# Washer disinfectors
## for laboratory glassware
## G 7883–G 7736 CD

Miele
PROFESSIONAL

I.C.T, S.L.
INSTRUMENTACIÓN CIENTÍFICO TÉCNICA

# Washer disinfectors for laboratory glassware

**NEW G 7883 Mielabor**
Washer disinfector
- Control system: Multitronic Novo plus with 8 Standard cleaning programmes
- Capacity:
  39 narrow necked flasks
  or 116 pipettes
  or 1600 test tubes
- H 850 (820), W 600, D 600 mm

**Product information** **Page 9**
**Technical data** **Page 34**

**NEW G 7883 CD Mielabor**
Washer disinfector
- Features the same as for the G 7883
- Integrated hot-air drying unit and storage drawer for liquid agent supply canisters
- Capacity:
  37 narrow necked flasks
  or 96 pipettes
  or 1600 test tubes
- H 820 (850), W 900, D 700 (600) mm

**Product information** **Page 9**
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**NEW G 7835 CD**
Washer disinfector
- Control system: Freely programmable “Profitronic” controls
- Integrated hot-air drying unit and storage drawer for liquid agent supply canisters
- Capacity:
  37 narrow necked flasks
  or 96 pipettes
  or 1600 test tubes
- H 820 (850), W 900, D 700 (600) mm

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**G 7736 CD**
Washer disinfector
- Control system: Freely programmable Micro Computer Unit (MCU)
- Integrated hot-air drying unit and storage drawer for liquid agent supply canisters
- Capacity:
  66 narrow necked flasks
  or 96 pipettes
  or 1600 test tubes
- H 1160, W 900, D 700 (600) mm

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**Note**
For details of other Miele washer disinfectors for laboratory glassware see page 19 and our brochure for large machines:
Washer disinfectors for laboratory glassware
G 7825–G 7828

# Added Miele benefits

**Innovative market leader**
- Miele has been at the forefront of developing cleaning and disinfecting machines for several decades
- Standardised cleaning processes are an important part of quality assurance GLP or GMP)


**Legendary Miele quality**
- Advanced technology, high quality, made in Germany
- Product development and production are in accordance with DIN EN ISO 9001 quality assurance standards
- Miele have been awarded the internationally acclaimed DIN EN ISO 14001 certification for environment management

**Safety**
- The final rinse is carried out with purified water for analytically clean laboratory glassware
- Injector units for processing narrow necked laboratory glassware
- Process documentation and data networking
- Thermal disinfection for hospital laboratories and the bio-technology industry (cleaning and final rinse at temperatures of up to 95°C)


**Excellent support from the drawing board to implementation**
- Thorough analysis and cost assessment according to your requirements
- Detailed planning with drawings
- Thorough product specific training and induction programme


**The complete package from one source**
- Flexible solutions for professional and economical preparation of laboratory glassware
- Baskets and inserts for a wide range of glassware
- Practical accessories: Mobile units and trolleys, water purification and softening systems


**Comprehensive support system**
- Highly trained Miele advisors
- Large dealer network
- Extensive network of highly qualified Miele technicians
- Maintenance and service contracts

# Miele: The professionals in processing laboratory glassware

**Manual versus machine preparation**
Many laboratories choose to use washer disinfectors for processing their laboratory equipment such as beakers, pipettes, measuring flasks, conical and Erlenmeyer fasks, Petri dishes, test tubes etc.

One reason is to avoid the danger posed by manually handling potentially dangerous equipment. Broken glass from manual cleaning, for instance, can cause dangerous injuries. Infectious and toxic contaminants pose a health hazard. Cleaning agents used often contain substances that are highly irritant.

Because washer disinfectors operate as a closed system with programmes that run fully automatically, the potential danger to laboratory personnel can be kept to a minimum This in turn means that machine preparation provides personnel with maximum protection.

Machine preparation also ensures that preparation can be standardised, validated and documented.

Laboratories use a wide variety of equipment made from glass, ceramic ware and plastic for testing and analysis, for isolating or cleaning substances before, during and after procedures, taking samples etc. Following on from this cleaning and drying are essential. The cleaning process must ensure that equipment, when used again, is not affected by its previous use.

The scenario will vary a lot from one laboratory to the next. To establish which machines and accessories, cleaning agents, water quality and cleaning programmes are the best ones for your needs the following aspects need to be considered:

**1) Application**
The application needs to be divided up into general areas first (organic, inorganic or physical chemistry, biology, microbiology, hospital, pharmaceutical, food industry, or cosmetic industry laboratory etc.) and then into areas of application or working practice (preparation work, analysis, test sampling etc.). The type of application will also be an important deciding factor in the type of machine and accessories as well as the cleaning process and selection of cleaning agents required.

**2) Laboratory equipment**
Laboratory equipment needs to be broken down into its various components (beakers, conical flasks, measuring flasks and cylinders, pipettes, Petri dishes, test tubes, phials, centrifugal test tubes etc.), their size or volume (1 ml, 500 ml, 1,000 ml) and the number of items requiring processing. This information will enable us to provide a detailed quotation of the right system for your requirements.

**3) Contamination**
Knowledge of physical and chemical attributes of the types of contamination the machine will need to deal with are of particular importance in choosing the cleaning process and type of cleaning agent to use.

Physical and chemical properties of a contaminant include, for instance, its solubility in water under acid, pH-neutral or alkaline conditions, its chemical reaction to hydrolysis or oxidation, its melting or softening point, its ability to emulsify, its suspension or dispersing properties.

**4) Disinfection**
For certain applications laboratory equipment has to be disinfected. On the one hand this protects laboratory personnel who come into contact with infectious contaminants at work. And on the other disinfection prevents bacterial cross contamination of test samples and instruments in medical laboratories, hygiene institutes, pharmaceutical laboratories, food and cosmetic industry laboratories.

**5) Analytical methods**
Methods of analysis used can be influenced by particular contaminants in laboratory glassware. Knowledge of these factors can help in selecting the correct cleaning agent.

**6) Analytically clean**
Each laboratory will have its own definition of “analytically clean” depending on the specification, nature and repeatability etc. of test methods used. The washer disinfector including all its accessories and the cleaning programme used must be able to achieve cleaning results that meet the standards required by the definition.

**Solution**
Because requirements vary from one laboratory to the next standard solutions are often not feasible. More often than not customers require solutions which are specific to their particular needs. By working together with laboratory personnel, Miele are able to provide tailor made solutions for individual requirements.

**The Miele systems cover all of the following aspects:**

- Cleaning, disinfection and drying
- Water preparation
- Detergent recommendations
- Cleaning programmes can be programmed and evaluated

# Systematic preparation of laboratory glassware

**Cleaning and drying**
The Miele system consists of the following components:
- Washer disinfector
- Baskets and inserts for laboratory equipment

Miele's G 7883– G 7736 CD washer disinfectors are single cabinet systems in which the whole process takes place (wash, rinse and disinfection if applicable, followed by drying) in a closed system. The cleaning process is carried out with injectors using water based agents. Programmable Profitronic and MCU controls enable programmes to incorporate specific process parameters (temperature, time, amount of cleaning agents etc.) for the cleaning task in hand. With the Multitronic Novo plus controls specific process parameters can also be changed in standard cleaning programmes. The controls are able to monitor and maintain the relevant process parameters ensuring consistent standards of cleanliness. Other features and options, such as heating for the process water, dispensers for acidic, ph-neutral or alkaline cleaning agents, high performance circulation pumps, hot air drying units and automatic mobile unit recognition enable cleaning processes to be carried out fully automatically.

Miele offer a wide range of mobile units as well as baskets and inserts for laboratory glassware processing. There are injector jets for pipettes and measuring flasks, conical and Erlenmeyer flasks. Injector jets ensure thorough internal cleaning, rinsing and drying of laboratory glassware. Rotating spray arms ensure thorough external cleaning and rinsing.

There are special inserts for holding beakers, Petri dishes, wide necked bottles and Erlenmeyer flasks and test tubes securely. These can be placed in the lower or upper basket. The spray arms in the machine and in the upper basket ensure excellent internal and external cleaning and rinsing results.

**Water preparation**
Very often different quality water is required for different stages of a programme, e.g. for the wash and the rinse.
Usually the beginning of a wash programme would use softened water (pre-wash, main wash and first rinses). Using softened water prevents limescale building up in the machine as well as unwanted side effects during the cleaning process.

Fully demineralised purified water is then used in the final rinsing stages. This water quality ensures the very best surface cleanliness of laboratory glassware. However, to ensure this level of cleanliness any contamination must first be removed.

**Cleaning agent**
Cleaning agents can generally be split into 3 groups.
- alkaline products
- pH neutral products
- acidic products

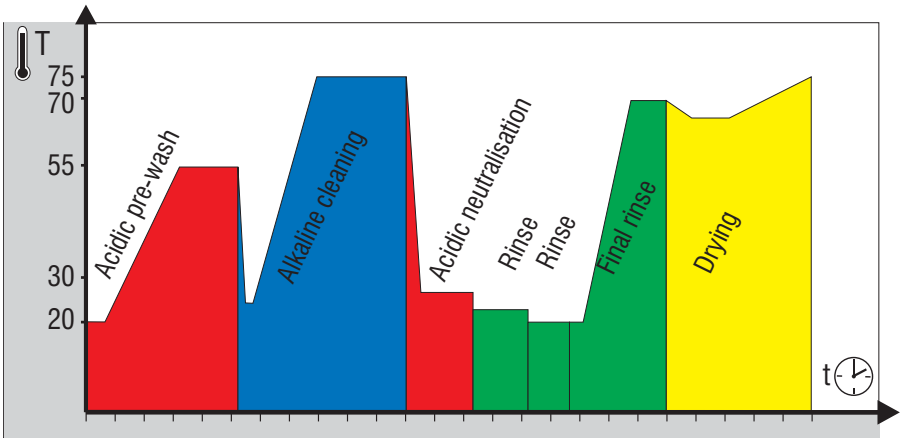
Alkaline cleaning agents are complex mixtures and can contain substances such as potassium or sodium hydroxide, silicates, cabonates, polycarbonates, complex compounds, tensides, enzymes, oxidation agents etc. The cleaning agent must be selected according to application and type of contamination on the equipment. For instance cleaning agents without tensides, but preferably with oxidation agents should be used for equipment used for plant and cell cultures. If samples are being analysed for phosphorous or phosphates in a laboratory, then the detergent should be phosphate or phosphonate free.

pH-neutral products generally contain tensides, emulsifiers or enzymes. They are occasionally used together with alkaline cleaning agents.

