

The new generation Washer-disinfectors for laboratories



Greater capacity.
Greater purity.
Greater flexibility.



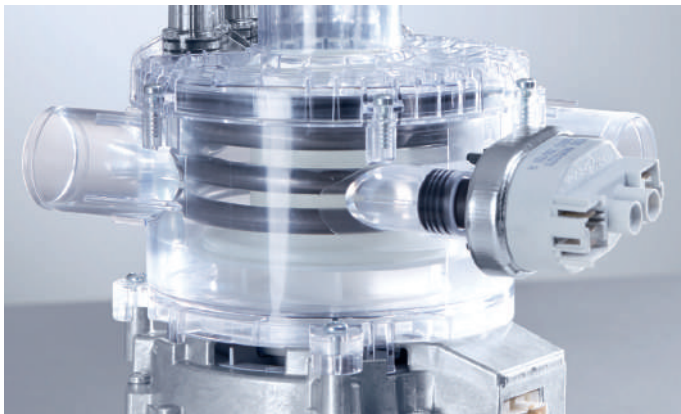
Miele advantages which pay their way

Miele washer-disinfectors represent a professional solution for laboratory glassware for analytical experiments. This approach is particularly gentle on materials and is recommended by leading manufacturers of laboratory glassware such as the DURAN Group.



Greater capacity

- High throughput capacity (up to 130 injector nozzles for laboratory glassware) is the result of optimised cabinet dimensions in combination with completely redesigned load carriers and results in savings in terms of time, space and investments.
- Rear docking frees up unobstructed space in load carriers.
- Laboratory glassware turnaround is increased and work is speeded up at peak hours.



Greater purity

- Excellent cleaning performance
- Variable-speed pump for perfect spray pressure in all programme phases
- Laser technology is used to weld the chamber sections to give a perfectly smooth, crevice-free finish for the ultimate in hygiene.
- No more heater elements in the wash chamber
- Multi-stage filtration system is highly efficient in removing particulate soil from water in circulation.
- Spray pressure and spray arm rotation is monitored in order to prevent any loss in circulation pressure or to immediately identify obstacles in the path of the spray arms.
- Conductivity monitoring ensures required water quality



Greater flexibility

- A new, modular basket concept offers maximum flexibility and intuitive operation as modules can be used in different combinations and can be reconfigured.
- Wide range of combination options to accommodate various load situations
- Reduction in number of load carriers needed saves both on investments and storage space
- In addition to a broad selection of standard programmes, programme customisation ensures cycles which perfectly suit the type of soil and the type and quantity of laboratory glassware

Innovations in their most compact form: Higher capacity – Greater purity – More flexibility

With the many innovations on board the new PG 8583 and PG 8593 washer-disinfectors, Miele Professional has taken reprocessing onto the next level. This model series is characterised by an intelligent combination of completely redesigned technical components, new application-specific programmes and a wide range of monitoring functions, offering safety and efficiency in reprocessing —
Innovation for greater performance and reliability.



Innovations in detail:

Convenience and ergonomics



Design and user interface

The modern design and the intuitive user interface make for the incredibly simple use of lab washers in the day-to-day running of laboratories.

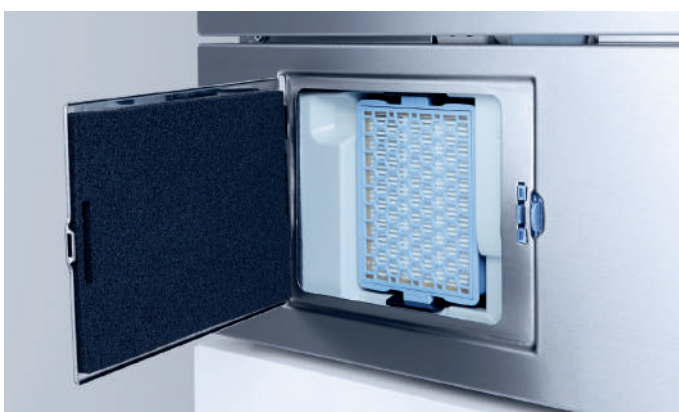
- The new control panel is the central design element and represents an intelligent combination of door handle and control panel. It consists of a single, flush stainless-steel surface with embedded 'touch-on-steel' controls.
- Inclined control panel for improved legibility
- 3-line text display and intuitive user interface for hassle-free operation
- Programmes catering for all disciplines and vacant programme slots for user-specific programmes
- Freely assignable direct-access buttons and individually selectable programme names for fast access to routine tasks
- Flush, smooth control panel and handle surfaces for simple wipe cleaning



Ergonomics

An easily accessible salt container in the door and the AutoClose functions simplifies the work of those operating these machines.

- The patented door salt container has a capacity of approx. 2 kg of salt. Replenishing the salt container no longer requires bending or stooping as the job can be performed standing upright. Similarly, there is no longer any need to remove heavy baskets and load carriers to access the salt container.
- AutoClose: Gentle pressure against the door is sufficient for it to be drawn closed and locked automatically. As a result, only a minimum of effort is required to reliably close and lock the door.



Highly efficient drying

Depending on the model, the new washer-disinfectors feature DryPlus hot-air drying or EcoDry to assist drying by releasing steam.

- EcoDry: The machine door automatically opens at the end of a programme once the temperature in the cabinet has dropped below 70°C. Hot, moisture-laden air is released, allowing the load to dry and cool down faster.
- DryPlus hot-air drying on the PG 8593 represents an ideal solution when dealing with intricate and narrow-lumened laboratory glassware and equipment. An upstream Class H13 HEPA filter ensures the reliable removal of particles from the air taken in for drying. The filter is easily accessible via a hatch in the front plinth.

Innovations in detail: High-performance technology for safe reprocessing



Patented variable-speed pump with brushless motor

The heart and soul of the new generation of washer-disinfectors and a USP is the variable-speed pump with integrated throughflow heater elements.

- Direct heating of water in circulation saves time
- High spray pressure in the cleaning phase to dislodge soil and provide the optimum conditions for cleaning complex and narrow-lumened instruments and laboratory equipment.
- Low spray pressure to ensure the uniform wetting of all surfaces in the neutralisation phase
- Particularly efficient use of water and energy by modulating spray pressure to suit needs
- Low-maintenance thanks to modern technology



Hygienic chamber

A completely redesigned chamber on the new washer-disinfectors enables high standards of hygiene and purity for analytical experiments.

