

# CTR | EXCELLENT PERFORMANCE.

The compact rack conveyor dishwasher





A machine for perfect cleanliness and hygiene. Perfectly coordinated accessories. Specially developed chemicals. Advice and personal support. Planning expertise and training courses. Monitoring, reporting and service. All that and more from Winterhalter.



#### HIGH DEGREE OF FLEXIBILITY

It offers a wide range of machine variants, is available with up to three tanks and has modules and features that can be retro fitted: The CTR is based on a modular system and can be customised to precisely meet your individual requirements. Even for confined spaces.

#### HYGIENE SAFETY

The CTR is designed with hygiene always in mind. Doors that open 180° and deep-drawn tanks. Hygiene tank heater. In addition, a hygiene mode that can be preset: If the tank or boiler temperature falls below the set value, the machine automatically reduces the transport speed, thus guaranteeing a hygienic wash. In accordance with hygiene standard DIN SPEC 10534 confirms. The CTR ensures you are always on the safe side.



## EVERYTHING IS POSSIBLE.

It has to be compact. Because there's generally not a lot of space in the kitchen. It has to be fast. Because there's a lot to wash at peak times. It has to be modular. So that it can be tailored precisely to meet individual requirements and demands. Naturally it should also be economical to operate. The impossible becomes reality with the CTR from Winterhalter: high washing performance and compact dimensions. Up to 195 racks per hour. Lower consumption values and lower operating costs. Maximum hygiene safety – and a huge degree of flexibility. This is thanks to the modular system, which enables the CTR to be easily planned, individually configured and retrofitted. The perfect solution for 100 to 400 diners.

---

### PERFECT WASH RESULTS

An efficient warewashing system. A new concept with a simplified design. And effective hygiene safety and filtration solutions: The CTR also guarantees first-class wash results for large loads.

### ECONOMICAL AND EFFICIENT

Despite its huge rack capacity, it has been possible to reduce rinse water consumption by up to 50 % – to a minimum of just 130 litres per hour. The speed-dependent control of the rinse water volume makes this possible. So you can wash as economically and environmentally friendly as possible.





### MODULAR SYSTEM

The CTR is available with up to three tanks, with additional pre-wash and drying zones, and optional exhaust air heat recovery. Which means: The CTR always offers you a customised solution. Precisely configured to your individual requirements. And should they change in the future – no problem: The modular design means that modules and features can be retrofitted at any time. You can find an overview on the following pages.

### OPERATING CONCEPT

The CTR makes washing remarkably simple: It is convenient to operate and easy to clean. A smart touch display is at the heart of the CTR cockpit. With single-button operation. With a language-neutral operator interface. And with self-explanatory pictograms. Different programmes can be selected for the tank draining process: Each uses the standard drain pump, which protects the user from contact with the wash water and ensures greater safety at work. All wash arms and curtains can be taken out separately and quickly and easily cleaned when necessary. The colour coding means they can't get mixed up.

### RACK CAPACITY

The CTR delivers an impressive rack capacity but with compact dimensions: With a transport speed of up to 195 racks per hour, it can handle a high volume of dishes during peak times. This allows you to simply and effortlessly set the machine according to your specific requirements at any given time: By selecting one of the three speed levels: fast, standard and intensive. The stored settings can be adjusted by the service technician according to individual requirements.

### WAREWASHING SYSTEM

The CTR high-performance washing system comprises of five wash arms at the top and four wash arms at the bottom. Thanks to their shape and nozzle geometry, they ensure that water is distributed over the entire wash area. The system has been balanced so that it provides the optimum pressure distribution between the top and bottom elements of the system. This means that dishes are held securely in position to ensure maximum washing performance.

### HYGIENE CONCEPT

The CTR delivers a perfect hygiene concept. The hygiene mode is one innovative feature: If the tank or boiler temperature falls below the set value, the machine automatically reduces its transport speed and thus ensures a hygienic wash. The user can also change to the »Speed mode« at any time. The CTR thus maintains its constant transport speed and washes with the selected rack capacity.