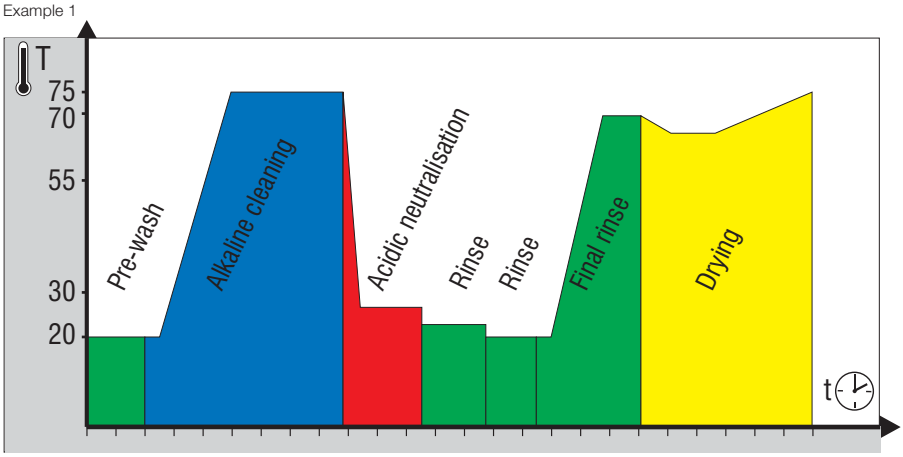
Acidic products are based on citric or phosphoric acid. They are often used for neutralisation of laboratory equipment after cleaning with an alkaline agent. Sometimes it is necessary to use a strong acidic cleaning agent, e.g. to remove limescale deposits from flasks used for water testing.

**Cleaning programme**
The wash programme consists of separate stages of a process carried out in the correct order using the appropriate cleaning agents. To create a suitable programme it is important to know the physical and chemical properties of the type of contamination being handled.
Many contaminants are water soluble or can be dissolved using alkalines (e.g. organic acids) or acids (e.g. amine and some metal oxides).
Chemical changes can convert some insoluble residues into soluble matter (e.g. alkaline hydrolysis of animal fats and oils into fatty acids and glycerine).
Other contaminants are virtually chemically inert and can only be broken down or emulsified using high temperatures and tensides (e.g. paraffin wax).
In certain circumstances dispensing the incorrect amount of cleaning agent, or running a programme with the process parameters set in the wrong order can lead to unsatisfactory results (e.g. running a hot pre-rinse on items contaminated blood will cause the blood to coagulate).

**Process assurance**
The aim of all laboratories is to carry out standardised processes which can be validated. In order to validate processes and working procedures these must be reproducible and be suitable for being documented. This requires a high degree of process assurance.
The controls used on Miele washer disinfectors can monitor validated procedures and working processes, e.g. they can:
- control and monitor temperature and time
- control the pressure of the recirculation pump
- control and monitor the amount of water used
- monitor level in the supply canisters and control the amount of liquid agents dispensed




Example 1




Example 2

The following examples are used to show two very different cleaning programmes:

**Example 1:**
Water testing laboratory
Analysis: inorganic materials
Laboratory equipment: Sample bottles
Programme: acidic pre-wash, alkaline cleaning, acidic neutralisation, 1–2 interim rinses, final rinse with fully de-mineralised water, drying

**Example 2:**
Institute for cell culture
Laboratory equipment: for cell growth
Programme: pre-wash, alkaline cleaning with oxidation agent, tenside and phosphate free, citric acid based neutralising agent, 2 interim rinses, final rinse with purified water, drying

**Laboratory glassware**

Most laboratory equipment is made from borosilicate glass. Unlike other types of glass (except: quartz glass) borosilcate glass has very good physical properties and is highly resistant to chemicals. Fluxing acids and strong suds will still etch into the surface of glassware if the concentration, temperature and effective periods are increased.
Because of this alkaline cleaning agents are generally used. If at all possible longer holding periods should be avoided at temperatures significantly higher than 70°C, and mildly alkaline cleaning agents should be used to reduce glassware corrosion to a minimum.
The deterioration rate of glassware must be taken into account according to its application. For instance etching on a simple beaker is not a major problem. However, could lead to inaccurate results with volumatic equipment such as pipettes.

**Conclusion**

It is essential for laboratories to be provided with customised solutions for their specific needs. And this requires a good working relationship between the user and the manufacturer of the washer disinfector!
Miele's team of application specialists have expert knowledge of the different machines and mobile units, baskets and inserts required for different uses. And our team of highly trained technicians will supervise the installation, commissioning and programming of the machine as well as train personnel in its use. Should there be technical difficulties at any time we have our own team of fully trained service technicians.
For a professional solution to your cleaning requirements you can be assured that Miele's application specialists will provide you with a highly professional service.

# G 7883 and G 7883 CD Mielabor

G 7883

The new G 78 generation of washer disinfectors provide the most professional and economical solution for analytically clean laboratory glassware in industrial and research laboratories.

Miele has an extensive range of baskets and inserts designed to accommodate a diverse range of laboratory glassware.

**G 7883**
Washer disinfector
- Capacity:
  39 narrow necked flasks
  or 116 pipettes
  or 1600 test tubes
- H 850 (820), W 600, D 600 mm

G 7883 CD with baskets and inserts for narrow necked glassware

**G 7883 CD**
Washer disinfector with drying unit
- Capacity:
  37 narrow necked flasks
  or 96 pipettes
  or 1600 test tubes
- H 820 (850), W 900, D 700 (600) mm

**Construction**
- Freestanding front loading machine with drop down door
- Suitable for use freestanding or can be slotted under a countertop in an existing laboratory.
- External casing:
  G 7883 – White (not for G.B.)
  G 7883 and G 7883 CD – Stainless steel
- Space frame construction with side wall insulation
  ➔ low heat- and noise-emissions
  ➔ easy to recycle
- Wash cabinet and spray arms in high grade stainless steel

**Programme controls**
- Multitronic Novo plus with 8 standard-wash programmes
  (See page 12 for a description of the controls, and page 35 for a description of the programmes)

**Features**
- Wash cabinet with 2 levels
  ➔ high capacity
- 2 spray arms (3rd spray arm is in the upper basket)
  ➔ thorough cleaning results
- Direct coupling of upper basket and injector mobile units to water feed
  ➔ maximum use made of suds solution
- Profi Monobloc Water softener
  ➔ continual reactivation during the cleaning programme
- Water intake controlled by fly wheel counter
  ➔ precise amount of water taken in ensures the correct ratio of water to cleaning and disinfecting agents
- 4-fold suds filtration system with wide area filter, coarse filter, glass splinter filter and micro-fine filter.
- Drying unit/radial fan for hot air drying (G 7883 CD)
  ➔ thorough internal and external drying of laboratory glassware
- Electrical door lock
  ➔ safety for personnel
  ➔ high process safety
- Access to check and control temperatures and temperature holding times

**Dispenser system**
- One dispenser each in the door for powder cleaning agent and liquid agents (rinsing agent) (G 7883/ G 7883 CD)
- 1 DOS 10/30 dispenser pump for liquid, acid agents (G 7883/G 7883 CD)
- Connection for DOS G 60 dispenser for liquid cleaning agents (G 7883)
- 1 DOS 60/30 dispenser pump for liquid cleaning agents (G 7883 CD)
- Drawer with 2 x 5 litre containers (G 7883 CD)

**Test certificates**
- Protection classification IP x 1 (drip water protected)

**Certification applied for**
- VDE
- EMV/radio and television suppressed
- DVGW
- MPG CE 0366

**Optional extras**
**G 7883**
- Serial interface RS 232 for PC or printer for process documentation *
- AD pump for non-pressurised demineralised water feed *
- Steam condenser/heat exchanger *
- 1 dispenser (DOS module G 60) for liquid cleaning and disinfecting agents
- Plinth, H 300 mm

**G 7883 CD**
- AD pump for non-pressurised demineralised water feed *
- Steam condenser *
- Plinth, H 300 mm
- Machine lid

* N.B. These features are available as standard on G.B. machines

**See page 34 for technical data**

# G 7835 CD Washer disinfector

G 7835 CD with baskets and inserts for pipettes

**G 7835 CD**
Washer disinfector with drying unit
- Capacity:
  37 narrow necked flasks
  or 96 pipettes
  or 1600 test tubes
- H 820 (850), W 900, D 700 (600) mm

**Construction**
- Freestanding front loading machine with drop down door
- Suitable for use freestanding or can be slotted under a countertop in an existing laboratory.
- External casing: Stainless steel
- Space frame construction with side wall insulation
  ➔ low heat- and noise-emissions
  ➔ easy to recycle
- Wash cabinet and spray arms in high grade stainless steel

**Programme controls**
- Freely programmable, Profitronic controls
  (See page 13 for a description of the controls, and page 35 for a description of the programmes)

