

Complete washing solutions

– an important contribution to efficient, hygienic production
and proven cleaning of critical production equipment



A photograph of an industrial facility, possibly a food processing plant, with a strong blue color cast. The image shows multiple levels of metal structures, pipes, and machinery. In the upper right, a sign reads "HC 948". In the lower right, a conveyor belt carries several blue cans. A large vertical pipe runs through the center of the frame. The overall scene is complex and industrial.

We don't just wash equipment
– we solve hygiene challenges

A washing solution from KEN HYGIENE SYSTEMS really is a solution. It is put together on the basis of the specific requirements and conditions that apply to your business, so that the hygiene process becomes an effective, integral part of the production flow.

For us, hygiene is not just about cleanliness. It is also about respecting the requirements for efficiency, environmental considerations and cost benefits that are on the agenda at all well-run companies.

We always begin with the customer

The needs of our customers and user are starting point. Our experienced specialists work closely with customers to achieve the best possible solution, which is always based on proven technology and detailed documentation.

Our experts will help you all the way. From the requirements analysis, design and installation to ongoing service and maintenance, so that you are assured the best possible value from your investment throughout its lifetime.

A good solution begins
with good questions



A good solution begins with understanding your needs and your actual situation. We will therefore ask questions such as:

- What items are to be washed?
- How much will be washed per day, how many hours and days per week?
- How much does the load weigh, and what is it made of?
- Is it sensitive to chemicals and/or temperature?
- How shall the machine be filled – manually, mechanically or automatically?
- Is there a desire for automation – if possible?
- What are the requirements for the cleaning level – visually clean, protein test, or ...?
- Shall the items also be disinfected – for example, chemically or thermally?
- Are there fragrances/flavours that can be transferred?
- Is there any requirement for active drying?
- How are the installation conditions, water quality, drainage conditions, ventilation and access conditions?
- Shall warming take place with steam or electricity?
- Does some of the water have to be recycled?
- Is the machine required to be built into the floor?
- Is there a need for process documentation, bar codes, RFID or other collection of data from the washing process to the central server?
- What are the requirements for documentation?

Once we have received answers to all relevant questions, we will be in a good position to put together exactly the washing solution that solves your challenges in the best way possible.

We offer complete washing solutions. This means that our solutions provide all that is needed to create value for customers:



MACHINES

- EWD Series
Equipment Washer Disinfectors
- EW Series
Equipment Washers
- SAW Series
Special Application Washers



DOCUMENTATION AND GMP

- Full documentation of materials, components and washing processes
- The customer's GMP standard is met



OPERATION, SERVICE & MAINTENANCE

- Installation
- Validation
- Preventive service and maintenance
- Call-out service for stoppages
- Upgrading of machines



ADVICE

- Assessment of the business' requirements, needs and situation
- Advice and recommendations
- Preparation of business case
- Design of installation
- Ongoing advice on optimization of operations





EWD SERIES

Equipment Washer Disinfectors

The EWD series consists of multi-functional machines which both wash and disinfect. This makes them the obvious problem-solvers in companies where hygiene has the absolutely top priority.

The machines are typically used by:

- Pharmaceutical companies
- Biotech companies
- Medtech companies
- Food companies
- Ingredients companies
- The hospital sector
- Laboratories
- Universities

As always, we ensure that an EWD machine is installed and delivered with full documentation in accordance with the agreement.

EWD 25 AND EWD 50

Washes and disinfects almost everything

An extremely flexible and multi-functional machine, that handles many different items. The movable washing and rinsing system with rotating nozzles ensures a very high level of hygiene, since the items – in addition to being washed clean, inter alia, by replacing the washing water between the phases – can be brought up to a temperature of up to 90° C.

The machine is available in two sizes: The EWD 25 with a washing chamber of approx. 2.5 m³ and the EWD 50 with a washing chamber of approx. 5.0 m³.



