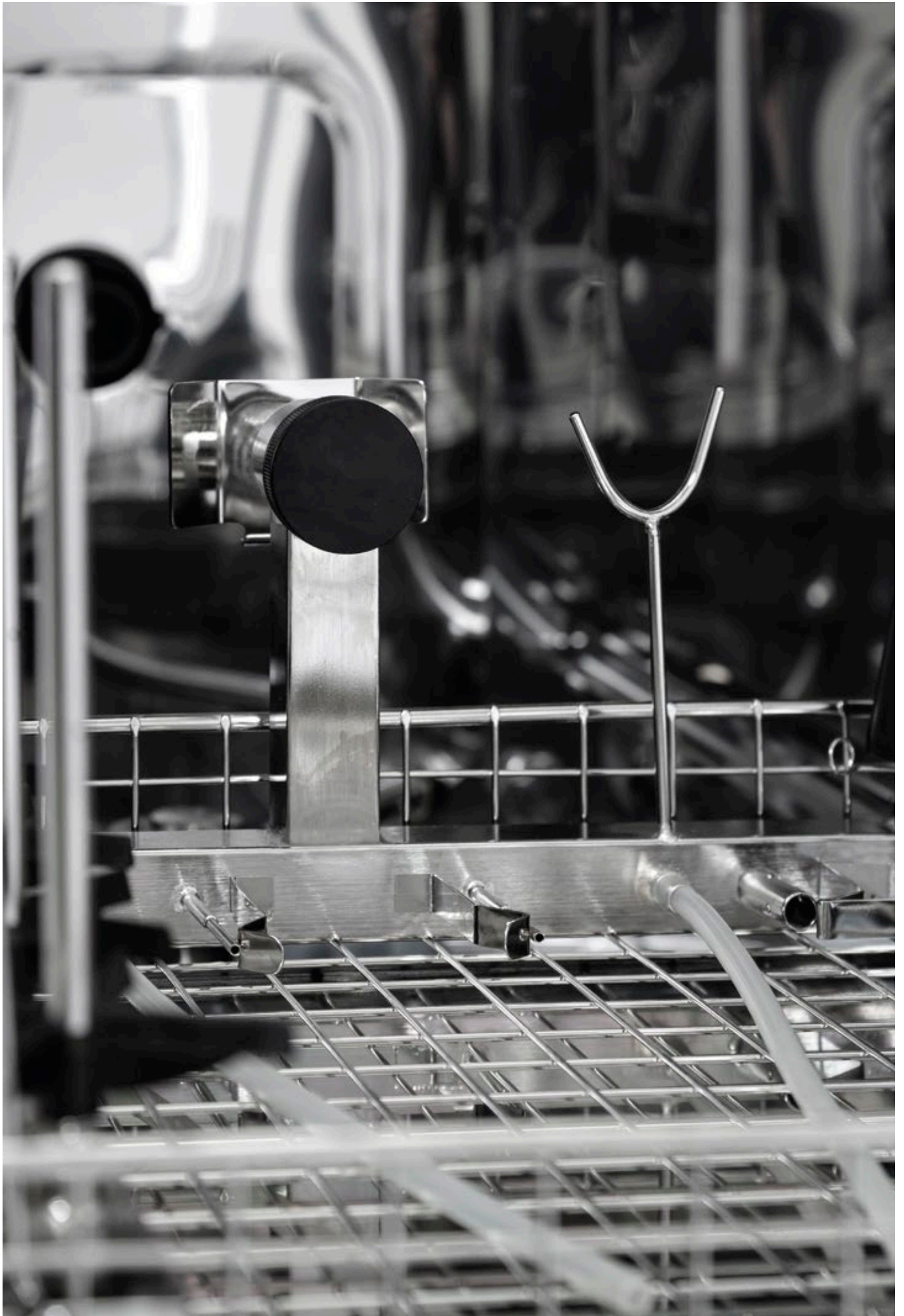
Independent process control and recording to verify actualized process parameters providing assurance of quality.

## **Ease of use**

Large touch-screen for clear and simple program selection, cycle phase and remaining time monitoring and process history checking.

## **Accessories that make a difference**

Precisely designed washing baskets and racks allow efficient processing of a wide variety of different instruments and equipment.



# Features and functionalities

## – benefits for the user

### **Perfect for small spaces**

With compact design and features comparable to large washer disinfectors, DEKO 25 X2 offers excellent disinfection process quality according to EN ISO 15883 Part 1 & 2.

### **Installation location**

DEKO 25 X2 can be placed below or on top of a counter. For ideal loading height, installation on base cabinet or support table is recommended, both with room for detergent container and accessories.