**Features**
- Wash cabinet with 2 levels
  ➔ high capacity
- 2 spray arms (3rd spray arm is in the upper basket)
  ➔ thorough cleaning results
- Direct coupling of upper basket and injector mobile units to water feed
  ➔ maximum use made of suds solution
- Professional Monobloc Water softener
  ➔ continual reactivation during the cleaning programme
- Water intake controlled by fly wheel counter
  ➔ precise amount of water taken in ensures the correct ratio of water to cleaning and disinfecting agents
- Steam condenser/Aerosol
  ➔ prevents emission of steam and hot air into the room
  ➔ can be operated without connection to vent ducting
  ➔ low installation costs
- 4-fold suds filtration system with wide area filter, coarse filter, glass splinter filter and micro-fine filter.
- Drying unit/radial fan for hot air drying
  ➔ thorough internal and external drying of laboratory glassware
- Electrical door lock
  ➔ safety for personnel
  ➔ high process safety
- Access to check and control temperatures and temperature holding times
- Sensors in the machine for automatic mobile unit recognition

**Dispenser system**
- 1 DOS 10/30 dispenser pump for liquid acidic agent
- 1 DOS 60/30 dispenser pump for liquid cleaning agent
- Connections for DOS G 60 and DOS G 10 dispensers
- Drawer with 2 x 5 litre containers

**Test certificates**
- Protection classification IP x 1 (drip water protected)

**Certification applied for**
- VDE
- EMV/radio and television suppressed
- DVGW
- MPG CE 0366

**Optional extras**
- 1 dispenser (DOS module G 60) for liquid disinfecting agents
- 1 dispenser (DOS module G 10) for liquid rinsing agents
- AD pump for non-pressurised demineralised water feed
- Plinth, H 300 mm
- Machine lid

**See page 34 for technical data**

# Multitronic Novo plus controls

Generation G78

Multitronic Novo plus

**G 7883 and G 7883 CD**
**Washer disinfectors**

**Controls**
- Multitronic Novo plus, some process parameters can be altered

**Programmes**
- 8 standard-cleaning programmes

**Programme control**
- Single knob programme selector switch

**Display**
- Programme sequence display
- Temperature and programme duration
- Programme end, optical and acoustic signal
- Service and fault check lights

**Control and safety features**
- 2 NTC probes in the sump for temperature monitoring and redundant temperature control
- Electric door lock
- Programme safety cut out
- Programme stopped in event of power cut

**Interface**
- Serial interface RS 232 for PC or printer for process documentation (This feature is standard or optional depending on country)
- Optical interface for service technician

**Note**
See page 35 for a list of programmes and their contents

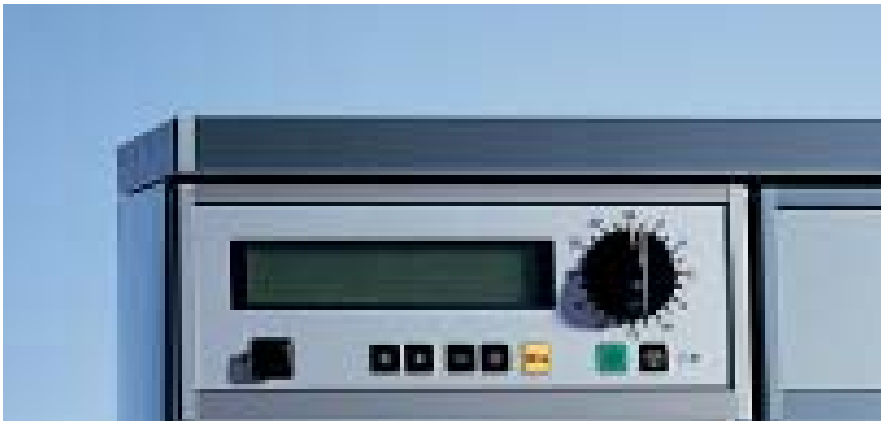
Serial interface for PC or printer connection

Process data reporting using a laptop computer

Access point for measuring temperature holding times

# Profitronic controls

Generation G7/8



Profitronic

**G 7835 CD Washer disinfector**

**Controls**
- Freely programmable “Profitronic” controls

**Programmes**
- 64 Programme slots including:
  11 standard cleaning programmes
  8 service programmes
  45 free programme slots

**Programme control**
- User friendly clear text display
- 6 languages programmed into the machine with 1 more programmable language option

**Update**
- New programmes can be programmed directly into the machine via an optical interface using a laptop computer or PC

**Display**
- The display shows operating and programming dialogues, programme sequences, temperature, time left, fault messages and number of operating hours

**Operational safety**
- There are 4 user access levels:

A: only fixed and free-access programmes
B: all programmes
C: automatic mobile unit recognition, 15 different codes can be set.
D: full programme range, including programming options

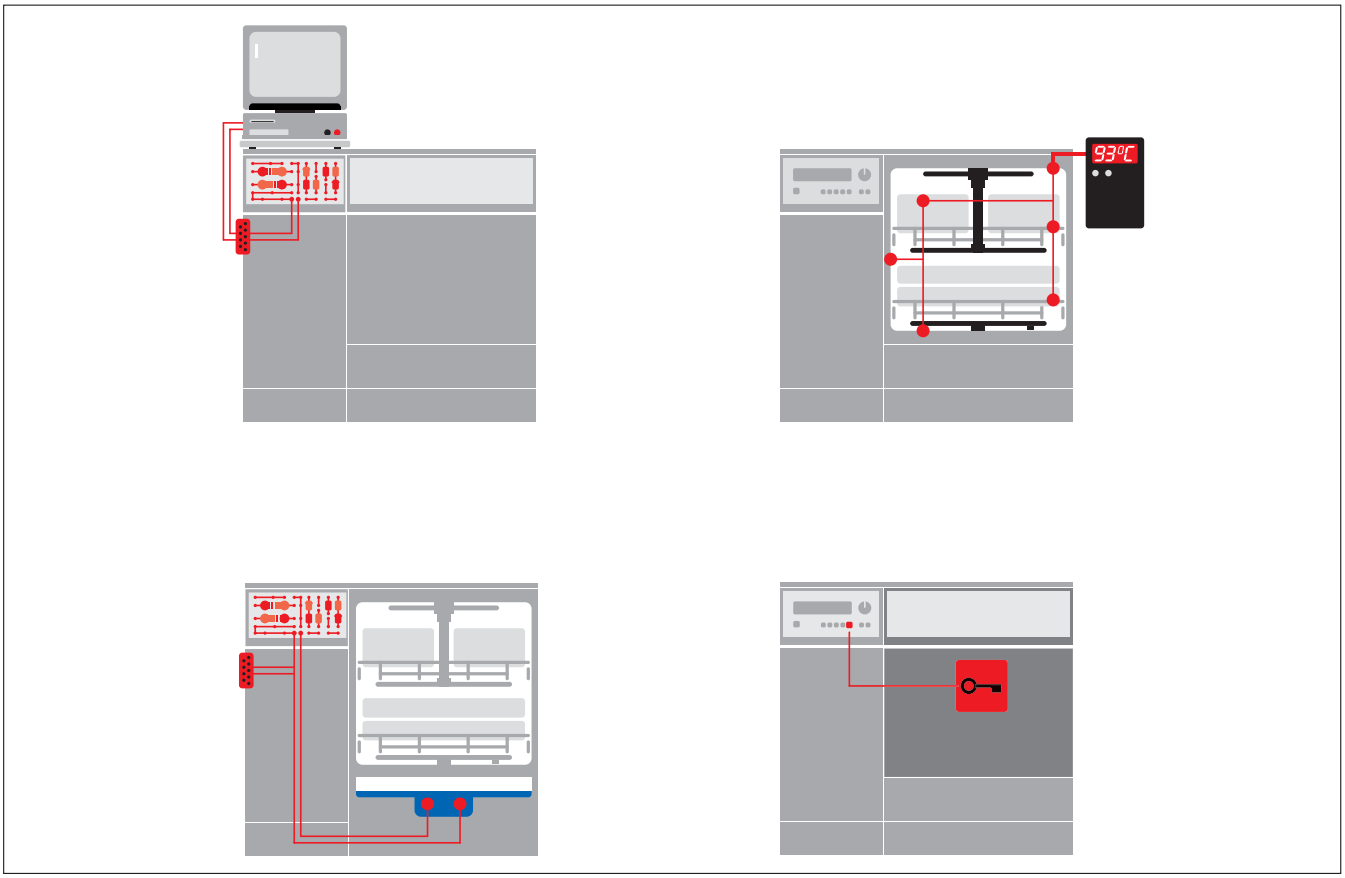
- Automatic mobile unit recognition

**Control and safety features**
- 2 NTC probes in the sump for temperature monitoring and redundant temperature control
- Door lock
- Peak load cut out

**Interface**
- Serial interface RS 232 for PC or printer for process documentation and networking
- Optical interface for service technician

**Note**
See page 35 for a list of programmes and their contents

# Setting the standard




**Setting the standard**
Thorough cleaning is an essential prerequisite for preparing analytically clean laboratory glassware for reproducable results. The cleaning and disinfecting processes must also be validated in accordance with Health and Safety regulations. Programme data and sequences must be documented.

Miele's latest generation of washer disinfectors comply with the requirements of EN ISO 15883.

**The new generation**
Miele, as a leading and innovative manufacturer, has set new standards for washer disinfectors with the latest G 78 generation of machines. And in doing so have also been thinking about your pocket: All new machines can be equipped with your existing series G 77 machine baskets and inserts – so you won't need to replace everything – typically Miele.