- Laser technology is used to weld the chamber sections to give a perfectly smooth, crevice-free finish offering no nooks or crannies where blood or soil can accumulate
- The removal of heater elements from the chamber removes a further potential source of a build-up of contamination and eliminates the risk of plastic items melting on contact with the heaters
- Greater space in the chamber facilitates a higher capacity per cycle (e.g. 128 laboratory flasks or 98 pipettes together with other laboratory glassware)



Rear basket docking system

The relocation of the docking system for upper and lower baskets and load carriers to the rear of the chamber guarantees a more streamlined water and air circuit and improves the use of resources.

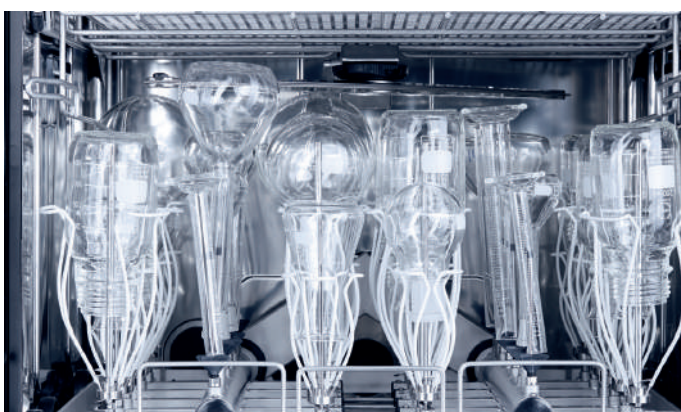
- Shorter circulation paths help minimise pressure losses and reductions in water temperature
- Automatically self-sealing valves when not in use ensure uniformly high spray pressure
- Use of same docking system to supply load carriers with water and hot air for internal drying



Optimised spray arms

The new spray arm design consistently improves on progress made on previous model series and ensures the ultimate in reprocessing reliability.

- Different nozzle forms ensure the forceful removal of persistent soil and the uniform wetting of wash loads
- Elimination of water reflections in spray curtain thanks to new arrangement of nozzles on spray arms
- Lower water consumption per cycle without any trade-off in terms of cleaning performance



Safety through constant checks

The new washer-disinfectors feature spray pressure and spray arm monitoring and some models also monitor water conductivity. These advanced sensors make a considerable contribution towards ensuring the reliability of reprocessing.

- Blockages caused by protruding load items are immediately detected
- Spray pressure losses as a result for example of excessive foaming is reliably detected
- Deviations from the selected conductivity level in the final rinse water are reliably detected.
- Thanks to integrated sensors, deviations from the programme parameters are immediately recognised, allowing rapid intervention on the part of users.

The new washer-disinfectors

PG 8583 and PG 8593



Washer-disinfectors	PG 8583
Width	600
Height, Depth [mm]	835 (820*), 600
Shortest cycle** [mins.]	19
Load capacity	Example: 128 laboratory flasks or 98 pipettes together with other laboratory glassware
EcoDry drying	
Depending on version, up to 2 integrated dispenser pumps for liquid products	

* Undercounter units
** Cleaning and disinfection



Washer-disinfectors	PG 8593
Width	600
Height, Depth [mm]	835 (820*), 600
Shortest cycle** [mins.]	18
Load capacity	Example: 128 laboratory flasks or 98 pipettes together with other laboratory glassware
Integrated DryPlus hot-air drying	
Integrated dispenser pump for liquid detergent	

* Undercounter units
** Cleaning and disinfection

Optimised cleaning programmes



The optimised programmes on the new PG 85 washer-disinfectors allow the improved chamber design, the high-performance spray technology and increased injector capacity to be utilised to the full.

All models also feature two vacant programme slots for freely programmable cycles to cater for individual needs. The result: superb reprocessing performance combined with high-level efficiency.

Injector Plus

The optimised water circuit via the rear-panel docking system and the modular accessories system allows 4 injector modules to be reprocessed on new-generation machines per cycle. The variable-speed pump ensures sufficiently high water pressure for reprocessing laboratory glassware in 4 injector modules without leaving any traces which may compromise analytical experiments.

Mini

The new Mini programme is characterised by particularly low consumption data. Compared with the Universal programme, this results in water savings of approx. 45% as well as lower consumption and shorter cycle times. The Mini programme is suitable for reprocessing slightly soiled loads, whereby the glasses concerned should be for example wide-necked and easily accessible to spray water (combination of upper and lower baskets with appropriate inserts or the number of injector modules per cycle limited to two).

Furthermore, models PG 8583 and PG 8593 each offer 2 vacant programme slots which can be used to cater for users' individual needs.

Programmes, cycle times, consumption

PG 8583	Cleaning				Energy	Drying	
	Cycle time [mins.]	CW [l]	HW [l]	AD [l]		Cycle time [mins.]	Energy [kWh]
Universal	33	4.5	31.5	18.5	1.7	3	–
Standard	28	5.0	14.0	18.5	1.7	2	–
Intensive	35	4.5	23.5	27.5	1.9	3	–
Anorganica	37	5.0	24.0	27.5	1.8	2	–
Organica	39	0.0	37.0	18.5	2.0	3	–
Injector Plus	38	6.0	42.0	24.0	1.8	3	–
Pipettes	41	7.5	37.5	45.0	1.8	2	–
Plastics	33	36.0	0.0	18.5	1.5	–	–
Mini	19	0.0	19.0	9.5	0.8	–	–
Oils	40	0.0	47.0	18.5	1.9	3	–
Special 93°C-10'	51	11.9	29.6	14.0	3.3	3	–
Demin. rinse	6	–	–	10.0	–	–	–
Rinse	4	10.0	–	–	–	–	–

PG 8593							
Universal	33	4.5	31.5	18.5	2.1	37	0.7
Standard	28	5.0	14.0	18.5	2.8	37	0.7
Intensive	35	4.5	23.5	27.5	2.3	37	0.7
Anorganica	36	5.0	24.0	27.5	2.4	37	0.7
Organica	38	–	37.0	18.5	1.8	37	0.7
Injector Plus	38	6.0	42.0	24.0	2.0	37	0.7
Pipettes	40	7.5	37.5	45.0	2.3	47	0.6
Plastics	33	36.0	–	18.5	1.6	52	0.7
Mini	18	–	19.0	9.5	2.3	37	0.7
Oils	39	–	47.0	18.5	1.6	37	0.7
Special 93°C-10'	51	11.9	29.6	14.0	1.5	79	1.4
Demin. rinse	6	–	–	10.0	1.6	–	–
Rinse	4	10.0	–	–	3.0	–	–
Drying	–	–	–	–	–	40	0.7

Heating: 8.5 kW (3N AC 400V 50Hz), connection to cold water (15°C), hot water (65°C) and demineralised water (15°C)

Competent and innovative



- Intensive development work and cooperation
- Trend-setting process development and product specifications







Innovations in detail:

Load carriers and inserts offering improved efficiency

In order to ensure that laboratory glassware and equipment is reprocessed safely and in a manner which retains its value, Miele Professional offers a wide range of accessories including upper and lower baskets, load carriers and inserts for a broad range of applications. With the introduction of the PG 85 series, the entire load carrier system has undergone a thorough reappraisal.

