### PRODUCT SPECIFICATION

## **DEKO 260 X2**

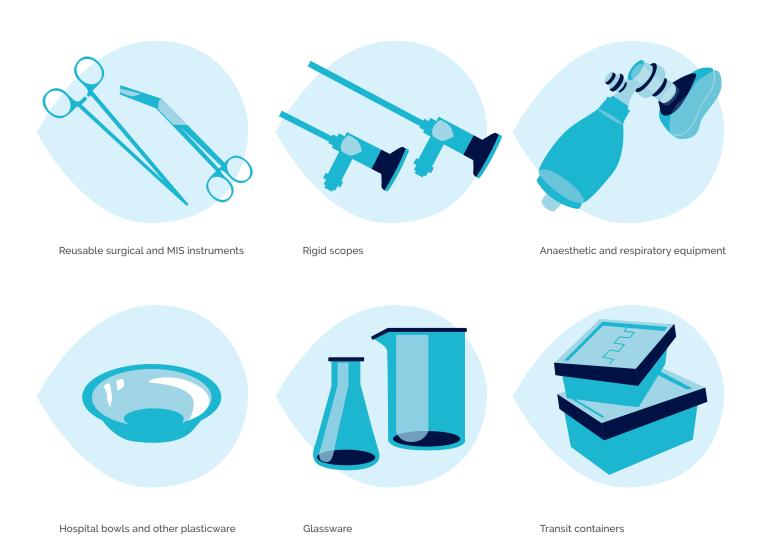
## Washer Disinfector





### Intended use

The DEKO 260 X2 Washer Disinfector ensures thorough cleaning and efficient processing of reusable surgical and MIS instruments, rigid scopes, anaesthetic and respiratory equipment, hollowware, glassware, transit containers, rubber and plastic goods and other similar and related equipment used in medical and laboratory applications.



### Main Features

Impressive performance, ease of use and reliability are synonymous for DEKO 260 X2 Washer Disinfector. Even if space is limited washing and disinfection quality should never be compromised - DEKO 260 X2 offers assurance according to EN ISO 15883 part  $1\,\&\,2$ .



#### Small, yet efficient

Only 65cm wide with capacity up to 8 DIN 1/1 with no need for loading equipment makes DEKO 260 perfect for small spaces.

#### Monitored washing and drying results

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

#### **Space saving loading solution**

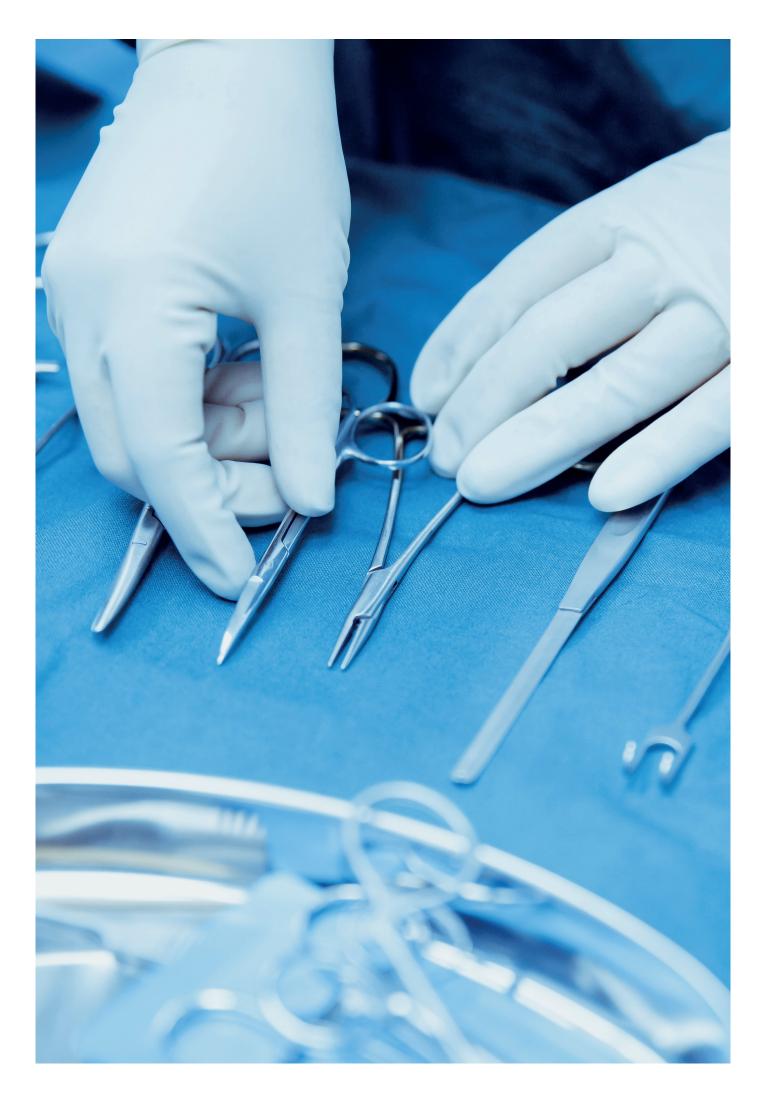
Independently removable, sliding wash shelves and modular racks offer ergonomic, space-saving and customizable solutions for all washing needs.

