



DEKO D4  
Washer-disinfector

**FRANKE**

DEKO

# Introducing the D4

Franke are proud to introduce their compact double door washer disinfector. The D4 has been designed to bring reliability, outstanding cleaning and disinfection performance, quality and great looks into one compact washer disinfector.

The versatile washer disinfector can be supplied as a single or double door model, the double door model can also be converted to operate as a single door model at any time. The D4 can be situated on a dedicated DEKO stand accessory or, be positioned undercounter, either way, the D4 will soon become an invaluable tool in your decontamination process.

## Superior results

The DEKO D4 has been designed and constructed to exceed the standard performance requirements stated in ISO/FDIS 15883 parts 1 & 2 as well as, the safety requirements stated in IEC 61010-2-045

Utilising the power of the 260 litres per minute circulation pump, process and cleaning results are guaranteed throughout the large two level wash chamber. The large capacity also allows for the insertion of additional wash racks to facilitate the washing of cannulated instruments, dental handpieces, hoses, glassware and rigid scopes.

The D4 comes as standard with pre-set programs installed and protected, however additional tailored programs can be added to meet any process requirements such as dental or laboratory use.

The washing spray patterns are delivered through three rotating spray arms or utilising jet rack connectors and guarantee water contact with all surfaces and crevices of instruments with the most intricate design.

## Ease of use

The doors on the DEKO D4's open & close smoothly and are interlocked securely throughout the cycle by the automatic locking system. The clear text on the display and the cycle complete indicator light will inform the operator when the cycle has been completed, safe in the knowledge that all parts of the chamber and washing accessories have been cleaned and thermally disinfected.

The efficient built in condenser system prevents any escape of condense and minimises the moisture within the chamber at the end of the cycle.



## Quiet, convenient and reliable

The DEKO D4 occupies its space efficiently; one unit requires only 600mm by 500mm of floor space. All components are accessible by the quick removal of dedicated service panels and can be made without moving the unit. Efficient diagnostic is achieved by interrogation of the microprocessor through the simplistic service mode.

Water is introduced directly into the chamber through a type "A" air gap to avoid the need of cleaning and disinfecting separate water holding tanks.

Any information, personnel training and service calls are attended to with the utmost dedication and urgency. Availability of spares is guaranteed for the minimum of 10 years after date of purchase.

## Controlled security

The advanced electronic control system can provide an unlimited number of tailored cycles with the 12 most used cycles available at a touch of a button. Process parameters are protected by security codes and a number of tested and approved cycles can only be altered by the manufacturer. The machine is facilitated by a 3 level access code to prevent unauthorised use of the machine.

Protection to thermo-labile medical devices is provided by a double overheat protection.

To achieve the outstanding cleaning efficiency cycle after cycle the washer disinfector monitors the detergent volume very closely as well as preventing the washer to start if there is insufficient detergent volume to complete the cycle. All chemical containers are safely positioned in an easily accessible draw.

## Latest technology

The DEKO D4 presents the latest technology in user interface applications in washer-disinfectors. The high brightness 4x20 character VFD information & control panel provides the means to view cycle information in real time and view the remaining cycle time. Also included is an automatic cycle counter.



Base cabinet, code no. 374228, available as an option.

# Traceability and verification to fit your quality system requirements

The critical process values i.e. temperature, times, pressure, detergent volume as well as descriptive cycle data can be independently recorded by three different means to suit your department requirements. Automatic or manual downloading can easily be undertaken to your PC or server. In addition to this the integrated paper printer displays all the cycle data.

For your security and confidence the documented files are protected by the Checksum system.

Archive information includes: institution name, date and time, operator and machine identification, cycle number, load tracking number, selected cycle name, phase descriptions, detergent dose volume and stage, chamber temperature and wash pressure throughout the process and faults.

# Reliable quality

The DEKO D4 is manufactured using quality polished stainless AISI 304 steel, it is easy to keep clean and is designed to withstand continuous use. Galvanised and painted metals and other non-compatible materials are totally avoided in the manufacture of the D4. Special attention has been given to sound and heat emissions by using the most efficient insulation.

During assembly the D4 is built using environmentally friendly materials.

