DEKO

DEKO D32 | Washer-disinfector-dryer

rhima

The DEKO D-32 is designed and constructed to exceed the standard performance and design requirements stated in ISO/DIS 15883-1 Washer-disinfectors - Part 1: General requirements and in Part 2: Requirements and tests for surgical instruments, anaesthetic and respiratory equipment, hollowware, utensils, glassware etc., as well as, the Safety requirements stated in IEC 61010-2-45: Particular requirements for washer disinfectors used in medical, pharmaceutical, veterinary and laboratory fields.

MEETING THE STANDARDS

Thanks to modern manufacturing technology the Deko D32 is safe and has a smooth and harmonic look with a stylish finish.

Process results are guaranteed throughout:

- water pressure for washing is supplied by a high powered circulation pump
- pipework and the number of loading shelves fitted with rotating spray arms are calculated to have the maximum soil removal efficacy
- wide selection of disinfection temperatures and cycle times to secure the microbial killing impact
- fast HEPA filtered drying

Cycles can be altered to meet almost any special requirement, though the standard requirements are met with the fixed, tested and approved programs inserted by the manufacturer.

The washing spray patterns are delivered through five rotating spray arms and purpose designed racks to guarantee the contact with all surfaces and crevices of instruments with the most intricate design.

QUALITY AT A GLANCE

The DEKO D32's compact dimensions are based on thorough ergonomic research and practical studies. With the working height of the doors, all controls at eye level and flexible usage of the wash chamber with individually removable shelves make the D32 simple and comfortable to work with.

With the horizontally front-opening door, separate transfer conveyors can be avoided and the loading and unloading is made easier safer and more hygienic. Any residual fluid dripping from the load is collected on the inner door surface, which is washed and decontaminated during each completed cycle.

The doors open & close smoothly with the assistance of gas springs and are locked securely throughout the cycle by an automatic locking system. Clear text on the display and a green indicator light will advise when the doors are unlocked for opening. An audible indicator may be added to draw attention to the ending of the cycle.

Double-glazed, heat insulated and shockproof window allows a visual check upon the status in the wash chamber.

All parts of the machine and washing accessories coming into contact with the processed items are being cleaned and disinfected simultaneously and separate manual handling is unnecessary.

TOUCH SCREEN TECHNOLOGY

The DEKO D32 presents the latest technology in user interface applications in washer-disinfectors. The combined high luminance 6.5” wide angle colour TFT LCD display and control panel provides the means to view cycle information real time on the panel i.e. temperature & pressure graphs, cycle and phase name, temperature, remaining process time and a non-resettable batch number. The intelligent software provides you with advice on service actions and routine checks. The maintenance and service file system restores valuable information for technical performance follow-up and evaluation.

Pass-through models have in addition also a high brightness 4x20 character VFD information display at the unloading side to indicate remaining program time, cycle name and possible faults.

TRACKING AND VERIFYING DATA FOR YOUR Q.A SYSTEMS

In order to guarantee that the values of the critical process variables were truly obtained and as programmed, the D32 is equipped with the highest level - Class C - independent, full process verification recording system.

The critical process values i.e. temperatures, times, pressures, detergent dosage time, flow & volume, errors, as well as descriptive cycle data can be independently recorded by three different means for your Quality Assurance System.

Integration of the latest Information technology allows you to review the operation online, download the process data into your server or PC by using a Flash Memory Card, or a direct Ethernet line. Additionally, you may secure your control with a paper printout by a process verification printer.

User identification and load tracking data can be inserted and downloaded into full tracking data systems by a bar code reader. A wireless bar code scanner makes this quick and easy.

For your security and confidence the documented files are protected from tampering by the CheckSum program.

Archive information includes: name of your institution, date & time, operator identification, cycle number, batch number, selected cycle's name, phase descriptions, detergent dosage stage & volume, chamber temperature throughout the process, washing pressure, faults and the CheckSum.