#### **Tailor with options**

In addition to comprehensive standard features, DEKO 260 X2 options allow customizing to serve the most stringent customer requirements.

#### **Premium quality**

The robust construction, high quality components and precise process control secure years of reliable service even under the most demanding use.



# Features and functionalities – benefits for the user

#### Small footprint, large capacity

With a small footprint (W 65 x D 62,5cm) DEKO 260 X2 offers a large capacity, accommodating up to 8 DIN 1/1 or 16 DIN 1/2. See capacity chart on page 7 for further details.

#### **Versatile washing options**

Up to 4 independently removable, sliding washing levels with rotating washing arms. Automatically connecting / closing wash arm connectors. Chamber roof and bottom equipped with rotating washing arms. Wash arms equipped with removable end caps. Standard delivery 2 washing shelves. Max. usable height 485 mm with bottom washing level.

#### **Efficient drying**

Fast dryer with HEPA filter EU13. Automatic filter quality monitoring and change indication. Drying temperature adjustable between 60–95 °C, time range 15–90 min. Available on request without dryer.

#### **Water pump**

Powerful 700L/min. circulation water pump. Water consumption approximately 16 l/washing phase.

#### Panels and door(s)

Framework, panels and wash chamber all made of stainless EN 1.4301 steel and fully recyclable. All outer panels and tempered window(s) heat and sound insulated. Interlocking hinged door(s) with insulated glass and safety locks allow visual monitoring of process cycle and function as loading levels when open.

Double-door machines are delivered with stainless steel panelling for wall opening:  $4 \times 100$  mm wide side panels and  $2 \times 100$  mm high top panels.

#### **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)

Large 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.

#### Process status indication, unloading side

Coloured led-indicators on unloading side for clear and simple visual detection of process status.

#### 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, 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
- $\boldsymbol{\cdot}$  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 fileserver. By default the verification is executed according to EN ISO 15883-1, clause 5.11.4 level b). Level c) is attained when the machine is equipped with a conductivity meter.

#### 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 standard EN ISO 15883 requirements. 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 between 10 – 60 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 50 mm
  - · 20 mm when equipped with an outlet pump
- Pure water connection
- · Back syphon Type A air gap protection
- · Shut-off isolator valves
- Exhaust air condenser

#### **Detergent dosing**

- Suction tube: Adjustable suction tube to ensure fit for all types of detergent containers.
- Adjustable detergent pump: Dosing of process chemicals by means of pump with flow sensor. Optional second detergent pump with flow sensor and low level indicator.
- Flow meter for detergent dosing (optional feature): 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.
- Integrated detergent container compartment: Fits 2 x 5 l detergent containers. Optional lockable door.
- 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") on loading or unloading side. Available on request without printer.

#### Purewater feed options (optional feature)

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

#### Conductivity meter (optional feature)

Integrated conductivity meter for monitoring final rinse water. If conductivity is above pre-set control value, alarm is shown on display and washing cycle is terminated.

#### Emergency stop switch(-es) (optional feature)

Emergency stop switch(es) available on request for loading and unloading side.