Durability and reliability will allow continuous use in any busy and demanding environment, these types of heavy workload have been the key factors in the design of the D4.



## Summary of features

- overall dim. W600xD500xH850 mm
  - usable wash chamber dim. W375xD375xH265 mm
  - powerful circulation water pump, output 260 L/min
  - framework, panels and wash chamber all made of stainless steel
  - interlocking door(s) provided with electric motor driven safety lock(s)
  - fully automatic microprocessor control including back-up batteries for full memory protection
  - 6+6 cycle selection & start keys
  - multi-level access code system. Special codes for: user, maintenance, authorized person
  - practically unlimited number of pre-set cycle library
  - secure, tested cycle files with denied access
  - customized cycle files
  - access to regulation of critical process parameter values with authorized person entry code only
  - VFD 4x20 high brightness information display at the loading end
    - in-process indication
    - cycle & phase info
    - remaining cycle time
  - cycle complete: green led
  - fault indication: red led
  - independent full process tamper-proof verification recording system
  - Flash memory card
- information:
    - name of institution
    - date & time
    - machine number
    - user identification
    - non-resettable cycle number
    - cycle name and configuration
    - cycle start and end time
    - temperature recording throughout the entire cycle
    - detergent dosage verification
    - pressure registering
    - fault identification and registering
    - CheckSum
  - special service and maintenance control system
    - malfunction identification in text format
    - adjustment of controls
    - calibration of measuring instruments
    - manual override step by step
    - component test mode
    - fault listing
    - updates by a PC and CF card
  - 2 independently removable, sliding wash wire baskets
  - automatically connecting / closing wash arm and rack connectors
  - 3 rotating wash arms with removable caps facilitating easy cleaning of the inner surfaces of the wash arm. No tools required for removing the wash arms.
  - adjustable automatic detergent dosage pump independent detergent dosage volume verification
  - indication for insufficient volume of chemicals to complete cycle

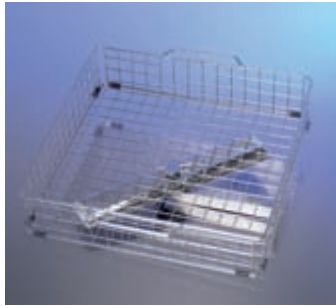
- cabinet for process chemical containers (accessory)
- boss entry port for test temperature sensor leads
- load temperature protection and over-temperature cut-outs
- automatic foam and washing water pressure control system
- opaque cold and hot water connection hoses 1/2" BSP
- drain outlet hose diameter 20mm
- sound and heat insulated
- 2 vapour condensers
- height adjustable feet
- full stainless steel panelling
- back syphon Type A air gap protection
- Deko Cycle Data Viewer software for reviewing archived cycle data

## Options:

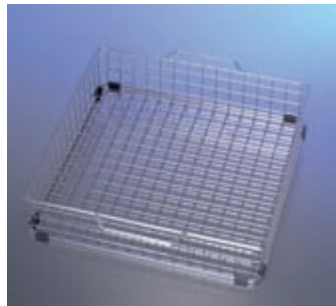
- bar code scanner
- load tracking
- Ethernet connection for real time observation and process data archiving
- network printer connection
- integrated Process verification serial ink printer for permanent recording
- Autoprint
- max 1 extra detergent pump
- max 1 extra adjustable rinse aid pump
- solenoid valve for connection to purified water supply
- storage base cabinet, code no. 374228 (opens at loading end)