SAFE AND SECURE

The most advanced electronic control system allows setting up practically an unlimited number of tailored programs. If required, there is an option of 12 listed cycles available at the touch of a button. Process parameters are protected by special codes and a number of tested and approved cycles can only be altered by the manufacturer. Use of the machine solely by authorised and trained personnel is facilitated by a 3-level access code system. Accurate instrumentation and the fast processor secure that the circumstances in the process are held within the pre-set limits in order to obtain the required cleaning and disinfection result. Protection to thermo-labile medical devices is provided by double overheating prevention.

Cleaning efficacy is increased by dosing automatically the precise adjusted volume of one or more detergent at the correct time of the wash cycle. Containers are safely positioned into an easy accessible sliding draw. The intelligent control system monitors the washing pressure constantly and secures the achievement of the pre-set process values.

Advice when detergent volume is running low is given at the start of the next cycle. If the volume is insufficient for the selected process then the cycle will not start.

WHEN ONLY THE BEST WILL DO

The DEKO D32 is manufactured by quality polished stainless AISI 304 and acid-proof AISI 316 steel, it is easy to keep clean and can withstand continuous use. Galvanised and painted metals and other noncompatible materials are totally avoided in the manufacture of the D32. Special attention has been paid to sound and heat insulation by using double sheet constructions and the most efficient and environmentally friendly materials.

Durability and reliability in continuous, heavy and busy institutional operating circumstances have been the key factors in the design of the D32.

QUIET, CONVENIENT AND RELIABLE

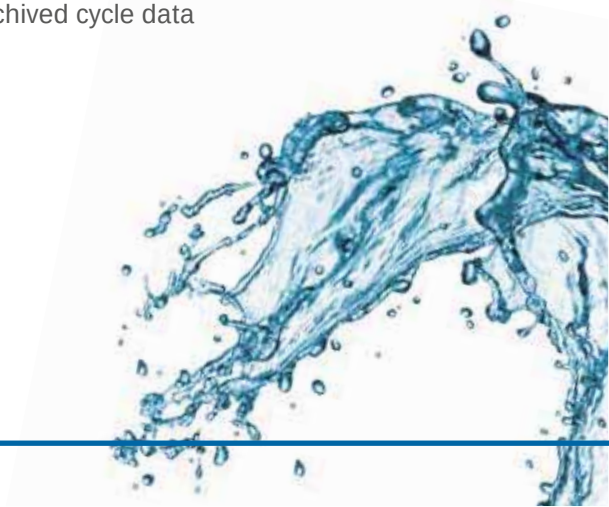
The DEKO D32 occupies its space efficiently. One unit requires only W800xD725 mm of floor space. Connections to water, electricity, drain and ventilation are provided with all necessary safety features. Regular control & maintenance of the machine is made quick and easy by the service mode of the microprocessor and easily accessible components. Water is taken into the chamber directly to avoid separate cleaning and disinfection of integrated water tanks. User and Maintenance Manuals include all relevant details and instructions as required. Any information, advice, personnel training and service calls are attended to with the utmost dedication and urgency.

Availability of spares is guaranteed for the minimum of 15 years after date of shipment and the complete programme and software lodged securely with an independent body.

SUMMARY OF FEATURES

- electricity 230/400V 3N 50Hz (or 60Hz), max 12.8 kW, 3 x 25A. Other voltages as required.
- powerful circulation water pump, output 800L/min
- framework, panels and wash chamber all made of stainless steel. No mild steel or galvanized steel frame constructions
- interlocking opening doors provided with gas springs and electrical motor driven safety locks
- fully automatic microprocessor control including back-up batteries for a full memory protection
- VGA-TFT 6.5“ touch-screen colour control panel and information display
- cycle selection & start keys
- phase indication as text
- remaining program time indication
- cycle complete indication as text and with a green led
- pressure graph
- temperature graph
- fault indication
- multi-level access code system. Special codes for: user, maintenance, authorized person
- 12 permanent program stations - unlimited number of pre-set cycles
- secure tested cycle files with no 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 unloading end
  - in-process indication
  - cycle & phase info
  - chamber temperature and remaining cycle time
- cycle complete: green led
- fault indication: red led
- independent full process tamperproof verification recording system
- 32 Mb Flash card
- information:
- name of institution
- date & time
- machine number
- user identification
- non-resettable cycle/batch number
- cycle name and configuration