The new G 7883, G 7883 CD and G 7835 CD washer disinfectors are a significant development in the history of cleaning and disinfecting by machine. They offer the very best in performance and reliability – both for the small laboratory as well as for laboratory glassware processing in industrial and research laboratories. The single compartment system offered by Miele washer disinfectors, in which each machine cleans, disinfects and dries, has proved itself as particularly flexible and economical. The automatic mobile unit recognition on the G 7835 CD, further ensures that instruments are cleaned in the correct programme.

**Miele's new washer disinfectors have an excellent safety record just as you would expect from Miele.**

Serial interface for PC or printer connection for documenting process parameters.

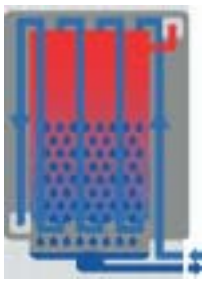
Separate sensors control and monitor the process to ensure that the machine is able to maintain cleaning, disinfecting and final rinse temperature parameters with even greater precision.

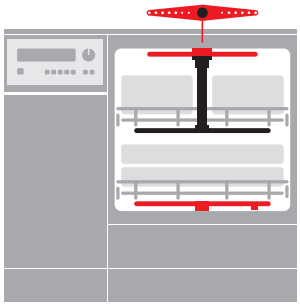
Validation and revalidation is possible thanks to the controllability of the temperature in the wash cabinet and on the items being processed via the many temperature sensors.

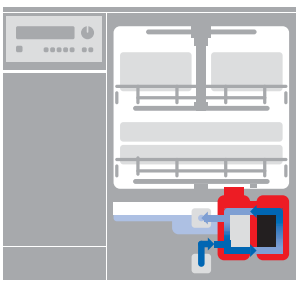
The door is securely locked for the whole programme duration.
It can only be opened at the end of the programme if all programme parameters have been successfully achieved.

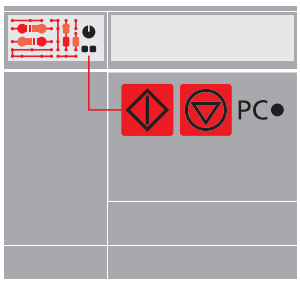
# Safer
# More economical
# Better results

Generation G 7 8










**Miele's new washer disinfectors are economical to run just as you would expect from Miele.**

The steam condenser with heat exchanger ensures significantly reduced water consumption on machines without a drying unit.

Thanks to the new Profi Monobloc water softener reactivation during a cleaning programme has led to a reduction in salt consumption of about 50% (in hardness range 5°–15° dH/ 89-267ppm). A separate reactivation programme is not necessary.

If you update your machine to a newer model you can still use your existing baskets.

Service friendly and easy to recycle construction.

**Miele's new washer disinfectors provide excellent cleaning performance just as you would expect from Miele.**

The spray arms have been designed to deliver maximum cleaning power to the surfaces being washed at the same time as being economical with the amount water they use.

A high pressure is used for injector mobile units to ensure thorough internal cleaning e.g. of narrow necked glassware.

An additional spray arm ensures external surfaces are also thoroughly cleaned, especially when injector units are being used.

Improved wash results have been achieved by arranging the jets carefully and regulating the rotation of the spray arms.

Greater programming flexibility for cleaning and disinfecting programmes has been achieved with the new electronic controls.

# G 7736 CD Washer disinfector

G 7736 CD

The G 7736 CD washer disinfector with integrated drying unit for laboratory glassware has a well proven track record as an excellent machine from the G 77 Generation. The high performance circulation pump with a water throughput level of Ø max. 600 l/min. and a 50% higher water level than the G 78 Generation machines gives this machine excellent cleaning performance.

The freely programmable Micro Computer Unit (MCU) has 64 programme slots. The user friendly clear text display makes them easy to operate. And with a serial interface for connecting a PC or printer process data can be documented.

G 7736 CD with baskets and inserts for pipettes

**G 7736 CD**
Washer disinfector with drying unit
- Capacity:
  66 narrow necked flasks
  or 96 pipettes
  or 1600 test tubes
- H 1160, W 900, D 700 (600) mm

# G 7736 CD Washer disinfector

**Construction**
- Freestanding front loading machine with drop down door
- External casing: Stainless steel
- Double skin body
  ➔ excellent heat and sound insulation
- Wash cabinet and spray arms in high grade stainless steel

**Programme controls**
- Freely programmable, Micro Computer Unit (MCU)
  (See page 18 for a description of the controls, and page 35 for a description of the programmes)

**Features**
- Direct coupling of upper basket and injector mobile units to water feed
  ➔ maximum use made of suds solution
- Large capacity water softener
- Steam condenser/Aerosol
  ➔ prevents emission of steam and hot air into the room
  ➔ can be operated without connection to vent ducting
  ➔ low installation costs
- 4-fold suds filtration system with wide area filter, coarse filter, glass splinter filter and micro-fine filter.
- Drying unit/radial fan for hot air drying
  ➔ thorough internal and external drying of laboratory glassware

**Dispenser system**
- One dispenser each in the door for powder cleaning agent and liquid agents (rinsing agent)
- 1 DOS 10/30 dispenser pump for liquid acidic agent
- 1 DOS 60/30 dispenser pump for liquid cleaning agent
- Drawer with 2 x 5 litre containers

**Test certificates**
- VDE
- EMV/radio and television suppressed
- DVGW
- MPG CE 0366
- Protection classification IP x 1 (drip water protected)

**Optional extras**
- AD pump for non-pressurised demineralised water feed
- Electric door lock

**See page 34 for technical data**

# Micro Computer Unit (MCU) controls

Micro Computer Unit

**G 7736 CD Washer disinfector**

**Control system**
- Micro Computer Unit (MCU), freely programmable

**Programmes**
- 64 Programme slots including:
  11 standard cleaning programmes
  4 service programmes
  49 free programme slots

**Programme control**
- User friendly clear text display
- 6 languages programmed into the machine with 1 more programmable language option

**Update**
- New programmes can be programmed into the machine directly

**Display**
- The display shows operating and programming dialogues, programme sequences, temperature, time left, fault messages and number of operating hours

**Operational safety**
3 different keys allow access to the 4 switch settings.

I: Only fixed and free-access programmes

II: All options in access level I, plus:
all programmes stored in memory
Modification of header paratmeters:
Wash and drying temperatures and the drying duration can be set.
**Parameters set in compliance with the legislation on containing epidemics (§ 18 IfSG) cannot be modified.**

III: All programmes in switch setting II are accessible, as well as:
modification of system parameters:
Programme deletion, date and time, reset filter operating times, programme lock, data transfer, software and hardware update, memory assignment and definition of programme access for switch setting I.

IV: All programmes in switch setting III are accessible, as well as:
modification of service mode:
Water intake duration, times for dispenser pumps, water treatment, filter replacement times for the coarse and particle filters in the drying unit, disinfection paramenters, operating language, programme running times.

**Control and safety features**
- Door lock
- Peak load cut out
- Programme stopped in event of power cut

**Interface**
- Serial interface RS 232 for PC or printer for process documentation

**Note**
See page 35 for a list of programmes and their contents

# Washer disinfectors for laboratory glassware

G 7826

**G 7825 Washer disinfector**
- Single door machine
- Wash cabinet with drop down door H 683, W 541, D 617 mm
- Control system: Freely programmable “Profitronic” controls
- Capacity per batch 72 narrow necked flasks or 116 pipettes
- External dimensions (Plinth, Washer disinfector, Drying unit): H 1975, W 900, D 750 mm
- External dimensions (Plinth, Washer disinfector, Drying unit, Steam condenser): H 2595, W 900, D 750 mm

**G 7826 Washer disinfector**
- As G 7825, but two door through feed model for separation into clean/unclean side

G 7828

**G 7827 Washer disinfector**
- Single door machine
- Wash cabinet with lift up door H 675, W 650, D 800 mm
- Control system: Freely programmable “Profitronic” controls
- Capacity per batch 115 narrow necked flasks or 232 pipettes
- External dimensions (Plinth, Washer disinfector, Drying unit, and if applicable Steam condenser): H 2420, W 1150, D 870 mm

**G 7828 Washer disinfector**
- As G 7827, but two door through feed model for separation into clean/unclean side

For detailed description see the brochure: Washer disinfectors for laboratory glassware G 7825–G 7828

# A-Z of laboratory glassware




Beakers


Viskosimeter


Conical flasks


Sequencing plates


Test tubes


Petri dishes, beaker covers


Funnels


Separatory funnels


Measuring cylinders


Pipettes


Flasks

Narrow necked flasks

# Upper and lower baskets

**O 188 Upper basket/open front (empty)**
- For various inserts
- H 215, W 531, D 475 mm
- Clearance 165 mm
- Height adjustment +/– 20 mm
- Built in spray arm

**O 190 Upper basket/open front/ empty**
- As O 188
- Clearance 215 mm

**O 175 Upper basket/Injector unit TA**
- For narrow necked glassware
- H 250, W 531, D 475 mm, H with TA 412 mm
- Clearance 170 mm
- 34 jets (E 351) 4 x 160 mm 34 clips (E 353)
- Connection for hot-air drying unit
- For G 7883 CD, G 7835 CD and G 7736 CD

**O 187 Upper basket/Injector unit**
- As O 175, but without connection for hot air drying unit

**O 184 Upper basket/Injector unit TA**
- For items such as centrifuge tubes, phials, test tubes for fraction collector or autosampler tubes
- Clearance 190 mm
- 96 jets 2.5 x 110 mm with plastic supports
- Connection for hot-air drying unit
- For G 7883 CD, G 7835 CD and G 7736 CD
- H 260 (468 with TA), W 531, D 475 mm

**U 874 Lower basket/open front (empty)**
- For various inserts
- H 50, W 534, D 515 mm
- Clearance when combined with upper basket:
  O 188 approx. 270 +/– 20 mm
  O 190 approx. 220 +/– 20 mm