Advantages

- Meets individual capacity requirements
- 9 programmes as standard – can be individually adjusted
- Replacement of washing water between phases
 - Guarantees a high level of hygiene and eliminates the risk of the transfer of allergens
- Effective hot-water rinsing (up to 90°C)
- Compact: Can be placed close to the items to be cleaned
- The "Rack & Spike" system ensures a rapid switch between different items and high flexibility
- Possibility for integrated drying by condensing (option)
- Low consumption of water and electricity

GMP preparation, level		Medium	Medium
Multi-chamber option		No	No
Separate washing/rinsing tanks		Yes	Yes
Thermal disinfection		Possible	Possible
Chemical disinfection		Possible	Possible
Steam heating		Option	Option
2 doors (clean/dirty sides)		No	No
Door system		Manual	Manual
Integrated active drying		Option	Option
Customer-specific design possible		Yes	Yes
Washing chamber (total)	W	1,110 mm	2,120 mm
	H	2,030 mm	2,030 mm
	D	1,250 mm	1,250 mm
Washing chamber (effective)	W	880 mm	1,890 mm
	H	1,700 mm	1,700 mm
	D	1,050 mm	1,050 mm
Washing chamber volume (total)	T	2,816 litres	5,380 litres
Washing chamber volume (effective)	E	1,570 litres	3,374 litres

EWD 20, EWD 30 AND EWD 60

Scalable flexibility

This multi-functional machine has been designed to match the highest GMP levels. The machine is highly flexible and can clean many different types of equipment.

The movable and separate washing and rinsing system with washing frame ensures a very high level of hygiene, since the items – in addition to being washed clean – can be brought up to a temperature of 90° C.



Advantages

- Meets individual capacity requirements
- 9 programmes as standard – can be individually adjusted
- Replacement of washing water between phases
 - No cross-contamination
 - Guarantees a high level of hygiene and eliminates the risk of the transfer of allergens
 - Possibility of reusing the last load's rinsing or disinfection water
- Effective hot-water rinsing (up to 90°C)
- Can be placed close to the items to be cleaned
- Washing frame safeguards the wash from all four sides
- Low consumption of water, electricity and chemicals

GMP preparation, level		High	High	High
Multi-chamber option		No	No	No
Separate washing/rinsing tanks		Yes	Yes	Yes
Thermal disinfection		Possible	Possible	Possible
Chemical disinfection		Possible	Possible	Possible
Steam heating		No	Option	Option
2 doors (clean/dirty sides)		No	Option	Option
Door system		Manual	Manual	Manual
Integrated active drying		No	Option	Option
Customer-specific design possible		Yes	Yes	Yes
Washing chamber (total)	W	1,060 mm	1,110 mm	2,120 mm
	H	1,730 mm	2,030 mm	2,030 mm
	D	940 mm	1,250 mm	1,250 mm
Washing chamber (effective)	W	870 mm	880 mm	1,890 mm
	H	1,640 mm	1,700 mm	1,700 mm
	D	850 mm	1,050 mm	1,050 mm
Washing chamber volume (total)	T	1,723 litres	2,816 litres	5,380 litres
Washing chamber volume (effective)	E	1,212 litres	1,570 litres	3,374 litres
Outer dimensions (total)	W	1,450 mm	1,710 mm	2,720 mm
	H	2,000 mm	2,320 mm	2,320 mm
	D	1,000 mm	1,390 mm	1,390 mm
Installation in floor (min.)	D	150 mm	150 mm	150 mm

EWD 5000 AND EWD 6000

Washing, disinfection and drying – intelligent and environmentally-friendly

Cleaning, disinfection and drying of process equipment, containers and many other things in one machine. With the market's best operating economy. The EWD 5000/6000 was originally developed to wash, disinfect and dry containers, carts and even instruments (medical devices in class IIb) for sterilization centres in hospitals. Derived from the strict requirements for documentation and hygiene, they also solve tasks in food and pharmaceutical/biotech, where capacity requirements are important.