- cycle start and end time
- temperature recording throughout the cycle
- detergent dosage verification
- pressure registering
- fault identification and registering
- CheckSum
- special service and maintenance control and notifying system
- notice to carry out routine control
- malfunction identification in text format
- adjustment of controls
- calibration of measuring instruments
- manual override step by step
- component test mode
- error listing
- updates by a PC and CF card
- 4 independently removable, sliding wash shelves
- automatically connecting / closing wash arm connectors
- 5 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 by a pump
- independent detergent dosage volume measuring
- indication for insufficient volume of chemicals to complete cycle
- sliding draw for process chemical containers
- boss entry port for test temperature sensor leads
- high efficiency dryer with a pre-filter and a HEPA filter Class H13
- ventilation connection provided with a spigot up-stand sleeve and condensate back-flow protection
- filter quality monitoring and change indication system
- drying mode may be used individually
- load temperature protection and overtemperature cut-outs
- automatic foam and washing water pressure control system
- opaque cold and hot water connection hoses 1/2“ BSP
- drain outlet diameter 50mm
- automatic pipework purging system
- sound and heat insulated
- height adjustable feet
- stainless steel side panelling
- back syphon Type A air gap protection
- shut-off isolator valves
- mutable process complete buzzer
- Deko Cycle Data Viewer software for reviewing archived cycle data

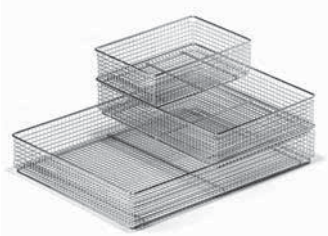


OPTIONS

- excluding dryer
- shockproof thermally insulated double glass window(s)
- bar code scanner
- cordless bar code scanner
- ethernet connection for real time observation and process data archiving
- network printer connection
- integrated Process verification serial ink printer
- autoprint
- with a 64 or, 128 Mb Flash card
- max. 2 extra detergent pumps
- max. 2 adjustable rinse aid pumps
- solenoid valve, feed pump and hose for purified water

Instruments

381 170
Utensil basket
incl. lid
340 x 250 x 200mm



381 200
Instrument wire tray 1/1
450 x 340 x 70 mm

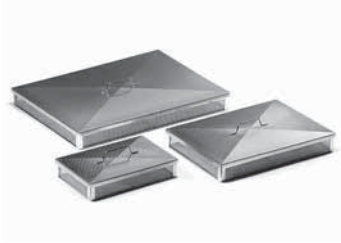
381 201
Lid for 381200

381 210
Instrument wire tray 1/2
340 x 250 x 70 mm

381 211
Lid for 381210

381 220
Instrument wire tray 1/4
250 x 170 x 70 mm

381 221
Lid for 381220



381 202
Fine mesh tray
430 x 320 x 50 mm

381 203
Lid for 381202

381 212
Fine mesh tray
320 x 230 x 50 mm

381 213
Lid for 381212

381 222
Fine mesh tray
230 x150 x 50 mm

381 223
Lid for 381222

381 300
Deko ½ universal basket
440 x 290 x 180 mm

381 301
Divider

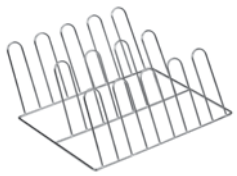
381 100
Sterilization basket
585 x 395 x 195 mm
• stackable in and on top of each other