**U 175 Lower basket/injector unit**
- For narrow necked glassware
- Clearance approx. 170 mm
- 33 jets (E 351) 4 x 160 mm 34 clips (E 353)
- Only for use in conjunction with upper basket O 175/O 187
- For G 7736 CD

**U 184 Lower basket/injector unit**
- For items such as centrifuge tubes, phials, test tubes for fraction collector or autosampler tubes
- 96 jets 2.5 x 90 mm with plastic supports
- Only for use in conjunction with upper basket O 175/O 184
- Clearance 170 mm
- For G 7736 CD

# Mobile injector units for narrow necked glassware

**E 329 Mobile injector unit 1/1**
- For narrow necked glassware
- With 39 jets:
  4/5 jets 2.5 x 90/110 mm,
  5/5/5 jets 4.0 x 140/160/180 mm,
  5/5/5 jets 6.0 x 200/220/240 mm,
  1 jet for flushing out powder dispenser
- For G 7883, G 7883 CD, G 7835 CD and G 7736 CD

**E 414 Mobile injector unit 1/1 TA**
As E 329 but with 37 jets
- Connection for hot-air drying unit
- For G 7783 CD, G 7735 CD and G 7736 CD

**E 350 Mobile injector unit 1/1**
- For narrow necked glassware
- With 33 jets/clips:
  15 jets (E 351) 4.0 x 160 mm,
  15 clips (E 353),
  18 jets (E 352) 6.0 x 220 mm,
  18 clips (E 354),
  1 jet for flushing out powder dispenser
- For G 7883, G 7883 CD, G 7835 CD and G 7736 CD

**E 380 Mobile injector unit 1/1 TA**
As E 350 but with 32 jets/clips
- Connection for hot-air drying unit
- For G 7883 CD, G 7835 CD and G 7736 CD

**E 340 Mobile injector unit 1/2 Multi-purpose**
- Half for narrow necked glassware
- Half for other inserts
  With 19 jets:
  3/3/3 jets 4.0 x 140/160/180 mm,
  3/3/4 jets 6.0 x 200/220/240 mm,
  1 jet for flushing out powder dispenser
- For G 7883, G 7883 CD, G 7835 CD and G 7736 CD

**E 355 Mobile injector unit 1/2 Multi-purpose**
- Half for narrow necked glassware
- Half for other inserts

With 16 jets/clips:
- 7 jets (E 351) 4.0 x 160 mm,
  7 clips (E 353),
  9 jets (E 352) 6.0 x 220 mm,
  9 clips (E 354),
  1 jet for flushing out powder dispenser
- For G 7883, G 7883 CD, G 7835 CD and G 7736 CD

**E 385 Mobile injector unit 1/2 Multi-purpose TA**
- As E 355 but with 15 jets/clips
- Connection for hot-air drying unit
- For G 7883 CD, G 7835 CD and G 7736 CD

# Mobile injector units for pipettes and butyrometers

**E 404 Mobile injector unit**
- For 38 pipettes in 3 rows:
  1st row 10 pipettes – 100 ml
  (length up to 550 mm)
  2nd row 14 pipettes – 25 ml
  3rd row 14 pipettes – 10 ml
- For G 7883 and G 7883 CD

**E 405 Mobile injector unit TA**
- As E 404 universal mobile unit, but with connection for hot air drying unit
- For G 7883 CD, G 7835 CD and G 7736 CD

**E 406 Mobile injector unit**
- For 116 pipettes up to 450 mm
- Surface space 16 x 16 mm
- Complete with support frame
- For G 7883, G 7883 CD, G 7835 CD and G 7736 CD

**E 408 Mobile injector unit TA**
- As E 406 but for 96 pipettes
- Connection for hot-air drying unit
- For G 7883 CD, G 7835 CD and G 7736 CD

**E 331 Mobile injector unit 1/1**
- For butyrometers
- With 39 jets 240 mm
  4.0 x 140 mm im lower area and
  1.5 x 100 mm flattended in upper area
- 1 jet for flushing out powder dispenser
- For G 7883, G 7883 CD, G 7835 CD and G 7736 CD

**E 336 MIBO sleeve for pipettes**
- Plastic, with screw fitting
- For pipettes in a mobile injector unit

# Inserts for test tubes, beakers and Erlenmeyer flasks

Illustration: E 103, E 104, E 105 and E 139, each with A 13 lid

**E 103 Insert 1/4**
- For approx. 200 test tubes up to 75 mm
- With 6 compartments, including A 13 lid
- For upper and lower basket

**E 104 Insert 1/4**
- As E 103 but for test tubes up to 105 mm
- For upper or lower basket

**E 105 Insert 1/4**
- As E 103 but for test tubes up to 165 mm
- For lower basket

**E 139 Insert 1/4**
- As E 103 but for test tubes up to 200 mm
- For lower basket

**E 149 Insert 1/4 container**
- For 80 test tubes up to 105 mm, incl. lid
- 80 compartments 18 x 18 mm
- Base mesh size 8 x 8 mm
- For upper or lower basket

**AK 12 Insert 1/2**
- For funnels, beakers, wide necked flasks etc.
- For upper or lower basket

**E 106 Insert 1/2 (illustrated)**
- For various laboratory glassware (narrow necked glassware, measuring flasks etc.)
- With 28 spring clips in 2 heights: 10 spring clips 175 mm, 18 spring clips 105 mm
- For lower basket

**E 106/1 Insert 1/2**
- With 28 small spring clips 105 mm
- For upper or lower basket

**E 106/2 Insert 1/2**
- With 15 large spring clips 175 mm
- For lower basket

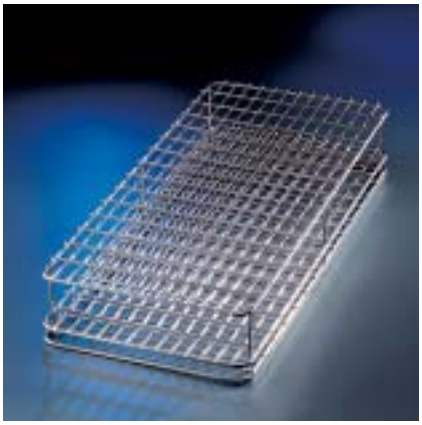
**E 109 insert 1/2 (illustrated.)**
- For 21 beakers up to 250 ml
- 21 x 3 spikes
- For lower basket

**E 110 Insert 1/2**
- For 10 beakers 250 to 600 ml
- 10 x 3 spikes
- For lower basket

**E 111 Insert 1/2**
- For 8 beakers 600 to 1,000 ml
- 8 x 3 spikes
- For lower basket

**E 144 Insert 1/2**
- For 18 beakers up to 250 ml
- 18 x 3 spikes
- For upper or lower basket

# Inserts for slides, beaker covers and Petri dishes



**E 134 Insert 1/2**
- For 210 slides
- 210 compartments 26 x 11 mm
- For upper or lower basket

**E 403 Insert 1/2**
- For 105 Petri dishes diameter 50–60 mm
- 36 supports, distance between supports 9 mm

**E 402 Insert 1/2**
- For 44 Petri dishes diameter 80–125 mm
- 23 supports, distance between supports 15 mm

**E 118 Insert 1/1**
- For 38 Petri dishes diameter 100 mm
- For upper or lower basket
- 38 holders, H 70 mm, distance between holders approx. 26 mm

**E 136 Insert 1/1**
- For 56 Petri dishes diameter 100 mm
- 56 holders, H 70 mm, distance between holders approx. 26 mm
- For lower basket

**E 137 Insert 1/1**
- For 56 Petri dishes diameter 100 mm
- 56 holders, H 70 mm, distance between holders approx. 26 mm
- For Insert E 136

# Inserts for drip feed or laboratory bottles

**E 125 Insert 1/1**
- For 9 x 2000 ml bottles
- H 224, W 460, D 460 mm
- 9 compartments
  Compartment dimensions
  125 x 125 mm
  Neck dimensions 55 x 55 mm
- For lower basket

**E 124 Insert 1/1**
- For 16 x 1,000 ml bottles
- H 148, W 460, D 460 mm
- 16 compartments
  Compartment dimensions
  100 x 100 mm
  Neck dimensions 48 x 48 mm
- For lower basket

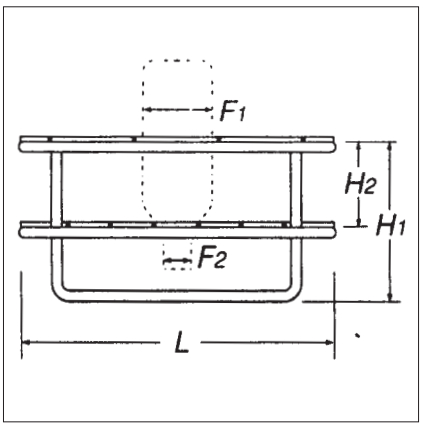
**E 126 Insert 1/1 (illustrated)**
- For 48 x 50 ml bottles
- H 83, W 445, D 445 mm
- 48 compartments
  Compartment dimensions
  45 x 45 mm
  Neck dimensions 28 x 28 mm
- For upper or lower basket

**E 127 Insert 1/1**
- For 40 x 100 ml bottles
- H 102, W 445, D 445 mm
- 40 compartments
  Compartment dimensions
  57 x 57 mm
  Neck dimensions 46 x 46 mm
- For upper or lower basket

**E 128 Insert 1/1**
- For 24 x 250 ml bottles
- H 103, W 445, D 445 mm
- 24 compartments
  Compartment dimensions
  71 x 71 mm
  Neck dimensions 46 x 46 mm
- For upper or lower basket