Advantages

- Extreme flexibility thanks to the free configurability of the racks/trolley
- Supplied with a minimum of 18 programme presets
- The lowest water consumption on the market
- The lowest ventilation requirement on the market
- Buffer tank and storage tank
- A0 controlled storage tank
- Self-cleaning washing chamber with 45 ° elevatable floor
- Guaranteed excellent washing results:
 - Washing frame ensures washing from all four sides
 - Base couplings ensure specific washing in trolleys/carts
 - Adjustable disinfection criteria (time and/or temperature)
- Heat insulated, soundproofed and hardened glass doors that open horizontally

GMP preparation, level		High	High
Multi-chamber option		Yes	Yes
Separate washing/rinsing tanks		Yes	Yes
Thermal disinfection		Possible	Possible
Chemical disinfection		Possible	Possible
Steam heating		Option	Option
2 doors (clean/dirty sides)		Standard (single door is an option)	Standard (single door is an option)
Door system		Automatic	Automatic
Integrated active drying		Yes	Yes
Customer-specific design possible		Yes	Yes
Washing chamber (total)	W	1,260 mm	1,460 mm
	H	2,000 mm	2,000 mm
	D	2,458 mm	2,858 mm
Washing chamber (effective)	W	1,040 mm	1,295 mm
	H	1,930 mm	1,940 mm
	D	2,182 mm	2,815 mm
Washing chamber volume (total)	T	6,199 litres	8,322 litres
Washing chamber volume (effective)	E	4,375 litres	7,032 litres
Outer dimensions (total)	W	2,447 mm	2,300 mm
	H	2,660 mm	3,100 mm
	D	2,650 mm	3,060 mm

EWD 1000

A strong machine for a myriad of applications

This environmentally-friendly, high level GMP machine has separate technical and washing cabinets. This makes it easy to vary the volume of the washing cabinet according to customer needs without having to change the entire machine. The EWD 1000 is suitable for washing process equipment at pharmaceutical, biotech, medtech, food and ingredient companies, as well as in laboratories and universities. And anywhere else where there are special requirements for the design of the washing chamber. As always, we ensure that an EWD machine installed and delivered with full documentation in accordance with the agreement.



Advantages

- Wash chamber can be built to individual requirements
- Supplied with a minimum of 18 programme presets
- The lowest water consumption on the market
- The lowest ventilation requirement on the market
- 2 buffer tanks or 2 storage tanks
- A0 controlled storage tank
- A0 controlled disinfection
- Active condenser drying
- Guaranteed excellent washing results:
 - Washing frame ensures washing the wash from all four sides
 - Possibility for internal washing, rinsing and disinfection
 - Adjustable disinfection criteria (time and/or temperature)

GMP preparation, level		High
Multi-chamber option		Yes
Separate washing/rinsing tanks		Yes
Thermal disinfection		Possible
Chemical disinfection		Possible
Steam heating		Option
2 doors (clean/dirty sides)		Option
Door system		Automatic
Integrated active drying		Yes
Customer-specific design possible		Yes
Washing chamber (total)	W	1,635+/-
	H	2,700+/- mm
	D	1,575+/- mm
Washing chamber (effective)	W	1,475+/- mm
	H	2,500+/- mm
	D	1,475+/- mm
Washing chamber volume (total)	T	6,909+/- litres
Washing chamber volume (effective)	E	5,402+/- litres
Outer dimensions (total)	W	2,000+/- mm
	H	3,800+/- mm
	D	3,500+/- mm
Installation in floor (min.)	D	350 mm



EW SERIES

Equipment Washers

The EW series comprises machines that carry out washing of different items. These are multifunctional machines that have proven their value in industries where there are strict requirements for clean and efficient production.

Using proven washing processes the machines in the EW Series ensure thorough cleaning of equipment and material. As always, we ensure that an EW machine is installed and delivered with full documentation in accordance with the agreement.