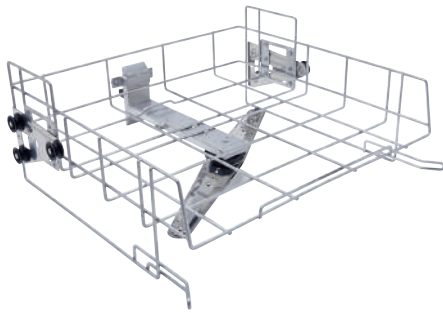
Improved efficiency

The new load carriers utilise the available space in the chamber to a higher degree, allowing more laboratory glassware and equipment and other load items to be washed in each cycle. Another benefit accrues from the redesigned water and air circuit: Wash liquor and drying air is fed along a shorter and streamlined circuit and with minimal pressure losses on their way to the spray arms and injector nozzles to best avail. Optimum pressure conditions are also created by the automatically self-sealing docking valves when not occupied. The modular nature of the new load carriers represents a further product benefit, facilitating future extensions.

Sample feature sets for medical applications / recommendations for washer-disinfectors	PG 8583	PG 8593
Sample feature set for laboratory glassware, basic	•	•
1 x A 101 upper basket, 1 x A 150 lower basket, 1 x A 300 module, 1 x A 301 module		
Sample feature set: High capacity and throughput	•	•
1 x A 100 upper basket, 2 x A 302 modules, 1 x A 150 lower basket, 2 x A 301 modules		
Sample feature set for pipettes and laboratory glassware	•	•
1 x A 150 lower basket, 1 x A 301 module, 1 x A 303 module		
Sample feature set for measuring cylinders and other laboratory glassware	•	•
1 x A 150 lower basket, 1 x A 301 module, 1 x A 306 module		
Sample feature set for long pipettes	•	•
1 x A 200 load carrier		

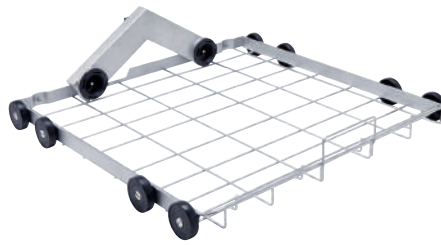
Sample feature set Laboratory glassware, Basic





A 101 upper basket/open front

- Open front
- For various inserts
- Height-adjustable
- Vertical clearance 160 +/-30 mm
- Built-in spray arm
- H 206, W 528, D 527 mm



A 150 lower basket for modules

- Lower basket with two docking pipes
- For the connection of up to two injector modules or inserts
- Automatically self-sealing docking valves
- H 154, W 528, D 546 mm



2 x A 300 modules/laboratory glassware 2 x 4

- For laboratory glassware, e.g. Erlenmeyer flasks, round flasks, laboratory bottles, measuring flasks and measuring cylinders
- 8 x E 352 injector nozzles (6 x 220 mm)
- 8 x E 354 spring clips for nozzles
- H 241, W 200, D 479 mm



A 301 module for laboratory glassware 3 x 6

- For laboratory glassware, e.g. Erlenmeyer flasks, round flasks, laboratory bottles, measuring flasks and measuring cylinders
- 6 x ID 110 injector nozzles with plastic supports (2.5 x 110 mm)
- 6 x E 351 injector nozzles (4 x 160 mm)
- 6 x E 353 nozzle supports
- 6 x E 352 injector nozzles (6 x 220 mm)
- 6 x E 354 nozzle supports
- H 241, W 232, D 479 mm



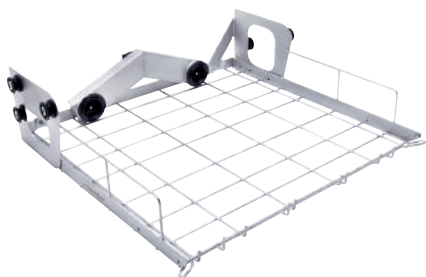
Optional: A 802 nozzle

- For use with washer-disinfector with powder dispensing (door)
- For use with injector modules to rinse out powder residue from door dispenser
- H 187, W 30, D 15 mm

Sample feature set

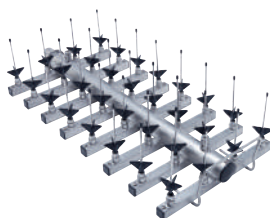
High capacity and throughput





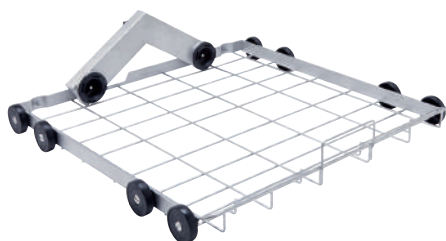
A 100 upper basket for modules

- Upper basket with two docking pipes
- For the connection of up to two injector modules or inserts
- Automatically self-sealing docking valves
- H 141, W 528, D 525 mm



2 x A 302 modules/laboratory glassware 4 x 8

- For laboratory glassware, e.g. Erlenmeyer flasks, round flasks, laboratory bottles, measuring flasks and measuring cylinders
- 32 x ID 110 injector nozzles with plastic supports (2.5 x 110 mm)
- H 132, W 215, D 479 mm



A 150 lower basket for modules

- Lower basket with two docking pipes
- For the connection of up to two injector modules or inserts
- Automatically self-sealing docking valves
- H 154, W 528, D 546 mm



2 x A 301 modules/laboratory glassware 3 x 6

- For laboratory glassware, e.g. Erlenmeyer flasks, round flasks, laboratory bottles, measuring flasks and measuring cylinders
- 6 x ID 110 injector nozzles with plastic supports (2.5 x 110 mm)
- 6 x E 351 injector nozzles (4 x 160 mm)
- 6 x E 353 nozzle supports
- 6 x E 352 injector nozzles (6 x 220 mm)
- 6 x E 354 nozzle supports
- H 241, W 232, D 479 mm