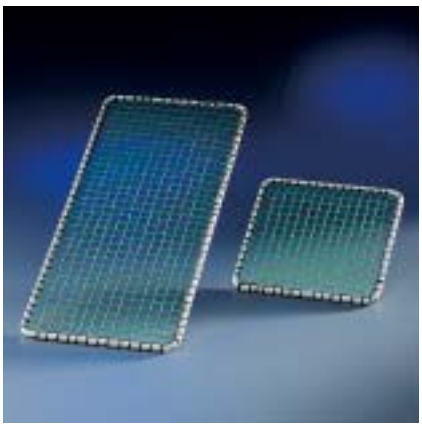
**E 129 Insert 1/1**
- For 20 x 500 ml bottles
- H 113, W 445, D 445 mm
- 20 compartments
  Compartment dimensions
  84 x 84 mm
  Neck dimensions 46 x 46 mm
- For upper or lower basket

**Note:** E 129 Insert cannot be used in the upper basket if 500, 1,000 or 2,000 ml drip feed bottles are in the lower basket



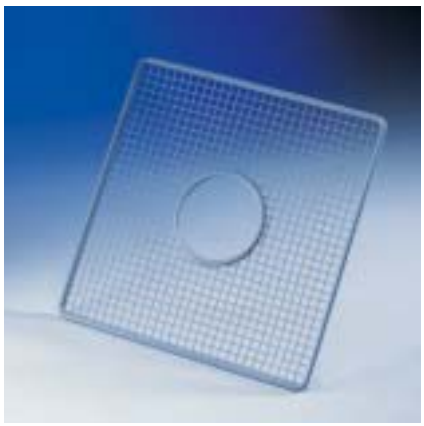

| Basket | L | $F_1$ | $F_2$ | $H_1$ | $H_2$ | No. of. compartments |
|---|---|---|---|---|---|---|
| E 124 | 460 | 100 | 48 | 148 | 100 | 16 |
| E 125 | 460 | 125 | 55 | 224 | 150 | 9 |
| E 126 | 445 | 45 | 28 | 83 | 40 | 48 |
| E 127 | 445 | 57 | 46 | 102 | 45 | 40 |
| E 128 | 445 | 71 | 46 | 103 | 60 | 24 |
| E 129 | 445 | 84 | 46 | 113 | 80 | 20 |

# Accessories for inserts

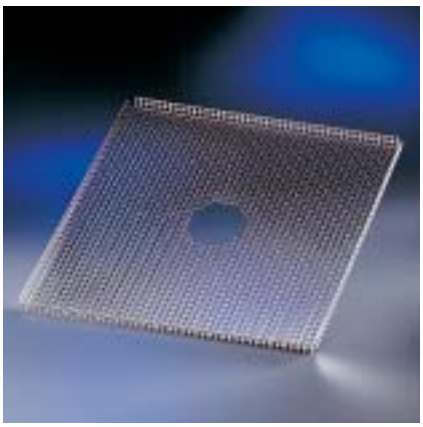


**A 2 Cover net 1/2**
- 216 x 456 mm
- Plastic coated metal frame with plastic netting
- For Inserts 1/2

**A 3 Cover net 1/4**
- 206 x 206 mm
- Plastic coated metal frame with plastic netting
- For inserts 1/4

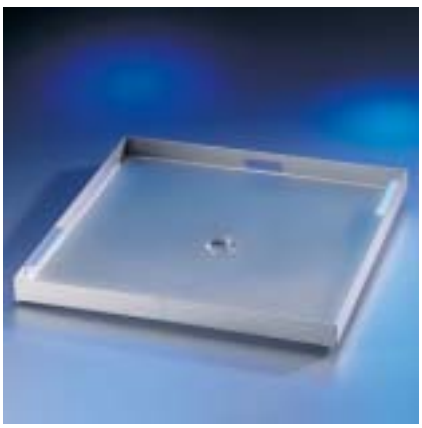


**A 5 Cover**
- For upper basket O 184 and lower basket U 184
- H 8, W 280, D 280 mm



**A 11 Insert 1/1**
- Stainless steel underlay frame, 450 x 450 mm
- For upper or lower basket

Not illustrated.
**A 12 Insert 1/2**
- Stainless steel underlay frame, 450 x 225 mm
- For upper or lower basket



**E 319 Insert 1/1**
- Surface area filter for coarse soiling
- W 500, D 488 mm
- Contains soiling e.g. labels from laboratory glassware, glass splinters etc.
- For G 7883, G 7883 CD, G 7835 CD and G 7736 CD

**A 13 Lid**
- For Inserts E 103, E 104, E 105 and E 139
- Stainless steel

**A 14 Lid**
- For Insert AK 12
- 210 x 210 mm
- Stainless steel

Not illustrated.
**A 16 Lid**
- For Insert E 142
- 230 x 215 mm
- Stainless steel

# Aqua Purificator

**G 7895, G 7795/1 Aqua Purificator**
- Cabinet unit for E 310 or E 318 demineralisation cartridges
- H 850 (820), W 300, D 600 mm
- Conductivity meter 0–20 micro S/cm
- Electrical connection: AC 230 V 50 Hz (European version)
- 2 pressure hoses, 1.2 m long, with ¾" threaded union are supplied as standard
- General recommended quality for the final rinse < 15 micro S/cm
- G 7895 compatible with G 7883, G 7883 CD, G 7835 CD
- G 7795/1 compatible with G 7736 CD

**E 313 Wall valve**
- For manual take-off of demineralised water
- Pressure proof up to 10 bar
- Complete with 150 cm pressure hose

**E 314 Cabinet mounted valve**
- For manual take-off of demineralised water
- Pressure proof up to 10 bar
- Complete with 150 cm pressure hose

**LWM-Module C**
- Conductivity meter for E 310/E 318 water demineralisation cartridges
- H 118, W 235, D 110 mm
- Conductivity meter 0–20 micro S/cm
- Electrical connection: AC 230 V 50 Hz
- 2 pressure hoses, 1.9 m long, with ¾" threaded union are supplied as standard
- General recommended quality for the final rinse < 15 micro S/cm

**E 310 Water demineralisation cartridge**
- Pressure proof, stainless steel cartridge, Ø 240, H 570 mm
- Priming and pressure relief valve for 2.5–10 bar
- Filled with 20 litres of mixed reusable reactivation resin for a capacity of approx. 25,000 litres of hard water depending on supply hardness level

**E 318 Water demineralisation cartridge**
- As E 310 but empty
- For disposable resin

**E 315 Disposable resin**
- 20 litres mixed resin for E 318 (2 x 10 litre bags)
- Capacity 25,000 litres

**E 316 Refill set for disposable resin**
- Plastic container with lid and funnel for 30 litres disposable resin

Expected total capacity in litres

| Water hardness | and with a selected conductivity level of: | | |
|---|---|---|---|
| | 5 µS/cm | 10 µS/cm | 20 µS/cm |
| 5° dH/89 ppm = 150 µS/cm | 4,250 | 4,500 | 5,000 |
| 10° dH/178 ppm = 300 µS/cm | 2,125 | 2,250 | 2,250 |
| 15° dH/267 ppm = 450 µS/cm | 1,420 | 1,500 | 1,670 |
| 20° dH/356 ppm = 600 µS/cm | 1,070 | 1,125 | 1,250 |
| 25° dH/445 ppm = 750 µS/cm | 850 | 950 | 1,000 |
| 30° dH/534 ppm = 900 µS/cm | 710 | 750 | 830 |

**Pure water capacity and quality**
Due to the special construction of the E 310 demineralisation cartridge, exceptionally pure water with a conductivity of approx. ~ 1.0 µS/cm is available immediately after reactivation.
The following ranges apply:
– up to 1.5 µS/cm – triple distillation
– up to 2.5 µS/cm – double distillation
– up to 20 µS/cm – single distillation

The information given in this chart is intended only as a guide.

# G 7796 DOS chemical supply unit
# G 7897 Aqua Soft System

**G 7796 DOS-unit**

- Supply unit for 1–4 DOS-modules with liquid chemical containers
- H 850 (820), W 300, D 600 mm
- Divided into 3 levels
  Level 1: Pull-out drawer on telescopic runners for max. 4 DOS-modules.
  Levels 2 and 3: Pull-out drawer on telescopic runners with drip tray and retainer for storage of 2 x 5 litre containers each.
- Internal dimensions:
  H 530, W 249, D 480 mm
- Containers with the following dimensions can be used:

| Container: | Dimens. (L x W x H) |
|---|---|
| 4 x 5 l | 245 x 145 x 225 mm |
| 2 x 10 l | 222 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 |
| 3 x 10 l | 268 x 151 x 350 mm |
| 1 x 20 l | 289 x 233 x 396 mm |
| 1 x 25 l | 288 x 234 x 456 mm |

- Compatible with G 7883, G 7883 CD, G 7835 CD

**G 7897 Aqua-Soft-System**

- High capacity water softener for a continuous supply of softened water for supply hardness ranges of up approx. 40°d (7.2 mmol/l)

**Capacity:**

- Max. 20 l/min, or 30 l/min. for short periods

**Construction**

- Freestanding on castors. Access from above
- External casing made from plastic

**Controls**

- Level controlled twin tank system

**Features**

- 2 x 6 litre resin cartridges
- 1 reservoir for 27 kg of salt

**Electrical connection**

- No electrical connection required

**Water connection**

- 2 pressure hoses approx. 2 m long with ¾" threaded union
  1 for connection to cold or hot water supply max. 65°C
  2.5–7 bar flow pressure to the Aqua Soft System
  2.5 bar on machines without a built in softener
  3.0 bar on machines with a Profi Monobloc softener
  3.5 bar on machines with a built in large capacity water softener
  1 hose for connection from the Aqua Soft System to the machine
- 2 drain hoses DN 22, approx. 1.5 m long, height not to exceed 400 mm
  1 for reactivation and one for overflow
- An odour trap and non-return valve must be supplied on site

**Dimensions**

- H 715, W 360, D 360 mm

The Aqua Soft System operates as a level controlled twin tank softener, consisting of 2 cartridges with ion exchange resin and a salt reservoir. The resin contains sodium ions. When hard water flows over the resin in one cartridge, the resin attracts calcium and magnesium ions and at the same time discharges its sodium load. There is no flow of water through the second cartridge at this time. When the supply in the first cartridge is depleted, a switch to the second cartridge is activated by the hardness range selector which is set to the local water hardness level by the service technician when commissioning the machine. At the same time reactivation of the spent resin in the first cartridge begins. Brine (NaCl) is taken from the salt reservoir. The salt reservoir must be regularly filled with coarse salt pellets. The reservoir takes approx. 25 kg of salt. This ensures that the system operates continuously.