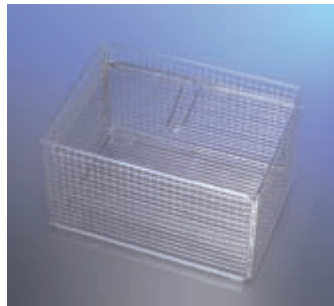
# Accessories



1



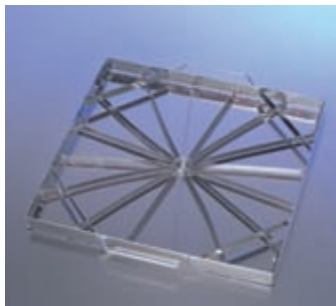
6



7

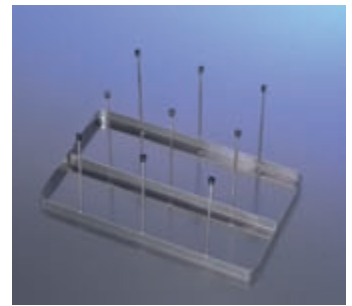


8

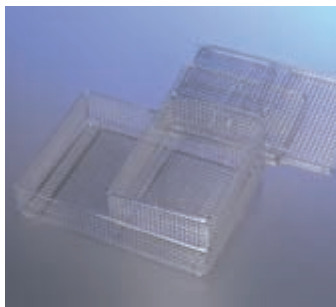


2

1. 381326 Top wash basket incl. a wash arm  
- dim. 380x380x90 mm
2. 374085 Lab wash base  
- dim. 390x390 mm
3. 381210 Instrument tray, 340x250x70 mm  
381220 Instrument tray, 250x170x70 mm  
381211 Tray lid, 340x250 mm  
381221 Tray lid, 250x170 mm
4. 381215 Instrument tray with end plates,  
- 340x250x70 mm  
381225 Instrument tray with end plates,  
- 250x170x70 mm  
381211 Tray lid, 340x250 mm  
381221 Tray lid, 250x170 mm
5. 381212 Fine mesh tray, 330x240x50 mm  
381222 Fine mesh tray, 240x160x50 mm  
381213 Tray lid, 330x240 mm  
381223 Tray lid, 240x160 mm
6. 381250 D4 Base basket, one included as standard  
- dim. 380x380x90 mm
7. 381170 Utensil basket with a lid  
- 340x250x200 mm
8. 381685 Rack for 6 kidney bowls  
- 330x190x160 mm
9. 381525 Peg rack, 9xH150 mm pegs  
- dim. 350x210 mm
10. 381214 Holder for 2 instrument trays  
- dim. 320x130x130 mm
11. 381635 Tray holder, full size, 360x360x130 mm  
381640 Stainless steel tray, 280x180x16 mm
12. 381540 Container for microscope slides, incl. a lid  
- dim. 250x170x100 mm