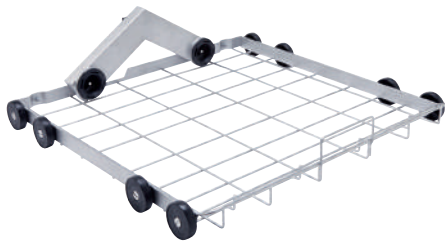
Optional: A 802 nozzle

- For use with washer-disinfector with powder dispensing (door)
- For use with injector modules to rinse out powder residue from door dispenser
- H 187, W 30, D 15 mm

Sample feature set

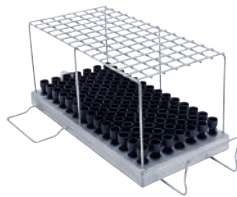
Pipettes and other laboratory glassware





A 150 lower basket for modules

- Lower basket with two docking pipes
- For the connection of up to two injector modules or inserts
- Automatically self-sealing docking valves
- H 154, W 528, D 546 mm



A 303 module for pipettes

- For e.g. 98 measuring and full pipettes
- Height of retaining frame 150 mm
- H 185, W 225, D 471 mm



A 301 module for laboratory glassware 3 x 6

- For laboratory glassware, e.g. Erlenmeyer flasks, round flasks, laboratory bottles, measuring flasks and measuring cylinders
- 6 x ID 110 injector nozzles with plastic supports (2.5 x 110 mm)
- 6 x E 351 injector nozzles (4 x 160 mm)
- 6 x E 353 nozzle supports
- 6 x E 352 injector nozzles (6 x 220 mm)
- 6 x E 354 nozzle supports
- H 241, W 232, D 479 mm



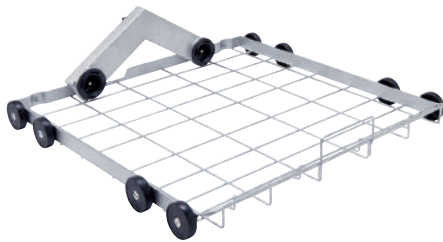
Optional: A 802 nozzle

- For use with washer-disinfector with powder dispensing (door)
- For use with injector modules to rinse out powder residue from door dispenser
- H 187, W 30, D 15 mm

Sample feature set

Measuring cylinders and other laboratory glassware





A 150 lower basket for modules

- Lower basket with two docking pipes
- For the connection of up to two injector modules or inserts
- Automatically self-sealing docking valves
- H 154, W 528, D 546 mm



A 306 module for measuring cylinders

- For laboratory glassware, in particular large-volume measuring cylinders
- Capacity: Either four 1 - 2 l tall measuring cylinders or two shorter 1 - 2 l measuring cylinders together with two taller ones can be accommodated simultaneously.
- Contact surfaces plastic coated
- H 418, W 235, D 471 mm



A 301 module for laboratory glassware 3 x 6

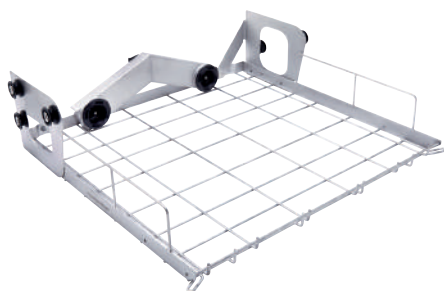
- For laboratory glassware, e.g. Erlenmeyer flasks, round flasks, laboratory bottles, measuring flasks and measuring cylinders
- 6 x ID 110 injector nozzles with plastic supports (2.5 x 110 mm)
- 6 x E 351 injector nozzles (4 x 160 mm)
- 6 x E 353 nozzle supports
- 6 x E 352 injector nozzles (6 x 220 mm)
- 6 x E 354 nozzle supports
- H 241, W 232, D 479 mm



Optional: A 802 nozzle

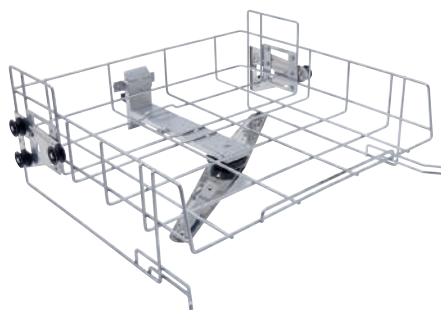
- For use with washer-disinfector with powder dispensing (door)
- For use with injector modules to rinse out powder residue from door dispenser
- H 187, W 30, D 15 mm

Upper and lower baskets, load carriers for use on PG 8583 and PG 8593



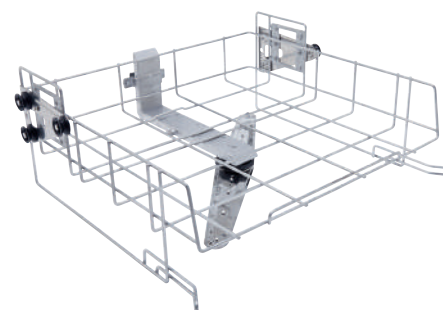
A 100 upper basket for modules

- Upper basket with two docking pipes
- For the connection of up to two injector modules or inserts
- Automatically self-sealing docking valves
- H 141, W 528, D 525 mm



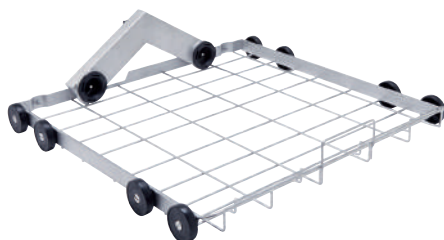
A 101 upper basket/open front

- Open front
- For various inserts
- Height-adjustable
- Vertical clearance 160 +/-30 mm
- Built-in spray arm
- H 206, W 528, D 527 mm



A 102 upper basket/open front

- Open front
- For various inserts
- Height-adjustable
- Vertical clearance 205 +/-30 mm
- Built-in spray arm
- H 206, W 528, D 527 mm



A 150 lower basket for modules

- Lower basket with two docking pipes
- For the connection of up to two injector modules or inserts
- Automatically self-sealing docking valves
- H 154, W 529, D 546 mm