Other hygiene features: the hygiene design of the interior of the machine and exhaust air heat recovery with an integrated and easily cleaned grease filter. The hygiene logbook provides additional hygiene safety: It stores all important operating data and the current operational status including fault messages and can also be called up via CONNECTED WASH\*. The hygiene certificate in accordance with DIN SPEC 10534 confirms the high hygiene standards of the CTR.

### CONNECTED WASH \*

Greater safety, greater efficiency: The CTR can be networked with a computer or mobile device via CONNECTED WASH. This creates the basis for the analysis and evaluation of all the important operating data. To optimise the entire washing process.

\* You can find out in which countries CONNECTED WASH is currently available and what functions and options it offers at [www.connected-wash.com](http://www.connected-wash.com)

### PRE-WASH ZONE S

The pre-wash zone S is a space-saving addition to the main wash zone and increases the rack capacity of the CTR. It comes without a separate tank and its own wash pump and is 500 mm wide. Wash arms at the top and bottom remove coarse food residues prior to the main wash phase. Its inbuilt filter cassette traps coarse soiling and can be easily removed and cleaned. The pre-wash zone S can be retrofitted.

### DRYING ZONE

Would you like to reuse the cleaned dishes as quickly as possible? Then take advantage of the optional drying zone which can also be retrofitted. This is especially recommended for wash items that are particularly difficult to dry. The CTR drying zone is available not only in a straight design, but also in a corner variant, so that your room planning can be as flexible as possible. For small kitchens and confined spaces.

### EXHAUST AIR HEAT RECOVERY

Intelligent use of energy: The CTR is available with an optional Energy exhaust air heat recovery system. This uses the energy from the steam produced by the machine to pre-heat cold inlet water. This is good for the environment, reduces energy consumption, lowers operating costs and also improves the kitchen climate.

### FILTRATION SYSTEM

The cleaner the wash water, the fewer changes of water are required – and the better the wash result. That's why the CTR is fitted with an effective filtration system: In the first step, coarse soiling is trapped in the removable strainer in the main wash zone. In the second step, the Mediamat filters out the finest particles, such as coffee grounds, from the wash water. Moreover, a pump inlet filter ensures that the pump is protected from mechanical damage. If the CTR is fitted with a pre-wash zone, food residues are trapped in a separate and easy-to-clean filter system before the main wash zone.

### FILLING AND EMPTYING

The CTR has several programmes for filling and emptying the wash tanks. Quick start: The machine fills in approximately eight minutes (depending on on-site conditions) and is ready for use shortly thereafter. Individual water change: Depending on how soiled the water is and the time available, a part or full regeneration of the tank water can be performed by means of the tank water exchange programme. Quick drainage: In addition to the regular drainage programme, there is also a programme that will pump out all the tank water in just five minutes.

### PRE-WASH ZONE M

For a better wash result and a significant increase in the rack capacity: The pre-wash zone M has its own deep-drawn tank, a double warewashing system at the top and bottom and its own pump. It has a width of 800 mm. The two-part filter system filters out food residues and prevents them entering into the main wash zone. A further advantage: By using the energy from the main wash zone, it pre-heats the dishes without any additional costs – and thus stabilises the temperature level across the entire washing process. Its own door ensures easy operation and ergonomic cleaning. The pre-wash zone M can be retrofitted.

### RACK-CONTROLLED ZONE ACTIVATION

An economical feature of the CTR: The zones for the pre-wash, main wash and rinse are only activated by the machine control unit if they are actually required – that is, the zones only activate when the dishes enter the respective zone. This conserves resources and lowers the operating costs when the machine is running below capacity. Because water, power, detergent and rinse aid are used efficiently and economically.

### SPEED-DEPENDENT RINSE WATER VOLUME

For a significant reduction in water consumption and operating costs: The CTR adapts the rinse water volume automatically to the current transport speed. Based on need – from an economical 130 litres per hour up to a maximum of 260 litres per hour. Furthermore, an individual setting allows you to determine whether your washing operation is designed for the highest possible energy savings or a high rack capacity.



A detailed overview of the CTR is available on our website at:

>> [www.winterhalter.com/ctr](http://www.winterhalter.com/ctr)



# CTR MODULES

## MAIN WASH ZONE

CTR M single rinse  
Length of zone: 1,400 mm.  
CTR L dual rinse  
Length of zone: 1,600 mm.