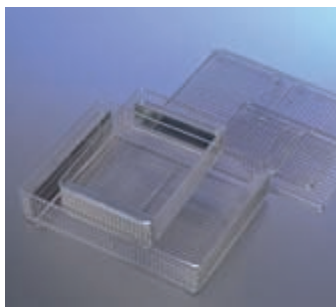
9



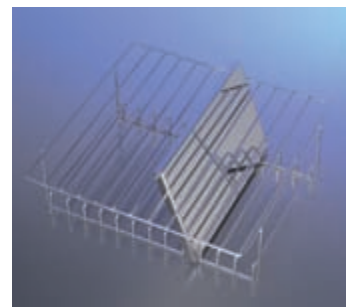
3



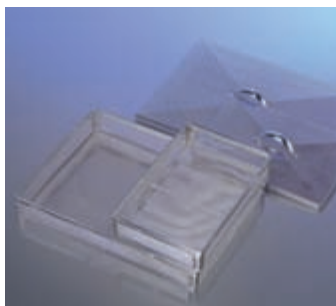
10



4



11

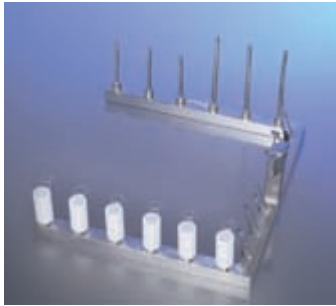


5

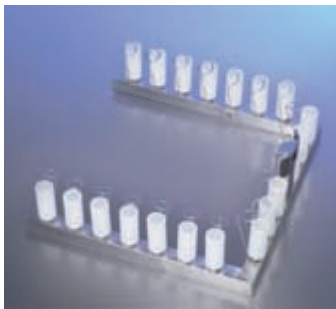


12

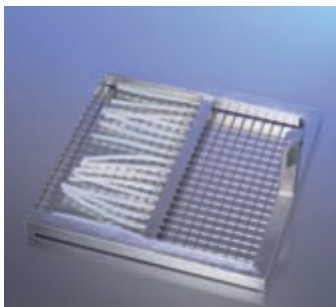
# Accessories



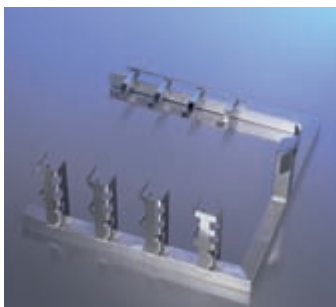
13



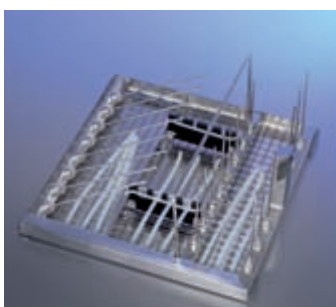
14



15

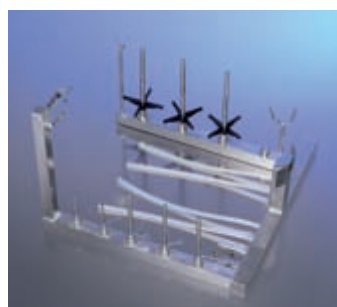


16

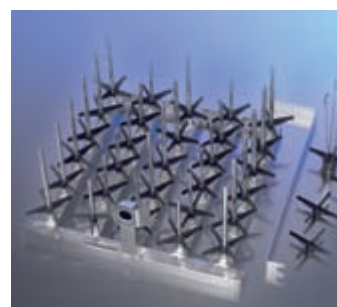


17

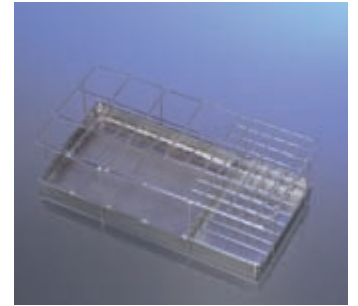
- 13.** 381325 Injector rack for dental equipment  
e.g. angle pieces, turbines for outer cleaning
- 14.** 381328 Injector rack for dental equipment  
e.g. angle pieces, turbines for outer cleaning
- 15.** 381329 Injector rack for hollow devices eg. needles
- 16.** 381330 Insert for 'Oras' faucet handles and hoses
- 17.** 381331 Rack for rigid scopes
- 18.** 381332 Rack for AN-equipment
- 19.** 381560 Injector rack,  
- 18 jet tubes H150 mm, Ø 8 mm  
- 12 jet tubes H100 mm, Ø 6 mm
- 381725 Jet tube tensioning key
- N23658 Bottle holder for dia. 8 mm jet tube
- N23659 Bottle holder for dia. 6 mm jet tube
- 381556 Bottle support 4 pegs, for 8 mm jet tube
- 381559 Bottle support 4 pegs, for 6 mm jet tube
- 20.** 381218 Mirror compartment  
- dim. 370x185x110 mm
- 21.** 381551 Rack for 18 Petri dishes  
- dimensioned to diameter  
- std dim. 330x300x90 mm
- 22.** 381260 Fine mesh tray, 370x370x40 mm
- 381536 Pressure lid, 370x370 mm
- 23.** 381475 Half-circle basket, D 380 mm, H 135 mm  
- includes a lid and compartment divider
- 24.** 381227 Storage basket for angle pieces and turbines  
- 30 places, dim. 250x170x70 mm
- 381230 Small box for needles and bore bits  
- dim. 90x90x40 mm
- 381235 Instrument tray 250x100x70 mm