#### **Drip tray with leakage sensor** (optional feature)

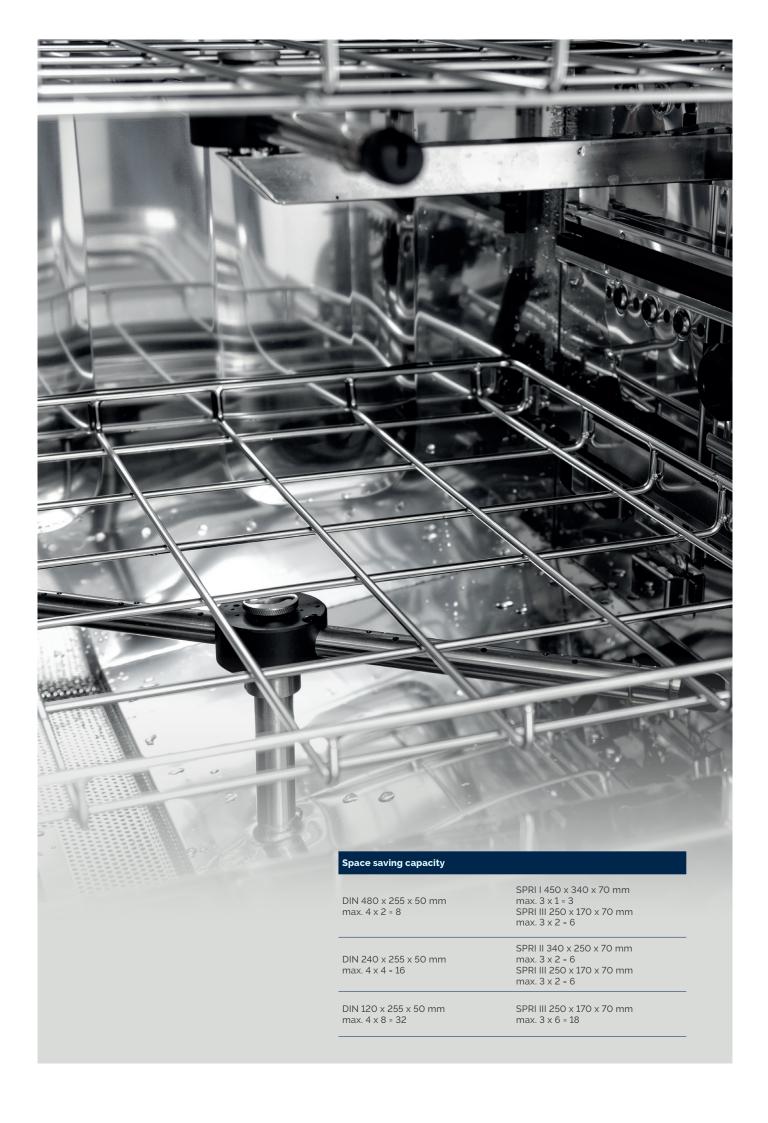
Separate stainless steel drip tray for possible leakage recognition. Alarm shown on display.

#### Sample drawing tap (optional feature)

For testing final rinse water quality, machine is equipped with a sample drawing tap. Final rinse is paused shortly to allow water sample drawing after which process is continued.

#### **Laboratory applications**

DEKO 260 X2 laboratory model is specially equipped for processing laboratory utensils: including lab wash shelves & wash arms for glassware, solenoid valve for purewater feed and coupling to conductivity measuring.



## Technical info

Model	DEKO 260 X2
Material	Stainless EN 1.4301 steel
User interface / Display	
7" colour Touch-Screen	X
Door functioning	
Manual hinged door	X
Single door model with door interlock	X
Double doors / pass-through model with door interlock	X
Washing mechanics	
Rotating washing arms	Max. 5
Removable washing levels	1-4
Wash arms equipped with easily removable end caps	X
Measurements	^
Width (mm)	650
Depth (mm)	625
Height (mm)	1850
Chamber volume, I (gross)	204/208 <sup>(2</sup>
Chamber volume, L(gross)  Chamber volume, L (effective)	130
Wash chamber dimensions, mm (gross)	W 590 x D 526/516 <sup>12</sup> x H 672
Wash level dimensions, mm (effective)	W 510 x D 510 x H 58-485
	8 DIN 1/1 OR 3 SPRI I + 6 SPRI III
Wash levels, max load (trays/baskets)	820
Loading height, mm	
Weight, kg (w/o drying unit)	180 (170)
Floor loading, kN/cm <sup>2</sup>	0.04
Adjustable feet for levelling ±10 mm	X
Media connections and consumption	
Back syphon protection	Back syphon Type A air gap protection
Cold water (CW, max 15 °C) inlet hose	R1/2" female thread, l. 3 m
Hot water (HW, max 65 °C) inlet hose	R1/2" female thread, l. 3 m
Min – max water pressure, bar	1–8
Min. water flow (CW/HW), L/s	0,5
Pure water inlet	Valve R3/4" male thread
Pure water min – max water pressure, bar	0-6
Water volume per cycle, l	16
Floor drain outlet	ø 50 mm
Drain outlet pump	0
Floor drain outlet, with outlet pump	Ø20 mm
Exhaust air condenser	X
Exhaust duct	ø 60 mm
Required property ventilation (exhaust air) capacity, L/s	30
Other technical features	
Total power, kW	9,4
Heating power, kW	7,5
Dryer fan, kW	0,4
Air throughput, m³/h	110
Wash pump, kW	1,9
Wash pump capacity, L/min	700
Pure water pump, kW	0,1
Pure water pump capacity, L/min	12
Total maximum heat transmission (W/m²)	124
Maximum fascia heat transmission (W)	80
Mean sound power level (A), dB	65
Peak sound power level (A), dB	70
Electric connection *	U 400-415V 3N AC 50/60Hz 3x16A U 200-220V 3PH AC 50/60Hz 3x32A