These machines are typically used in companies that work with:

- Food
- Cosmetics and personal care products
- Industrial production etc.



EW 1200 AND EW 1300

Fast and effective washing of larger items

A versatile washing machine designed for the washing of different carts and racks. The process is extremely efficient, and the items are optimally cleaned in minutes.

The machine's large washing size and washing frame, which washes from all sides, provides flexibility for washing many different types of carts and other equipment. The model is available in two washing chamber sizes. KEN HYGIENE SYSTEMS also manufacture special racks that fit directly into the machines.



Advantages

- 9 separate standard programmes with an option for individual programming
- Hot water rinse (up to 90° C)
- A standard wash cycle of about 5 minutes, including loading and unloading
- Unique washing frame guarantees optimum cleaning results from four sides
- Separated washing and rinsing frame so that washing water and rinsing water do not mix
- Intelligent washing process for optimized water and chemical consumption
- Possibility for split machine (2 doors) for the strict separation of unclean and clean sides
- User-friendly and uncluttered front display
- Optional automatic loading and unloading
- Can be built into the floor

GMP preparation, level		Standard	Standard
Multi-chamber option		Yes	Yes
Separate washing/rinsing tanks		Yes	Yes
Thermal disinfection		No	No
Chemical disinfection		Possible	Possible
Steam heating		Option	Option
2 doors (clean/dirty sides)		Option	Option
Door system		Automatic	Automatic
Integrated active drying		No	No
Customer-specific design possible		Yes	Yes
Washing chamber (total)	W	1,280 mm	1,280 mm
	H	2,000 mm	2,000 mm
	D	1,400 mm	2,000 mm
Washing chamber (effective)	W	1,200 mm	1,200 mm
	H	1,900 mm	1,900 mm
	D	1,320 mm	1,920 mm
Washing chamber volume (total)	T	3,584 litres	5,120 litres
Washing chamber volume (effective)	E	3,010 litres	4,377 litres
Outer dimensions (total)	W	2,150 mm	2,150 mm
	H	2,900 mm	2,900 mm
	D	1,700 mm	2,300 mm
Installation in floor (min.)	D	325 mm	150 mm







SAW SERIES

Special Application Washers

The SAW series consists of standard washing machines designed for specific special tasks – including the cleaning of containers, drums, scales and serving carts.

The machines are typically used by:

- Pharmaceutical companies
- Food companies
- The hospital sector

A SAW machine from KEN HYGIENE SYSTEMS is of course delivered with full documentation in accordance with the agreement.

HC 948

Cleaning of scale parts from multihead weighing systems

The HC 948 ensures an effective and gentle wash of detachable scale parts from multihead weighing systems. The unique rotating washing cylinder ensures effective cleaning of all items and can be replaced without the use of tools when the transition to another type of hoppers requires this.

With a special insert adapted to your type of drums, the DCD 948 is an efficient and space-saving solution for automatic cleaning of drums. Your drums are gently cleaned inside and out in one process.



Advantages

- Two separate standard programmes with an option for individual programming
- Hot water rinse (up to 90° C)
- Process time of approx. 20 minutes
- Washes many types of weighing bowls, tracks and barrels
- Gentle but effective washing extends the life of the items
- Rotating washing cylinder for weighing bowls
- Alarm shown on display in the event of irregularities
- Washing cylinder adapted to the weighing system for an optimal washing process
- Washing cylinder can be replaced without tools
- The machine can be placed beside weighing systems, thus saving transport time
- Space-saving design – doors open inwards