18



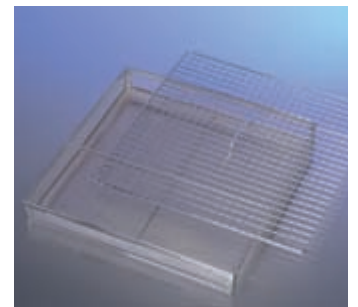
19



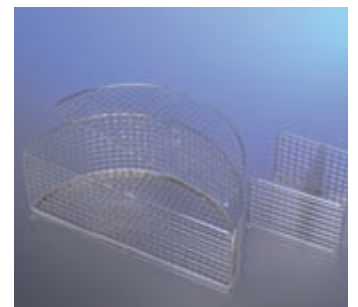
20



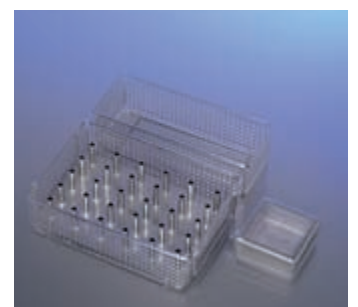
21



22



23



24

# Technical Data

Model	D4
Outer dimensions mm:	
Width	600
Depth	500
Height*	850/1405*
Weight kg	90
* 1405 mm incl. base cabinet	
Gross wash chamber volume L	72
Usable inner dimensions mm:	
Chamber height	265
Chamber width	375
Chamber depth	375
Wash levels	2
Usable height on lower level, mm	105/145
Usable height on upper level, mm	95
Maximum usable height on one level, mm	265
Wash arms max.	3
Auto-connection for injection tube racks	1
Loading basket 370x370x80 mm	2
Water volume / one cycle phase, L	6
Electricity	
230V 1N 50Hz 3.5kW	16A
230V 1N 50Hz 3kW	13A
200V 1N 50/60Hz 3kW*	16A
Heating power kW	3 or 2.5*
Circulation pump 260L/min, W	540
Outlet pump 28L/min, W	85
Outlet size diameter in mm	
Outlet hose length, m	2
Cold water hose L=1,5 m	R1/2"
Hot water hose L=1,5 m	R1/2"
Purified water connection	R3/4"
Min/Max water pressure bar	1/8

## Models:

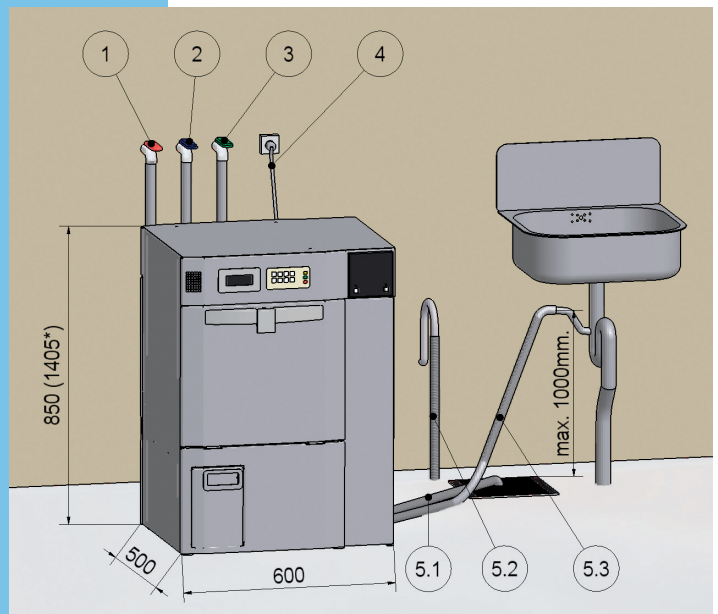
X = pass-through  
L = laboratory

## Included as standard:

- 2 wash baskets
- 3 wash arms
- 1 detergent pump

## Tests / Approvals:

ISO 9001:2000  
ISO 14001:1996  
ISO 13485  
SIS TR-3:2001  
ISO FDIS 15883-1,  
15883-2  
IEC 61010-2-045  
**CE 0537**



1. Hot water
2. Cold water
3. Purified water
4. Electricity
- 5.1, 5.2, 5.3 Outlet connection alternatives

\* 1405 mm incl. base cabinet



Representative in UK:

**Dekomed Limited**

34 London Road  
Hazel Grove  
Stockport  
Cheshire  
SK7 4AQ

Tel: +44 (0) 161 483 7333  
Fax: +44 (0) 161 483 7366  
Email: deko@dekomed.co.uk  
Web: www.dekomed.co.uk

Subject to changes without further notice. Please ask the supplier for confirmation as required.



Manufacturer:  
Franke Finland Oy  
Vartiokuja 1  
FIN-76850 Naarajärvi  
Finland

Telephone +358 15 34111  
Fax +358 15 3411 560  
www.franke.fi