### **Washing equipment**

Removable, sliding wash wire basket for loading instruments. Optional second wash shelf with wash arm, connecting / closing wash arm and rack connector. Chamber roof and bottom equipped with rotating wash arms. Wash arms with removable end caps. Washing basket (WxDxH) 370x370x60 mm, max. usable height 255 mm with bottom washing basket only. Max. usable height 110 mm on bottom and 85 mm on top when using both levels.

### **Powerful water circulation**

Powerful 260 L/min water circulation pump with only 8,5 l water consumption per washing phase.

### **Panels and door**

Framework, panels and wash chamber all made of stainless EN 1.4301 steel and fully recyclable. All outer panels heat and sound insulated. Interlocking hinged door with safety lock function as loading level when open.

### **Advanced State-of-the-art control**

Fully automatic PLC control including back-up batteries for full memory protection. Multi-level access code system protects any unauthorized changes to washing cycles and set parameters. Separate codes for user, maintenance and authorized person. Special service and maintenance control system restore valuable information for technical performance follow-up and evaluation and enables component testing. Process control and independent recording accuracy compliant with ISO EN 15883-1 & 2 for washer disinfectors.

### **Display (loading side)**

7" colour display showing selected cycle, batch number, current cycle phase, chamber temperature, washing pressure and remaining cycle time. Pressure and temperature indication available as graphs. Service instructions, warnings and error indications in signal colors.

### **Pressure control for foam and washing water**

To secure powerful washing efficacy, automatic foam and washing water pressure control ensure proper water pressure is maintained during water circulation and throughout the whole washing cycle. In case of excess foam or sudden drop of circulating water pressure, machine automatically drains the chamber and restarts the aborted process cycle step from the beginning (max. 3 times). Failure to reach the predefined parameters will result in an interruption of the cycle and an error notification on the display. Load temperature protection and overtemperature cut-outs for secure operation.

### **Independent tamper-proof process recorder**

Machine is equipped with a temperature recorder, with sensors and signal processing independent from the controller, to record the attainment of programmed washing and disinfection conditions.

Machine stores all cycle process data such as:

- name of institution
- date & time
- machine identification
- sequential cycle number
- cycle name and configuration
- cycle start and end time
- temperature
- water pressure

Internal storage of 32 GB for recording all process data, transferable to external USB memory stick or throughout an optional network connectivity (FTP over Ethernet) to external file-server. Verification is executed according to EN ISO 15883-3, clause 5.11.4 level b).

### **Network connectivity (Ethernet)** (optional feature)

Network connectivity feature allows:

- remote monitoring of the machine over network
- logging process events over network to email client
- sending process data printouts to local and network printer
- storing process data to external fileserver (FTP over Ethernet)

See "DEKO WD networking, System description" for more information.

### **Remote access** (optional feature)

Capability for remote access allowing remote service support. See "DEKO WD networking, System description" for more information.

### **Boss entry port**

Machine is equipped with boss entry port to insert temperature sensors to perform IQ, OQ, PQ (when requested by the user).

### **Wash programs**

Program library with 6 different factory-set programs tested and approved to meet requirements stated in standard EN ISO 15883. Programs are easily adaptable to suit special washing and disinfection requirements. Internal memory provides a pre-set cycle library for creating a practically unlimited number of programs. User adjustable audible indicator notifying end of cycle. Cycle duration typically 30 minutes depending on the load items and cycle setup.

### **Media connections**

Water connections with slow closing valves and flexible hoses prevent the transfer of sound and vibration. Media connections are located on the bottom half of the machine.

- Opaque cold and hot water connection hoses
- Drain outlet valve diameter 20 mm
- Pure water connection
- Back syphon Type A air gap protection
- Shut-off isolator valves
- Vapour condenser

### **Outlet pump**

Machine is equipped with outlet pump for efficient draining.

### **Detergent dosing**

- Suction tube: Adjustable suction tube to ensure fit for all types of detergent containers.
- Adjustable detergent pump: Pump with flow sensor for dosing process chemicals. Optional second detergent pump with flow sensor and low level indicator.
- Flow meter for detergent dosing: Measures the volume of dosed detergent and verifies the requested dosing volume.
- Detergent low-level indication: The detergent suction hose equipped with a float switch monitors sufficient detergent availability advising user to replace the container when detergent level is below minimum.
- Detergent dosing flushing cycle: Special flushing cycle to remove detergent build-up (precipitate) by hot water from the dosing system.
- Back syphon protection: Type A air gap solution to prevent back syphon from water supply.
- Rinse aid pump (optional feature): For dosing rinse aid to final rinse water.

### **Panel printer**

Panel printer to print process data (see "Independent tamper-proof process recorder").

### **Purewater feed options** (optional feature)

For purewater feed, machine may be equipped with a solenoid valve when connected to pressurized purewater resource. Purewater can be used in all water process phases.

### **Laboratory applications**

DEKO 25 X2 laboratory model is specially equipped for processing laboratory utensils: including lab wash base & wash arms for glassware and solenoid valve for purewater feed.