GMP preparation, level		Medium	Medium
Multi-chamber option		No	No
Separate washing/rinsing tanks		No	No
Thermal disinfection		Possible	Possible
Chemical disinfection		Possible	Possible
Steam heating		Option	Option
2 doors (clean/dirty sides)		No	No
Door system		Manual	Manual
Integrated active drying		No	No
Customer-specific design possible		No	No
	W	960 mm	960 mm
Washing chamber (total)	H	1,450 mm	1,450 mm
	D	960 mm	960 mm
Washing chamber (effective)	W	700 mm	700 mm
	H	1,200 mm	1,200 mm
	D	700 mm	700 mm
Washing chamber volume (total)	T	1,336 litres	1,336 litres
Washing chamber volume (effective)	E	588 litres	588 litres

DCD 20

Effective washing of drums

A powerful washing system developed specifically for cleaning drums made of plastic and stainless steel. All barrel parts (e.g. lids and seals) can be washed together with the drum – this provides a simple and efficient cleaning procedure.

The machine can be equipped with automatic drum loading to make processing easier and reduce the physical strain on staff. This means that it is cleaned together with the barrel and thus is completely clean when the barrel is to be lifted out of the machine after the wash.



Advantages

- Washes drums from 50 to 300 litres
- Easy changeover between sizes
- Short wash cycle, approx. 15 min.
- Choose between manual or automatic loading and unloading
- Lowest water consumption on the market
- Low noise
- Minimal consumption of water, electricity and chemicals
- Possibility of reusing rinsing or disinfection water

GMP preparation, level		High
Multi-chamber option		No
Separate washing/rinsing tanks		Yes
Thermal disinfection		Possible
Chemical disinfection		Possible
Steam heating		No
2 doors (clean/dirty sides)		No
Door system		Manual
Integrated active drying		No
Customer-specific design possible		Yes
Washing chamber (total)	W	1,060 mm
	H	1,730 mm
	D	940 mm
Washing chamber (effective)	W	870 mm
	H	1,640 mm
	D	850 mm
Washing chamber volume (total)	T	1,723 litres
Washing chamber volume (effective)	E	1,212 litres
Outer dimensions (total)	W	1,450 mm
	H	2,000 mm
	D	1,000 mm
Installation in floor (min.)	D	150 mm

TC 910

Effective and fast washing and centrifugation

A highly effective and fast machine for washing and drying serving carts from airplanes, trains and hospitals. The machine is based on a patented system in which 2 or 3 trolleys at a time are washed and rinsed in a rotating grille cage, where the load is spun dry at the end of the process.

The machine's design provides a very high capacity (From 40 up to 100 carts per hour) with a low consumption of electricity and water.



Advantages

- Rotating carts ensure efficient washing
- Spinning between washing and rinsing ensures minimal consumption of rinsing water
- Effective centrifugal drying
- Easy insertion and removal of carts
- Short wash cycle of 3-4 min. including emptying
- Short cycle time and high capacity per hour
- Low consumption of water, electricity and chemicals

GMP preparation, level		Standard
Multi-chamber option		No
Separate washing/rinsing tanks		Yes
Thermal disinfection		No
Chemical disinfection		Possible
Steam heating		Option
2 doors (clean/dirty sides)		Standard (single door is an option)
Door system		Automatic
Integrated active drying		Spinning
Customer-specific design possible		No
Washing chamber (total)	W	1,240 mm
	H	1,370 mm
	D	1,620 mm
Washing chamber (effective)	W	940 mm
	H	1,040 mm
	D	1,165 mm
Washing chamber volume (total)	T	2,750 litres
Washing chamber volume (effective)	E	1,134 litres
Outer dimensions (total)	W	2,350 mm
	H	2,150/2,900 mm
	D	2,050 mm
Installation in floor (min.)	D	325 mm

CC 1200 AND CC 1300

Effective and fast washing

Environmentally-friendly washing of containers, for example dairy products, breakfast products, compotes and jams.