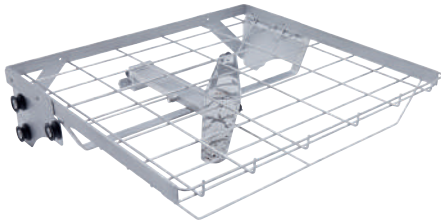
A 151 lower basket/open front

- For various DIN mesh trays and inserts
- Clearance dependent on type of upper basket used
- H 88, W 529, D 110 mm



A 202 load carrier

- For e.g. 4 DIN mesh trays on 2 levels
- Built-in spray arm
- Clearances from bottom:
 - Level 1 with base: H 95, W 519, D 485 mm, without base: H 135, W 494, D 500 mm
 - Level 2: H 135, W 516, D 462 mm
- 6 additional LuerLock connections for lumened instruments
- H 223, W 529, D 542 mm



A 103 upper basket/open front

- Open front
- For various inserts
- Vertical clearance 95 mm
- Built-in spray arm
- Particularly suitable for the reprocessing of DIN mesh trays and other shallow loads in combination with A 202 load carrier.
- H 133, W 528, D 528 mm



A 802 nozzle for injector modules

- For use with washer-disinfector with powder dispensing (door)
- For use with injector modules to rinse out powder residue from door dispenser
- H 187, W 30, D 15 mm

Injector modules for laboratory glassware

For use with A 100 upper basket and A 150 lower basket



A 300 module for laboratory glassware 2 x 4

- For laboratory glassware, e.g. Erlenmeyer flasks, round flasks, laboratory bottles, measuring flasks and measuring cylinders
- 8 x E 352 injector nozzles (6 x 220 mm)
- 8 x E 354 spring clips for nozzles
- H 241, W 200, D 479 mm



A 300/1 module for laboratory glassware 2 x 4

- For laboratory glassware, e.g. Erlenmeyer flasks, round flasks, laboratory bottles, measuring flasks and measuring cylinders
- 8 x ID 220 injector nozzles with plastic supports (6 x 220 mm)
- H 242, W 178, D 479 mm



A 301 module for laboratory glassware 3 x 6

- For laboratory glassware, e.g. Erlenmeyer flasks, round flasks, laboratory bottles, measuring flasks and measuring cylinders
- 6 x ID 110 injector nozzles with plastic supports (2.5 x 110 mm)
- 6 x E 351 injector nozzles (4 x 160 mm)
- 6 x E 353 nozzle supports
- 6 x E 352 injector nozzles (6 x 220 mm)
- 6 x E 354 nozzle supports
- H 241, W 232, D 471 mm



A 301/2 module for laboratory glassware 3 x 6

- For laboratory glassware, e.g. Erlenmeyer flasks, round flasks, laboratory bottles, measuring flasks and measuring cylinders
- 18 x ID 160 injector nozzle with plastic support (4 x 160 mm)
- H 181, W 220, D 479 mm



A 301/3 module for laboratory glassware 3 x 6

- (not illustrated)
- For butyrometers
- 18 x SD-B injector nozzles for butyrometers
- H 261, W 180, D 479 mm



A 302 module for laboratory glassware 4 x 8

- For laboratory glassware, e.g. Erlenmeyer flasks, round flasks, laboratory bottles, measuring flasks and measuring cylinders
- 32 x ID 110 injector nozzles with plastic supports (2.5 x 110 mm)
- H 132, W 215, D 479 mm



A 301/1 module for laboratory glassware
3 x 6

- For laboratory glassware, e.g. Erlenmeyer flasks, round flasks, laboratory bottles, measuring flasks and measuring cylinders
- 18 x E 351 injector nozzles (4 x 160 mm)
- 18 x E 353 nozzle supports
- H 181, W 216, D 479 mm



A 302/1 module for laboratory glassware
4 x 8

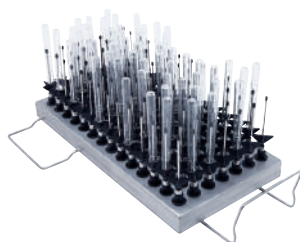
- For laboratory glassware, e.g. Erlenmeyer flasks, round flasks, laboratory bottles, measuring flasks and measuring cylinders
- 32 x E 351 injector nozzles (4 x 160 mm)
- 32 x E 353 nozzle supports
- H 181, W 235, D 479 mm

Injector module and load carrier for pipettes and phials for use on PG 8583 and PG 8593



A 303 module for pipettes

- For e.g. 98 measuring and full pipettes
- Height of retaining frame 150 mm
- H 185, W 225, D 471 mm



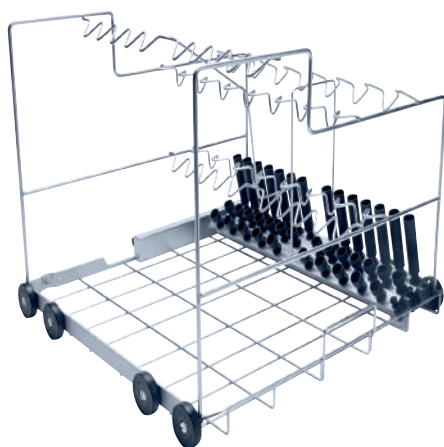
A 304 module for phials

- For 98 tubes, e.g. centrifuge tubes, phials, test tubes or autosampler tubes
- H 130, W 222, D 471 mm



A 306 module for measuring cylinders

- For laboratory glassware, in particular large-volume measuring cylinders
- Capacity: Four 1 - 2 l tall measuring cylinders or two shorter 1 - 2 l measuring cylinders together with two taller ones can be accommodated simultaneously.
- Contact surfaces plastic coated
- H 418, W 235, D 471 mm



A 200 load carrier

- For 38 pipettes in 3 rows
- 1st row 10 pipettes – 100 ml, holder spacing 20 mm
- 2nd row: 14 pipettes, 25 ml, holder spacing 26 mm
- 3rd row 14 pipettes – 10 ml, holder spacing 26 mm
- H 397, W 529, D 546 mm



Accessories for reprocessing with fully demineralised water



PG 8595 Aqua Purificator

Housing unit for 2 water demineralisation cartridges VE P 2000 / VE P 2800

- Compatible with PG 8583, PG 8593
- Generally recommended quality for final rinse < 19 $\mu\text{S}/\text{cm}$
- H 835 (820), W 300, D 600 mm
- Freestanding unit, can be built under
- Outer panelling in stainless steel or white



CM ConductivityMeter

Conductivity module for water demineralisation cartridges VE P 2000 and VE P 2800