# Technical info

| <b>Model</b>  |   | <b>DEKO 25 X2</b> |
|---|---|-------------------|
| Material  | Stainless EN 1.4301 steel   |                   |
| <b>User interface / Display</b>                     |   |                   |
| 7" colour Touch-Screen                              | X   |                   |
| <b>Door functioning</b>                             |   |                   |
| Manual hinged door                                  | X   |                   |
| Single door model with door interlock               | X   |                   |
| <b>Washing mechanics</b>                            |   |                   |
| Rotating washing arms                               | Max. 3  |                   |
| Removable washing levels                            | 1–2   |                   |
| Wash arms equipped with easily removable end caps   | X   |                   |
| <b>Measurements</b>                                 |   |                   |
| Width (mm)  | 460   |                   |
| Depth (mm)  | 580   |                   |
| Height (mm)   | 845   |                   |
| Height with base cabinet/support table (mm)         | 1295  |                   |
| Chamber volume, l (gross)                           | 40  |                   |
| Chamber volume, l (effective)                       | 36  |                   |
| Wash chamber dimensions, mm (gross)                 | W 390 x D 390 x H 265   |                   |
| Wash level dimensions, mm (effective)               | W 370 x D 370 x H 255   |                   |
| Wash levels, max load (trays/baskets)               | 3 DIN 1/4 OR 2 SPRI III   |                   |
| Loading height, mm                                  |   |                   |
| • floor installation                                | 490   |                   |
| • on base cabinet                                   | 935   |                   |
| Weight, kg  | 60  |                   |
| Floor loading, kN/cm <sup>2</sup>                   | 0.02  |                   |
| Adjustable feet for levelling ±10 mm                | X   |                   |
| <b>Media connections and consumption</b>            |   |                   |
| Back syphon protection                              | Back syphon Type A air gap protection   |                   |
| Cold water (CW, max 15 °C) inlet hose               | R1/2" female thread, l. 1.5 m   |                   |
| Hot water (HW, min 45 °C) inlet hose                | R1/2" female thread, l. 1.5 m   |                   |
| Min – max water pressure, bar                       | 1–8   |                   |
| Min. water flow (CW/HW), L/s                        | 0.2   |                   |
| Pure water inlet                                    | R1/2" female thread, l. 1.5 m   |                   |
| Pure water min – max water pressure, bar            | 0–6   |                   |
| Water volume per cycle, l                           | 8.5   |                   |
| Floor drain outlet                                  | ø 20 mm, l. 2 m   |                   |
| Vapour condenser                                    | X   |                   |
| <b>Other technical features</b>                     |   |                   |
| Total power, kW                                     | 3.5   |                   |
| Heating power, kW *                                 | 3 / 2.5 *   |                   |
| Wash pump, kW                                       | 0.54  |                   |
| Wash pump capacity, L/min                           | 260   |                   |
| Drain outlet pump, kW                               | 0.085   |                   |
| Drain outlet pump capacity, L/min                   | 28  |                   |
| Total maximum heat transmission (W/m <sup>2</sup> ) | 70  |                   |
| Maximum fascia heat transmission (W)                | 45  |                   |
| Mean sound power level (A), dB                      | 65  |                   |
| Peak sound power level (A), dB                      | 70  |                   |
| Electric connection *                               | U 200-220V 1PH AC 50/60Hz 1x16A<br>U 230-240V 1PH AC 50/60Hz 1x13A<br>U 230-240V 1PH AC 50/60Hz 1x16A |                   |