Advantages

- 9 separate standard programmes with an option for individual programming
- Hot water rinse (up to 90° C)
- Possibility for steam disinfection inside the container
- A standard wash cycle of only approx. 4 minutes, including loading and unloading
- Flexible centre nozzle and wash frame guarantee optimum cleaning results
- Possibility of internal pressure washing in the container
- High flexibility, washes many different types of containers
- Possibility for split machine (2 doors) for the strict separation of unclean and clean sides
- Uncluttered front display
- Possibility of connecting a printer, bar code or RFID reader for documentation

GMP preparation, level		Standard	Standard
Multi-chamber option		Yes	Yes
Separate washing/rinsing tanks		Yes	Yes
Thermal disinfection		No	No
Chemical disinfection		Possible	Possible
Steam heating		Option	Option
2 doors (clean/dirty sides)		Option	Option
Door system		Automatic	Automatic
Integrated active drying		No	No
Customer-specific design possible		Yes	Yes
Washing chamber (total)	W	1,280 mm	1,280 mm
	H	2,000 mm	2,000 mm
	D	1,400 mm	2,000 mm
Washing chamber (effective)	W	1,200 mm	1,200 mm
	H	1,900 mm	1,900 mm
	D	1,320 mm	1,920 mm
Washing chamber volume (total)	T	3,584 litres	5,120 litres
Washing chamber volume (effective)	E	3,010 litres	4,377 litres

Accessories, equipment and supportive solutions

We offer a wide range of accessories, equipment and supportive solutions for our washing machines, including:

- Basic carts, racks and inserts
- Transport systems
- Baskets and racks for storage
- RFID antennas and readers (bar code readers for automatic identification of items)
- Data collection from completed washing programmes
- And much more

Contact our sales department and let us help you find the right accessories and equipment.

KEN CC 1200



Detailed documentation and GMP

Every solution from KEN HYGIENE SYSTEMS is fully documented according to CE marking requirements. And of course it complies with all the norms and standards applicable to hygiene, quality and safety. Naturally we always provide documentation in accordance with the agreement.