381 110
Sterilization basket
585 x 395 x 100 mm

381 101
Divider grid for 381100

381 102
Compartment grid for
20 sterilization pouches
• fits into sterilization baskets

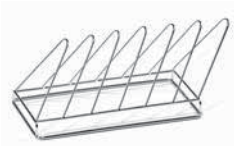
381 103
Lid for sterilization
baskets, 600 x 400 mm



381 460
Shoe rack,
28 holders

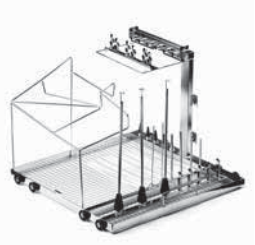
381 483
Insert for Oras shower
heads and hoses
• 7 sets

381 684
Rack for Speculas



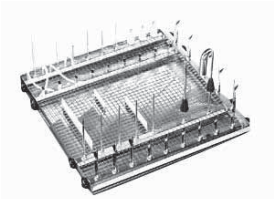
381 685
Holder for kidney dishes

381 310
Rack for Anaesthetic
equipment

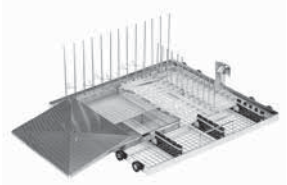


381 314
Rack for AN equipment
• long hoses

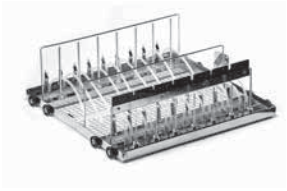
381 209
Tray for 6 Opto instruments
• includes tray 381210



381 1318
Rack for optics, hoses
and rigid scopes



381 340
Rack for rigid scopes
• incl. fi ne mesh tray
381212 and lid 381213



381 343
Rack for laparoscopes
• incl. trays 381210, 381212 and
lids 381211, 381213

381 350
Rack for Bird hoses
• incl. 2 x tray 381220

381 360
Rack for suction hoses

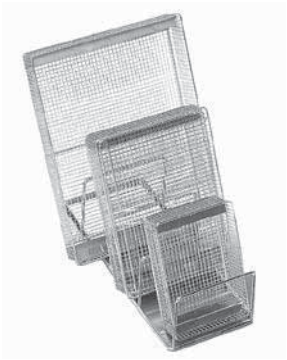
381 365
Rack for milk bottle
nipples, incl. lid
• 48 jet tubes, H 50 mm

381 370
Rack for optical equipment
N 119 348
Replacement sieve
for rack 381 370

381 686
Rack for hollow
instruments

PV6 666 2
MIS-rack

Dental



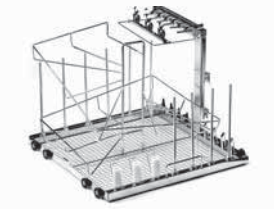
381 205
Instrument tray 1/1
with end plates, 450 x 340 x 70 mm
381 201
Lid 450 x 340 mm
381 215
Instrument tray ½
with end plates, 340 x 250 x 70 mm
381 211
Lid 340 x 250 mm
381 225
Instrument tray ¼
with end plates, 250 x 170 x 70 mm
381 221
Lid 250 x 170 mm
381 216
Holder for 3 instrument trays

381 217
Basket for e.g. dental mirrors
• incl. basket 381219
250 x 170 x 100 mm

381 230
Fine mesh box 90 x 90 x 40 mm,
incl. lid for small items
381 235
Instrument tray
250 x 100 x 70 mm

381 227
Carrier for dental
250 x 170 x 70 mm
• 30 angle pieces
• only for outer cleaning