- Single-line, illuminated display
- 10-point measurement in 0 - 199.9 $\mu\text{S}/\text{cm}$ range.
- Optical and acoustic 'change cartridge' indicator
- Optical and acoustic fault indicator
- Wall bracket
- Connection to external LED (optional)
- The device comes with a sensor cell and 3/4" hoses for connection to the cartridge and the machine.
- H 118, W 235, D 110 mm
- Input: 100 - 240V, 50/60 Hz, 85 mA;
- Output: 9V, 400 mA, 3.6 VA



VE P 2000

Water demineralisation cartridge, charged

- Pressure-proof stainless-steel cartridge
- H 410, \varnothing 230 mm
- Complete with vent and pressure relief valve
- Contains 12.5 l of reusable mixed resin



VE P 2800

Water demineralisation cartridge/ charged

- Pressure-proof stainless-steel cartridge
- H 570, Ø 230 mm
- Complete with vent and pressure relief valve
- Contains 19 l of reusable mixed resin



LP 2800

Water demineralisation cartridge, empty

- Can be charged with 19 l of single-use resin

E 315 disposable resin

- 20 l homogenous, mixed-bed resins for LP 2800
- Box with 2 x 10 l bags, vacuum-sealed in plastic bags
- Replacement filter bag

E 316 refill set

- Plastic barrel with lid and funnel for 30 l of disposable resin

SK fast-action coupling

for water demineralisation cartridges

- Conversion kit for simple replacement of cartridges consisting of:
- 2 x VA adapters from 3/4" to fast-action for direct connection to cartridge
- 2 x fast-action couplings with 3/4" PVC double nipple including gaskets for existing set of hoses.

UfZ conversion kit for spare cartridges

- If two cartridges are used, the 2 x VA 3/4" connections can be screwed onto the second cartridge. This obviates the need to disconnect the connections from the first cartridge.

Accessories for dispensing process chemicals



PG 8596 dispenser unit

Housing unit for process chemicals and dispenser modules

- H 835 (820), W 300, D 600 mm
- Compatible with PG 8583, PG 8593
- Freestanding unit, can be built under
- Unit with removable door
- Outer panelling in stainless steel or white
- Interior dimensions: H 690 / 380 / 285 mm (top drawer removed / lower / upper drawer), W 250 mm, D 555 / 425 mm (without / with drip tray and dispenser modules)

2 levels:

Removable telescopic drawers with drip tray liners for canisters containing process chemicals

Canister sizes

Accommodates a total of 6 x 5 l canisters (L 245 x W 145 x H 225 mm*).

Lower drawer offers space for larger canisters:

- 2 x 10 l, 140 x 193 x 307 mm
- 2 x 10 l, 223 x 203 x 321 mm
- 2 x 10 l, 229 x 193 x 323 mm
- 2 x 10 l, 194 x 204 x 353 mm
- 1 x 20 l, 289 x 233 x 396 mm
- 1 x 25 l, 288 x 234 x 456 mm

* Only possible with DOS K 85/1 dispenser with short siphon.



DOS K 85/1 dispenser module

- For liquid alkaline detergents and chemical disinfectants, neutralising agent
- Peristaltic pump, adjustable via machine's electronic controls
- Integrated dispenser monitoring function ensuring high level of process security
- Short siphon (200 mm) for 5 l canister, incl. level fill monitoring
- Length of connection cable: 3.00 m
- Length of suction hose: 1.80 m



DOS K 85 dispenser module

- As DOS K 85/1
- But with long siphon (300 mm) for 5 l and 10 l canisters
- Option: Conversion kit, Part no. 5458034, for siphon (10-30 l containers) available from Spares.