# Accessories

**UE 30–30/60–78 plinth**
- H 300, W 300, D 600 mm
- Stainless steel
- For G 7795, G 7796
- Can be bolted to the machine

**UE 30-60/60–78 plinth**
- H 300, W 600, D 600 mm
- Stainless steel
- For G 7883
- Can be bolted to the machine

**UC 30-90/60–78 plinth**
- H 300, W 900, D 600 mm
- Stainless steel
- For G 7882 with G 7795 or G 7796
- Can be bolted to the machine

**UC 30-90/70–78 plinth**
- H 300, W 900, D 700 mm
- Stainless steel
- For G 7883 CD
- Can be bolted to the machine

**DOS C 60 module**
- Dispenser for liquid detergents
- Adjustable for dispensing between 3–78 ml
- Adjustable siphon tube with level indicator for various container sizes
- For G 7883, G 7883 CD

**Test Kit**
- Tests the presence of proteins and monitors cleaning results
- Contents sufficient for 48 tests

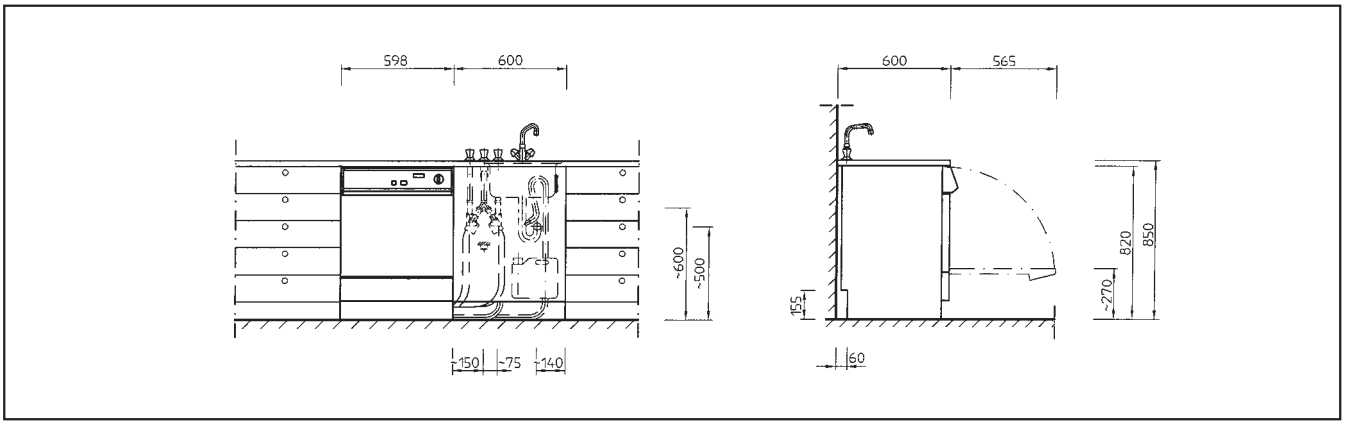
# Accessories

**Magnetic strip for automatic mobile unit recognition**
- 6 magnets, of which 5 are variable can be combined using the PLUS(1)/MINUS(0) function
- 25 possible combinations
- For G 7835 CD with “Profitronic” controls

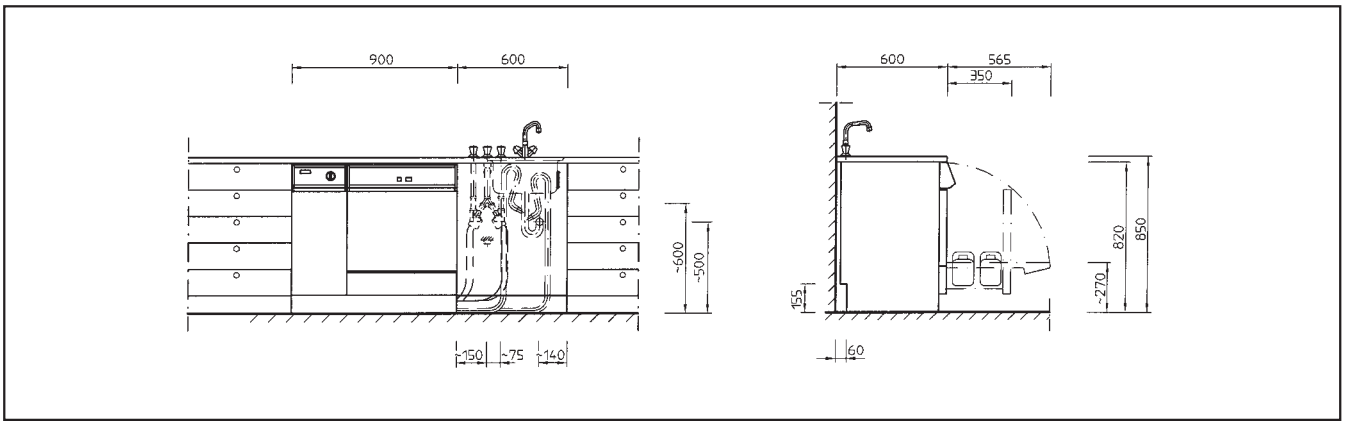
**Mielcar**
- Loading and unloading trolley
- H 1000, W 630, D 814 mm
- Loading height freely adjustable between 640 and 855 mm
- 4 wheels, of which 2 are lockable
- For G 7736 CD
- For G 7883, G 7883 CD and G 7835 CD when installed on a 300 mm high plinth

**Mieltrans**
- Trolley for storing and transporting baskets and inserts
- H 1985, W 616, D 662 mm
- 4 levels, each adjustable by 102.5 mm
- Usable space 549 x 599 mm
- 4 lockable wheels