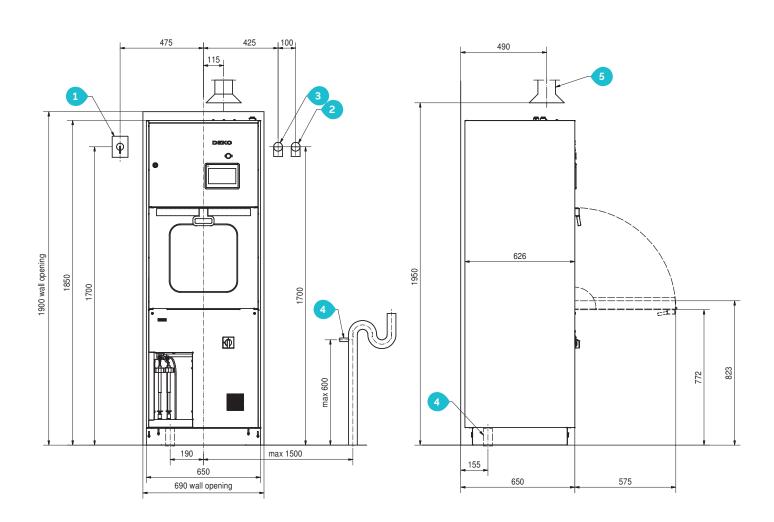
Model	DEKO 260 X2
Controls/Programmes	
Programmability	X
Pre-set programmes	6
Customizable programme positions	Unlimited
Cycle status display	X
Cycle complete indication with mutable buzzer	X
Password protected modes	3
Automatic detergent dosing system	
Suction tube	Adjustable / Telescopic
Integrated detergent container compartment for 2 x 5 l containers	X
Detergent low level indication	X
Independent detergent volume verification	X
Lockable door for detergent compartment	0
Additional detergent pump incl. flow sensor and low level indicator	0
Rinse aid pump	0
Process control	
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)	0
Remote access	0
Emergency stop switch(es)	0
Sample drawing tap	0
Solenoid valve for purewater/distilled water feed	O (L)
Pump & solenoid valve for unpressurized purewater feed	0
Integrated conductivity meter	0
Coupling to conductivity measuring	L
Drip tray with leakage sensor	0
Automatic maintenance reminder	X
Standard compliance	
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
EN 1717	X

X = Standard O = Optional (L) = Standard in laboratory model (2 = Double door (pass-through) model \* = Regional options

# Installation, single door model

- 1. Circuit breaker (1
- **2.** Cold water G1/2" (female), shut off valve  $^{(1)}$
- 3. Warm water G1/2" (female), shut off valve (1
- **4.** Drain outlet NS dia 50 mm 4.1 Alternative drain outlet dia 20 mm with outlet pump (2)
- 5. Exhaust duct dia 60 mm

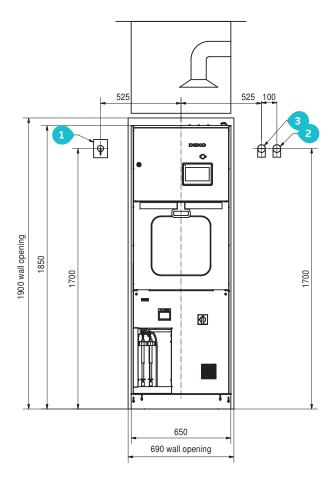
<sup>&</sup>lt;sup>(2</sup> Option

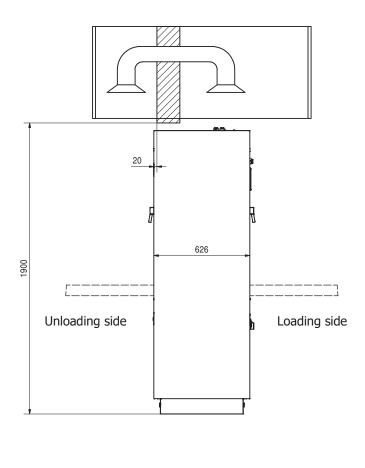


<sup>&</sup>lt;sup>(1)</sup> Supply by the buyer/installation party

# Installation, double door (pass-through) model

Wall opening width: 650 mm / machine + 40 mm, height: 1900 mm







Preventing infections since 1976.