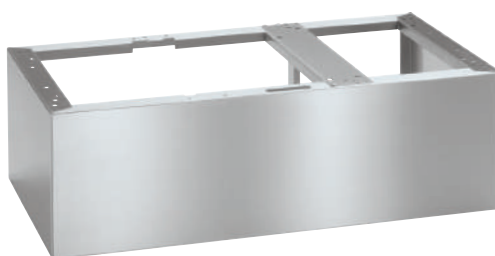
Accessories

Plinths



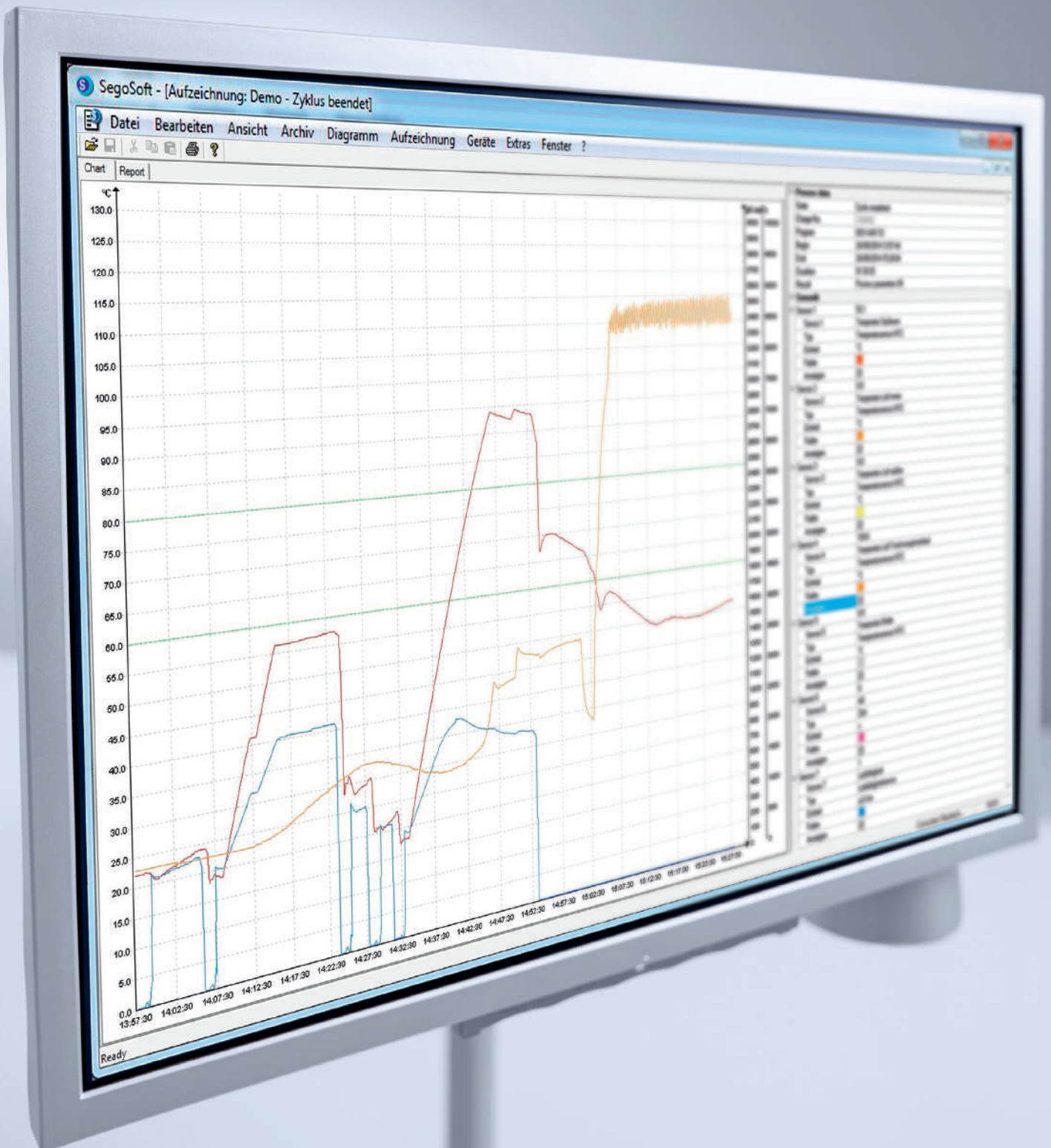
UG 30-60/60-85 plinth

- For use on PG 8583 and PG 8593
- Stainless-steel plinth, bolted to machine
- H 300, W 600, D 600 mm



UG 30-90/60-85 plinth

- For use with PG 8583 and PG 8593 in combination with PG 8595 or PG 8596
- Stainless-steel plinth, bolted to machine
- H 300, W 900, D 600 mm



Process documentation options

Miele Professional offers its own complete process documentation package. This also operates in conjunction with Miele's new washer-disinfectors from the PG 85 series and comprises Segosoft Miele Edition documentation software and tailored communication modules and accessories. This approach guarantees gap-free documentation of reprocessing, representing a clear benefit to patients and healthcare staff alike and offering certified legal security.

Comprehensive

The user-friendly Segosoft Miele Edition allows full traceability and secure documentation of washing and disinfection as well as all other processing stages not involving washer-disinfectors (sterilisation, testing, heat-seal pouching).

- Automatic recording of process protocols, routines checks and maintenance work
- Digital and conventional records
- Legally compliant documentation

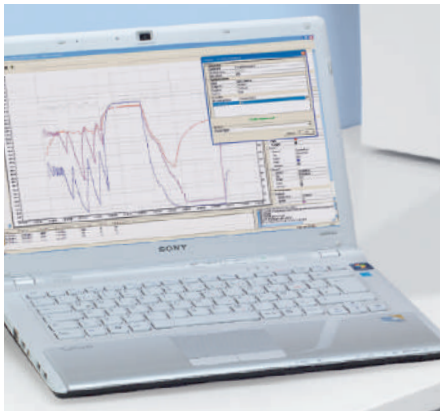
Flexibility

Depending on the requirements of the installation location, documentation can be performed using two different communication modules.

- RS232 module: Basic solution for small installations, connection of the PRT 100 protocol printer and connection of the Segosoft Miele Edition via USB
- Ethernet module: Standard communication module with extended functionalities (auto-configuration, graphic protocols, update-enabled) and hence particularly suited to direct connection to a PC or a network.

Process documentation options

The new washer-disinfectors offer a variety of approaches to documentation. This makes it possible to tailor systems to meet the various needs of laboratories.



1. Direct link to a PC

A Miele washer-disinfector is connected direct using the Ethernet module to a computer running the Segosoft Miele Edition. In this case, cable lengths of up to 13 m are possible, allowing the PC to be installed in the laboratory or in a neighbouring room.

- Short distances and simple handling by approving loads on-site.
- Most flexible approach to connecting two or more units in hygiene room.
- Automatic data transfer from machine to software.



2. Network connection

A washer-disinfector is linked up to the laboratory's own computer network via an Ethernet module. This allows data to be processed on a central PC.

- Use of existing computer for documentation
- Automatic data transfer from machine to software



3. Documentation via USB

Process data is saved on a USB flash memory connected to a washer-disinfector via the RS232 communication module. Data can then be later read out on a PC using the Segosoft Miele Edition and processed.

- Low level of investments in computer and network infrastructure
- Use of existing laboratory computer

Segosoft® Miele Edition



4. Process documentation via printer
 Process data printouts via PRT 100 protocol printer connected via RS232 communication module. Paper printouts are filed for future reference.

- Particularly simple approach
- Paper-printed protocols
- Long or short protocol format