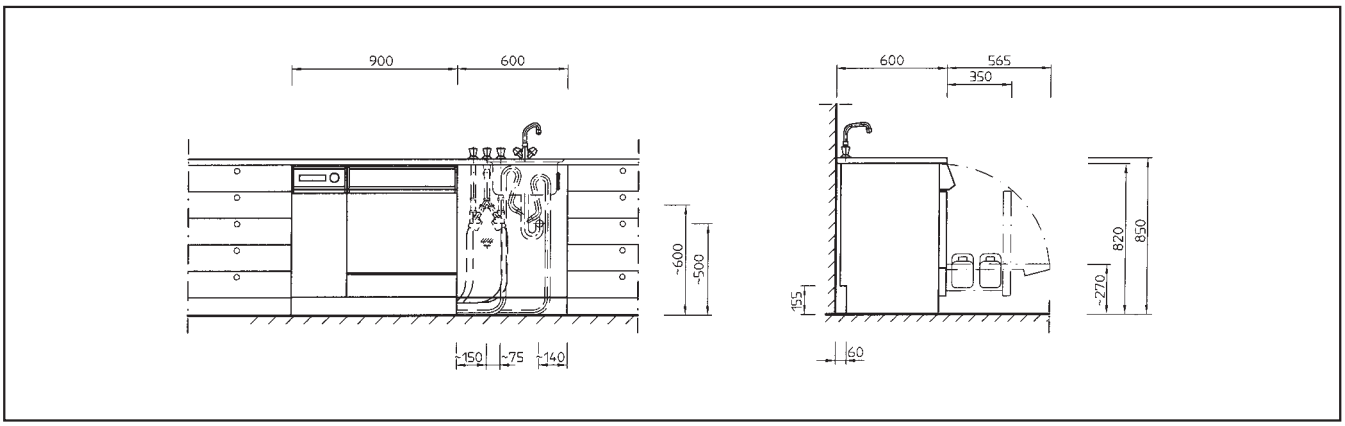
# Installation



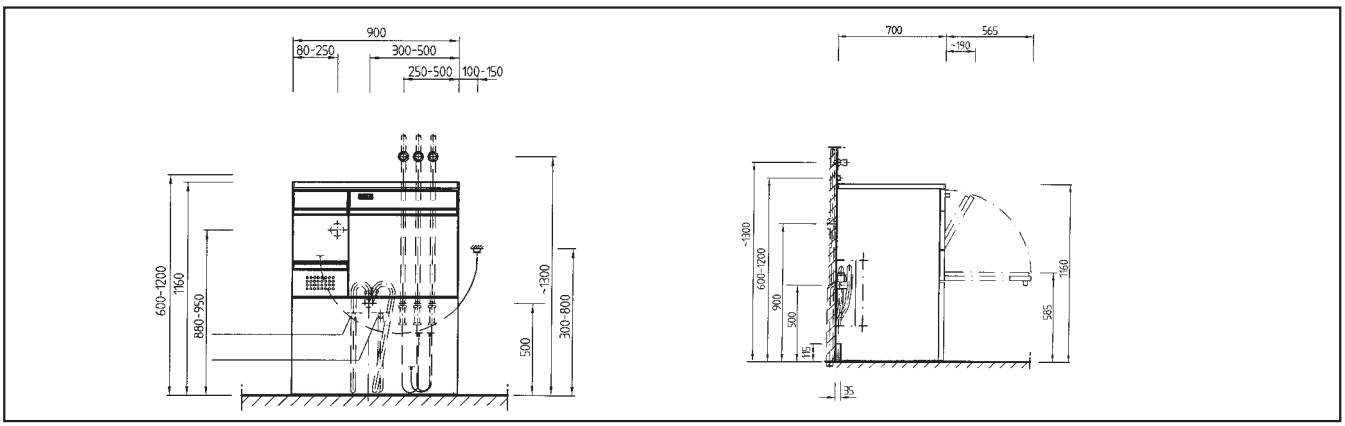

G 7883




G 7883 CD




G 7835 CD




G 7836 CD

# Technical data

| Washer disinfectors | | G 7883 | G 7883 CD | G 7835 CD | G 7736 CD |
|---|---|---|---|---|---|
| **Controls:** | | | | | |
| ● Multitronic Novo Plus | | ● | ● | – | – |
| ● Profitronic | | – | – | ● | – |
| ● Micro Computer Unit | | – | – | – | ● |
| ● Impulse heating for drying, T = 10 min | | ● | – | – | – |
| ● Hot air drying | | – | ● | ● | ● |
| **Water connections:** | | | | | |
| ● 1 x cold, 2.5–10 bar flow pressure (250–1000 kPA) | | ● | ● | ● | ● |
| ● 1 x hot (max. 70°C), 2.5–10 bar flow pressure (250–1000 kPA) | | ● | ● | ● | ● |
| ● 1 x AD (VE) water, 1.5–10 bar flow pressure (150–1000 kPA) | | ● | ● | ● | ● |
| ● 3 inlet hoses ½" with ¾" threaded union, length approx. 1.4 m | | ● | ● | ● | ● |
| ● 2 drain pumps DN 22 mm – delivery head: 100 cm | | – | – | ● | ● |
| ● 1 drain pump DN 22 mm – delivery head: 100 cm | | ● | ● | – | – |
| **Electrical connection:** | | | | | |
| ● 3 N AC 50 Hz 400 V /1 N AC 230 V 50 HZ (European version) | | ●/● | ●/● | ●/– | ●/– |
| ● Heating/Wash cabinet | | 9.0/6.0 | 9.0/6.0 | 9.0/– | 9.0/– |
| ● Circulation pump | kW | 0.7/0.7 | 0.7/0.7 | 0.7/– | 1.2/– |
| ● Total rated load | kW | 9.0/6.7 | 9.0/6.7 | 9.7/– | 10.2/– |
| ● Fuse rating (GB version) | | 3x15/1x30 | 3x15/1x30 | 3x15/– | 3x15/– |
| ● Mains connection cable, length approx. 1.6 m, Ø 5 x 2.5 mm²/1.6 m, Ø 3 x 4.0 mm² | | ●/● | ●/● | ●/– | ●/– |
| **Dispenser system:** | | | | | |
| ● 1 powder dispenser in the door | | ● | ● | – | ● |
| ● 2 x liquid dispensers in the door (switched on together) | | – | – | – | ● |
| ● 1 x liquid dispenser in the door (for rinsing agent) | | ● | ● | – | – |
| ● 1 x DOS 10/30 dispenser pump for liquid acidic agent | | ● | ● | ● | ● |
| ● 1 x DOS 60/30 dispenser pump for liquid agent (detergent) | | – | ● | ● | ● |
| **Connection for:** | | | | | |
| ● DOS C 10 dispenser for liquid rinsing agents | | – | – | ● | – |
| ● DOS G 60 dispenser for liquid cleaning agent | | ● | – | – | – |
| ● DOS G 60 dispenser for liquid cleaning agent (chem. DES) | | – | – | ● | – |
| **Water softener:** | | | | | |
| ● for cold and hot water to max 70°C, Monobloc | | ● | ● | ● | – |
| ● Large capacity water softener | | – | – | – | ● |
| **Steam condenser:** | | | | | |
| ● Heat exchanger | | ● | – | – | – |
| ● Aerosol | | – | ● | ● | ● |
| **Drying Unit TA:** | | – | ● | ● | ● |
| ● Fan | kW | – | 0.3 | 0.3 | 0.3 |
| ● Heater rating | kW | – | 1.7 | 1.7 | 1.7 |
| ● Total rated load | kW | – | 2.0 | 2.0 | 2.0 |
| ● Air throughput 55 m³/h | | – | ● | ● | ● |
| ● Temperature settings in 1°C increments (level 1) | | – | 50–99°C | 60–115°C | 55–116°C |
| ● Temperature settings in 1°C increments (level 2) | | – | – | 60–115°C | – |
| ● Temperature settings in 5°C increments (level 2) | | – | 50–99°C | – | – |
| ● Time settings in 1 min. increments (level 1) | | – | 1–99 min | 1–240 min | 1–250 min |
| ● Time settings in 1 min. increments (level 2) | | – | – | 1–240 min | – |
| ● Time settings in 5 min. increments (level 2) | | – | 5–95 min | – | – |
| ● Coarse filter, class C, Filtration rate: 98%, filter life 100 h | | – | ● | ● | ● |
| ● Particle filter, class S, Filtration rate: 99.995%, filter life 500 h | | – | ● | ● | ● |
| **Dimensions, Weight:** | | | | | |
| ● External dimensions: H 850 (820), W 600, D 600 mm | | ● | – | – | – |
| ● External dimensions: H 820 (850), W 900, D 700 mm | | – | ● | ● | – |
| ● External dimensions: H 1160, W 900, D 700 (600) mm | | – | – | – | ● |
| ● Weight, unloaded | kg | 70 | 119 | 140 | 174 |

# Technical data

| Programme sequence | Appliance | Programme | Duration | | Consumption* | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Main wash min | Drying min | Cold water l | Hot water l | AD l | EL kWh |
| Pre-wash (acid) | G 7883 | A INORGANIC | 35 | – | 11 | 24.5 | 18.5 | 2 |
| Main wash | G 7883 CD | A INORGANIC | 35 | | 11 | 24.5 | 18.5 | |
| Neutralisation | G 7835 CD | INORGANIC | | | | | | |
| 2x Interim rinses | G 7736 CD | | | | | | | |
| Final rinse | | | | | | | | |
| Pre-wash | G 7883 | B vario TD NR | 34 | – | 10 | 24.5 | 9.5 | 1.7 |
| Main wash | G 7883 CD | B vario TD NR | 34 | | 10 | 24.5 | 9.5 | |
| 2x Interim rinses** | G 7835 CD | VAR-TD-NR | | | | | | |
| Final rinse/Disinfection 93°C | G 7736 CD | | | | | | | |
| 2x Main washes | G 7883 | C ORGANIC | 34 | – | – | 39 | 9.5 | 2 |
| Neutralisation | G 7883 CD | C ORGANIC | 34 | | – | 39 | 9.5 | |
| Interim rinse | G 7835 CD | ORGANIC | | | | | | |
| Final rinse | G 7736 CD | | | | | | | |
| Pre-wash | G 7883 | D Universal | 24 | – | 10 | 19.5 | 9.5 | 1.2 |
| Main wash | G 7883 CD | D Universal | 24 | | 10 | 19.5 | 9.5 | |
| Interim rinse | G 7835 CD | – | | | | | | |
| Final rinse | G 7736 CD | | | | | | | |
| Pre-wash | G 7883 | E Standard | 30 | – | 10 | 19.5 | 18.5 | 1.8 |
| Main wash | G 7883 CD | E Standard | 30 | | 10 | 19.5 | 18.5 | |
| Neutralisation | G 7835 CD | LABOR-STANDARD | | | | | | |
| Interim rinse | G 7736 CD | | | | | | | |
| Final rinse | | | | | | | | |
| Separate rinse | G 7883 | Cold ⊥ | 3 | – | 10 | – | – | 0.02 |
| | G 7883 CD | Cold ⊥ | 3 | – | 10 | – | – | 0.02 |
| | G 7835 CD | – | | | | | | |
| | G 7736 CD | | | | | | | |
| Pre-wash | G 7883 | vario TD | 34 | – | 10 | 24.5 | 9.5 | 1.7 |
| Main wash | G 7883 CD | vario TD | 34 | | 10 | 24.5 | 9.5 | |
| Neutralisation | G 7835 CD | DES-VAR-TD | | | | | | |
| Interim rinse | G 7736 CD | | | | | | | |
| Final rinse/Disinfection 93°C | | | | | | | | |
| Main wash/Disinfection 93°C | G 7883 | SPECIAL 93°C–10' | 38 | – | 11.5 | 9 | 9.5 | 2.5 |
| Neutralisation | G 7883 CD | SPECIAL 93°C–10' | 38 | | 11.5 | 9 | 9.5 | |
| Interim rinse*** | G 7835 CD | SPECIAL93/10 | | | | | | |
| Final rinse | G 7736 CD | | | | | | | |
| Main wash | G 7883 | – | | | | | | |
| Neutralisation | G 7883 CD | – | | | | | | |
| Interim rinse | G 7835 CD | LABOR-SHORT | | | | | | |
| Final rinse | G 7736 CD | | | | | | | |
| Pre-wash | G 7883 | – | | | | | | |
| 2x Main washes | G 7883 CD | – | | | | | | |
| Neutralisation | G 7835 CD | LABOR-INTENSIVE | | | | | | |
| 2x Interim rinses | G 7736 CD | | | | | | | |
| Final rinse | | | | | | | | |

* Data obtained from machine without steam condenser
** On the G 7835 CD there is only 1x interim rinse
*** Only applies to G 7835 CD

AD = Aqua destillata

Miele
PROFESSIONAL

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