Control of all materials and processes

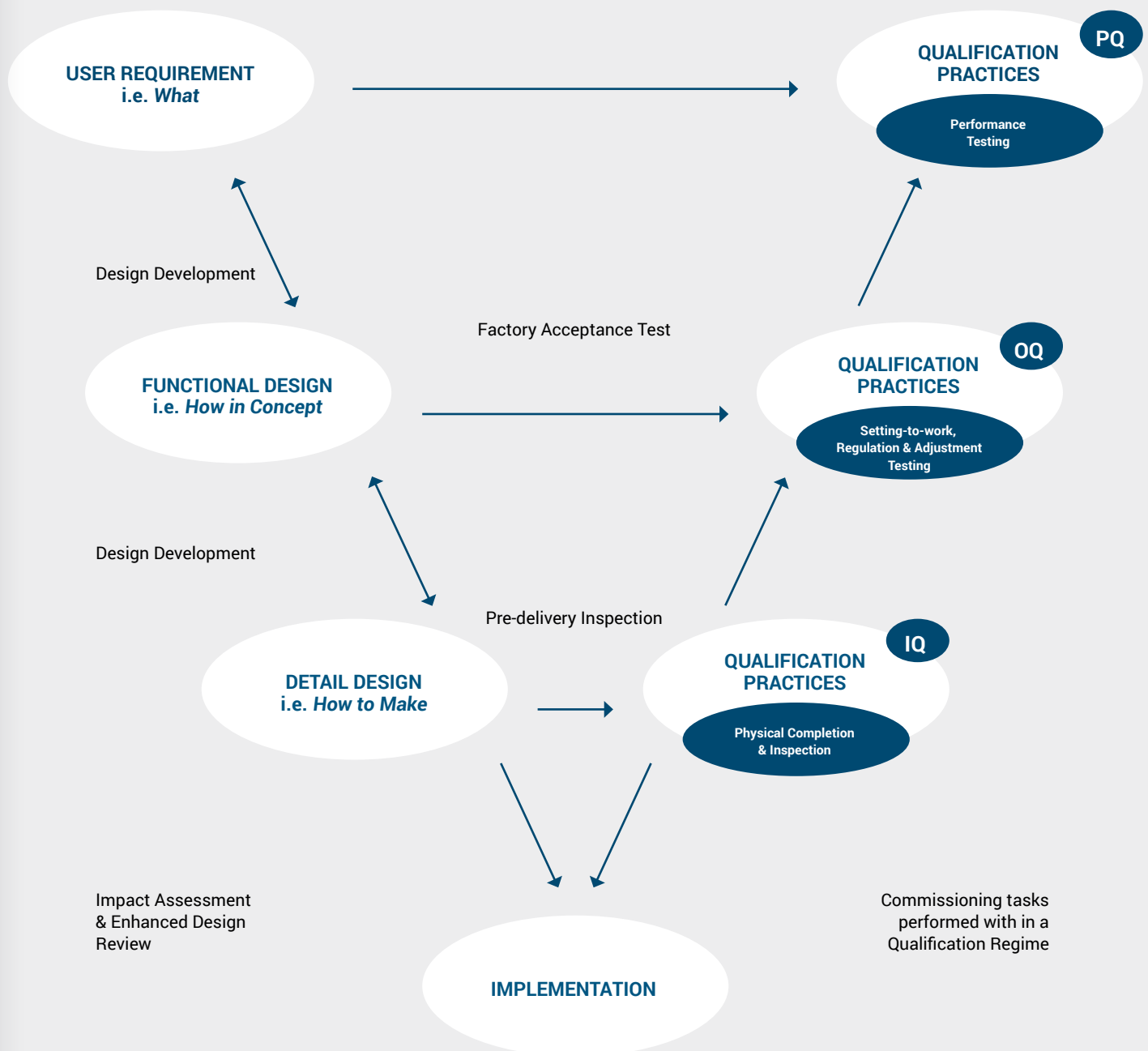
We develop and assemble our machines at our plant in Denmark, which gives us full control over quality from start to finish. If you require it, you will receive paperwork for every detail, as all materials, components and processes in a washing solution from KEN HYGIENE SYSTEMS are meticulously documented.

Good Manufacturing Practice

We take more than external requirements and standards into account. We will of course also consider the GMP standards under which your business operates.

The close dialogue with you regarding the identification of specific user requirements, and the ongoing reconciliation of design in relation to your requirements play an essential and integral role in our cooperation.

V model



Operation, service and maintenance

A good solution is the one that works effectively and seamlessly throughout its life.

We follow our deliveries to the door with expert knowledge and technical support in all phases:



Installation

Our experienced technicians ensure that the system installed in accordance with all agreed regulations. During installation, we provide thorough training of all relevant employees in your company.

This helps to enhance operational reliability and the ability to immediately respond to any errors or other problems.



Commissioning

We deliver a well-running facility that is tested and ready for operation.

You can be sure that it will meet all the specifications we agreed.



Preventive service and maintenance

To ensure stable operation we offer frequent service inspections.

At the service we ensure that worn parts are replaced and any damage is repaired before they become the cause of major problems.



Call-out service for stoppages

Our technicians are ready for rapid deployment in case of malfunctions or stoppages. It is very important to us to ensure the maximum uptime of our system.



Upgrading of machines

If your washing requirements change, this can often be resolved by adjusting, rebuilding or adding new racks to the existing machine.

We can also help with upgrading if there are better components on the market, for example, control systems that even better optimize the operating costs.



People and society depend on companies' ability to make responsible choices regarding hygiene and environment – and that companies are operated efficiently and competitively.

KEN HYGIENE SYSTEMS supplies top quality washing solutions to companies and health care services for cleaning critical equipment. Our solutions include everything needed to ensure efficient installation and operation – consulting, devices, documentation and servicing.

Our solutions are based on the needs of our customers and users. Our relationship with our customers is based on openness and trust in order for them to make informed choices and implement the best solutions.



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