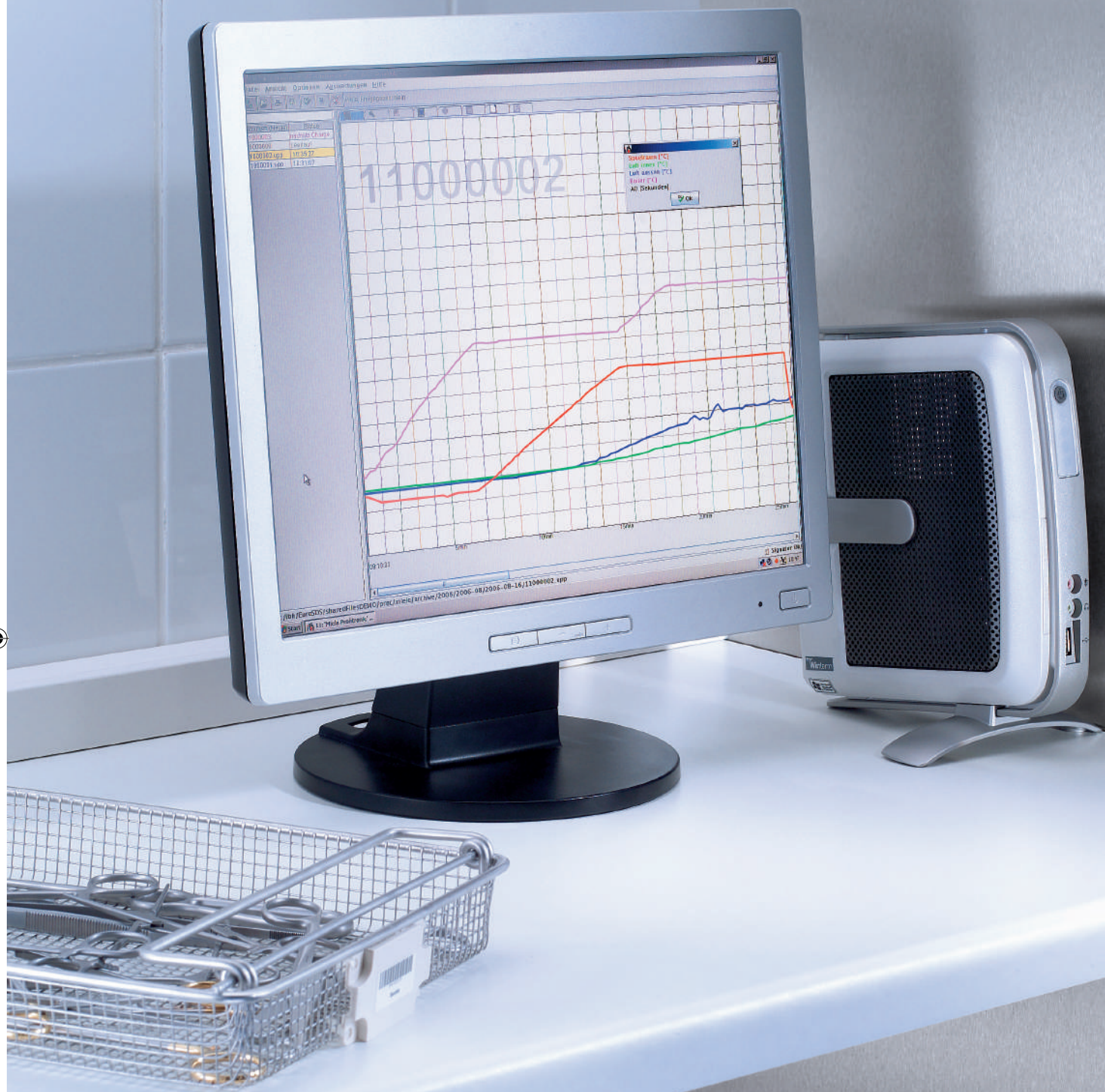
SegoSoft Miele Edition 7
 Apart from the Ethernet module, no further hardware is required to connect a machine to Segosoft Miele Edition 7, (e.g. converters or adapters, etc.). Alongside the online activation of licences and automatic configuration of software for fast and simple commissioning, automatic signature updates are also possible during operation.

- Use with initial or additional licence
- Documentation in PDF/A1 format
- Long-term archiving according to ISO 19005-1:2005
- Level of security certified by BSI (German Office of Data Security)

- XKM RS 232 10 Med**
- RS 232 module
 - Basic USB solution for printer connection
 - Memory for up to 25 short/long protocols, no graphic protocols
- XKM 3000 L Med**
- Ethernet module
 - Universal solution for PC and network connection
 - Extended functionalities (updates)
 - Ring buffer for up to 30 process protocols and 2 graphic protocols



Comparison of documentation options				
	Direct PC connection	Network connection	Documentation via USB	Printer
Documentation: Process protocol	•	•	•	•
Documentation: Temperature/pressure charts	•	•	–	–
Documentation: Routine checks	•	•	•	–
Documentation: Maintenance	•	•	•	–
Advanced digital signature with reference to user	•	•	•	–
Manual approval with signature	–	–	–	•
Digital approval with user name/password	•	•	•	–
Convenience of short distances within laboratory	+++	++	++	+++
Paperless filing	•	•	•	–
Data backup function	•	•	•	–
Legal security	•	•	•	•
Initial outlay	+++	+++	++++	+
• = available – = not available + = evaluation scale				



NetBox.2

Process documentation system

The NetBox2 is a complete documentation system including pre-configured software. The system is connected via an interface to the washer-disinfector. The NetBox2 collects all relevant process data during washing and disinfection programmes. In standard mode, the unit harvests data fully automatically without any involvement on the part of the user. This means maximum operating safety as the NetBox2 provides considerable protection against operating errors. Once collated, process data remains in memory; the NetBox has the capacity to save up to 1000 batch protocols. Later, data can be saved to a network or a storage device. In network mode, the unit can be monitored and operated via a PC interface. A flat-screen monitor is also available as an optional extra to plot time/temperature curves. A further optional extra is a barcode scanner or RFID transponder to facilitate the fast and simple identification of loads. The user can also approve or lock batches, depending on process cycles.

Effective process documentation system requirements

- Complete system with high level of process security, including pre-installed and configurable software
- Tamper-proof
- Simple operation without knowledge of PCs
- Extremely simple installation
- Process visualisation
- Batch-related documentation
- Documented load approval
- Optional long-term archiving as XML files
- Touch screen controls
- Scanner interface
- Machine status monitor
- Archiving of cycle data
- Transfer of load/approval data to EuroSDS®
- Provision of load / approval data for external documentation systems
- Web interface

System components

- NetBox2 with keypad and mouse plus cables for connection to washer-disinfectors

Optional:

- Flat screen for process visualisation and load data capture
- Barcode scanner (with connection lead or wireless using Bluetooth technology) to simplify machine operation and load data capture
- RFID transponder as alternative to barcode system
- Ethernet switch with 4 ports
- Network cable if access via network
- The process documentation software is optionally available as a software-only solution for installation on a Windows PC.

Date of commissioning:

The NetBox2 is connected by a Miele Service technician. If integration into an in-house computer network is required, a member of the customer's IT department must be available on site.

Miele & Cie. KG,
Gütersloh, Germany
www.miele-professional.com

Forever Better

Since 1899, Miele - a family run company - has subscribed to a corporate philosophy condensed into the two words 'Forever better'. Two words which form the bedrock for the highest of quality and production standards and have given rise to the innovating prowess of a brand 'Made in Germany'. A brand promise which gives commercial users the certainty of having chosen the right product.

Award-winning

An unerring focus by Miele Professional on top quality and dependability is the reason why Miele has been repeatedly voted best and most reliable brand by users. In major consumer surveys, Miele's product brand also comes out top in the 'Fair production conditions' category.

Single-source supplier

Miele Professional offers commercial users durable and long-lasting laundry machines, dishwashers, washer-disinfectors and sterilisers together with accessories and standards of service and pre-sales advice which are of a similar quality. And, if things should go wrong, Miele's after-sales service operation has been acclaimed for many years in succession for its excellence.