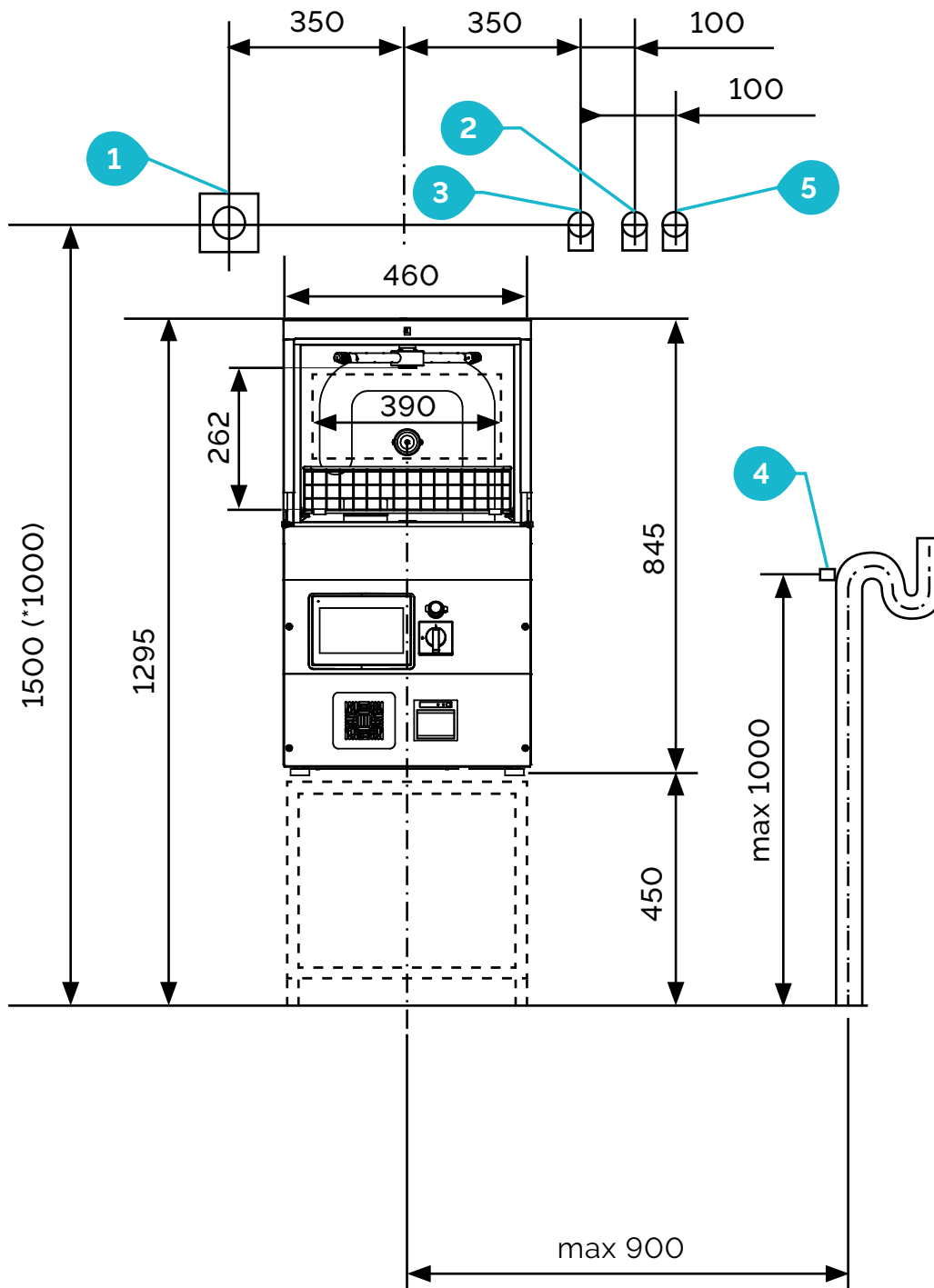
| Model   | DEKO 25 X2  |
|---|---|
| <b>Controls/Programmes</b>  |   |
| Programmability   | X   |
| Pre-set programmes  | 6   |
| Customizable programme positions                                    | Unlimited   |
| Cycle status display  | X   |
| Cycle complete indication with mutable buzzer                       | X   |
| Password protected modes  | 3   |
| <b>Automatic detergent dosing system</b>                            |   |
| Suction tube  | Adjustable / Telescopic   |
| Detergent low level indication                                      | X   |
| Independent detergent volume verification                           | X   |
| Additional detergent pump incl. flow sensor and low level indicator | O   |
| Rinse aid pump  | O   |
| <b>Process control</b>  |   |
| Load temperature protection and over temperature cut-outs           | X   |
| Pressure control for foam and washing water                         | X   |
| Boss entry port for test temperature sensor leads                   | X   |
| Independent tamper-proof process verification                       | X   |
| Independent tamper-proof process recorder                           | X   |
| Panel printer   | X   |
| Network connectivity (Ethernet)                                     | X   |
| Remote access   | X   |
| Solenoid valve for purewater feed                                   | O (L)   |
| Automatic maintenance reminder                                      | X   |
| <b>Standard compliance</b>  |   |
| EN ISO 15883  | EN ISO 15883-1, -2  |
| IEC 61010-1   | X   |
| IEC 61010-2-040   | X   |
| IEC 61326-1   | X   |
| CE 0537   | X   |
| EN ISO 14971  | X   |
| EN ISO 13485  | X = Standard O = Optional (L) = Standard in laboratory model * = Regional options |
| EN 1717   | X   |

# Installation

1. Circuit breaker <sup>1</sup>
2. Cold water R1/2" (female), shut off valve <sup>1</sup>
3. Warm water R1/2" (female), shut off valve <sup>1</sup>
4. Drain outlet NS dia 20 mm
5. Pure water R1/2" (female), laboratory models, option

<sup>1</sup> Connection height 1000 mm without base cabinet

<sup>2</sup> Supply by the buyer/installation party







Preventing infections since 1976.

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