381 385
Rack for dental hoses



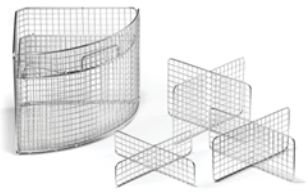
381 397
Dental hose rack

381 625
Dental tray rack 1/1 for
base wash level
• for 24 pcs trays

381 626
Dental tray rack ½ for
base wash level
• for 12 trays

381 640
St/st tray
280 x 180 x 16 mm

Laboratory



381 500
Sector basket, H 135 mm

381 501
Lid

381 502
Divider, H 50

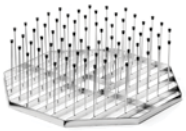
381 503
Divider, H 90

381 503
Divider, H 125

381 503
Divider, H 180

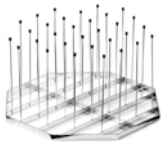
381 510
Sector basket, H 210 mm

381 515
Peg rack
12 pcs

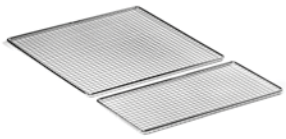


381 520
Peg rack
H 150 mm, 72 pcs

381 530
Peg rack
H 250 mm, 26 pcs



381 535
Pressure lid, diam. 520 mm
• for peg racks 381520 and 381530



381 531
Pressure lid 1/1
600 x 600 mm

381 532
Pressure lid ½
600 x 300 mm

381 540
Basket for microscope slides
• 120 compartments 26 x 8 mm
• incl. basket 381219 and lid 381221

381 550
Compartment for culture dishes - 48 pcs 360 x 345 x 140 mm
• compartments 102 x 16 mm

381 555
Bottle washing rack, includes support stars
• 54 pcs
• Standard version:
27 pcs: D8, H150 mm
27 pcs: D6, H100 mm
• replaceable tubes

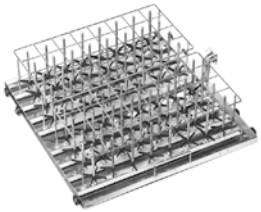
381 725
Tension key for spray tubes

381 580
Half circle tray for beakers

381 590
Pipettes washing trolley

389 000 B
Tailor-made racks for large bottles per specific dimensions

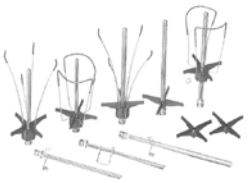
Bottles



381 603
Bottle washing rack with compartments, support stars. Tailor-made per specific dimensions.

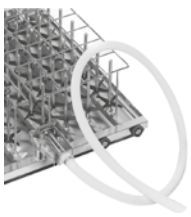
381 700
Bottle washing rack, 150 gr - 2 x 32 pcs
381 710
Bottle washing rack, 250 gr - 2 x 32 pcs
381 720
Bottle washing rack, 500 gr - 2 x 18 pcs

381 701
Bottle carrier, 150 gr.
381 702
Lid - 32 pcs
381 711
Bottle carrier, 250 gr.
381 712
Lid - 32 pcs
381 721
Bottle carrier, 500 gr.
381 722
Lid - 18 pcs



N23 658
Bottle support, D8 mm
N23 659
Bottle support, D6 mm
N23 674
Bottle support, D4 mm
N24 365
Height adjust. support D6 or D 8 mm
N24 366
Height regulator diam. 8 mm
N24 435
Height regulator diam. 6 mm
N24 436
Height regulator diam. 4 mm
381 556
Bottle support, D4 mm, standard height 120 mm
381 557
Bottle support, D6 mm, standard height 120 mm
381 558
Bottle support, D8 mm, standard height 180 mm

Spray tubes
N26 060 D
Spray tube cap
PV1 081 37
Plastic tube with silicone foil 3/4
PV1 055 22
Plastic tube with silicone foil 7/8
- incl. N66763 base, N66764 cap and NP66891 silicone foil



381 320
Testing connector for spray tube racks

Wash Shelves

374 073 A
Instrument middle shelf incl. wash arm

374 078 A
Middle shelf for laboratory equipment, incl. washing arm

Certified System
Quality
ISO 9001

rhima

Version 1.0

DEKO

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