## PRE-WASH ZONE S

Length of zone: 500 mm.  
Extends the main wash zone.  
Increases rack capacity as a priority.  
Retrofittable.

## PRE-WASH ZONE M

Length of zone: 800 mm.  
Prevents soiling entering the main wash zone.  
Increases rack capacity.  
Improves the wash result and reduces energy demand.  
Retrofittable.

## SINGLE RINSE



## DUAL RINSE



↔ = Retrofittable

What needs to be done to develop a conveyor dishwasher that offers more possibilities? This question resulted in the creation of the CTR. Our engineers abandoned the conventional path of the static machine model and designed the CTR to be a flexible system: with a compact and powerful machine model at its heart. With various modules for attachment, the machine can be perfectly customised to meet the customers' requirements. The CTR's area of application is therefore exceptionally broad and ranges from restaurants through to canteens and even motorway services. The result is always the same: a tailor-made rack conveyor dishwasher.

### DRYING ZONE

Length of zone: 700 mm.  
A drying zone in a linear configuration.  
To make sure cleaned wash items are quickly ready for reuse.  
Retrofittable.



### CORNER DRYING ZONE

Length of zone: 795 mm.  
Corner drying zone (90° or 180° angle).  
For small kitchens and confined spaces.  
Retrofittable.



### EXHAUST AIR HEAT RECOVERY

Utilises energy contained in the generated steam for optimum energy utilisation.  
Improves the room climate and lowers operating costs.  
Retrofittable.



# PROFESSIONALLY PLANNED. NEATLY SOLVED.

Washing up plays a key role in foodservice but is rarely in the limelight. Only when everything is running smoothly in the wash up area can the overall kitchen function effectively. This means it is even more important to professionally plan the washing process and warewashing solutions with skilled partners.

## ERGONOMICS

Pre-sorting dirty dishes can often be a bottleneck. The solution: A professionally planned and ergonomically designed work space with short work routes. For smooth and fast work.

## ROOM CLIMATE

Pleasant room temperatures and reduced humidity: Modules such as the Energy exhaust air heat recovery create a well-balanced room climate. The option of retrofitting makes the planning process even more flexible.

## COMPACT

Compact dimensions and a Multi-module concept, simplify kitchen planning. And enable tailor-made solutions even for complex room conditions.



## HYGIENE

The separation of »clean« from »dirty« areas is often a challenge. Flexible machine systems like the CTR enable the most diverse planning and installation options and ensure the required hygiene.

## EFFICIENCY

One of the most important subjects when it comes to a kitchen: efficiency and economy. It's great if a machine with an intelligent control unit can ensure operating costs are reduced to a minimum.

## USER FRIENDLINESS

Good kitchen planning can become outstanding when employees enjoy working with a machine. 180° rotating doors for example, make it easy to access the interior and consequently particularly easy to clean. Making everyone's life that little bit easier.



## A WIN-WIN-WIN SITUATION.

The perfect kitchen: with tailor-made washing technology and an efficient washing process. This is the goal of professional kitchen planning. That's why we do everything possible to support our customers and partners during the planning phase. With our expertise as worldwide washing specialists. With expert advice on technology, potential savings options and the digital possibilities of process optimisation. With modern and high-quality dishwashing technology such as the CTR: the compact and powerful rack conveyor dishwasher that can be tailor-made to precisely meet individual customer requirements. And of course with everything to make the work of experts in specialist planning easier: from BIM to 3D tools. This gets the project off to a great start under the best conditions. And makes everyone happy: the customers, the specialist planners and all of us at Winterhalter.

### WORKFLOW

Ensure an efficient washing process with the CTR: from the return of dirty wash items to restocking with clean dishes. Perfectly coordinated work processes make employees and guests happy.

*»200 employees eat in our company canteen every day. However, our kitchen is very small. That's why it was a real challenge to find the right dishwasher. CTR gives us exactly that. Thanks to its modularity, it fits perfectly into our kitchen and can handle even large amounts of dishes in a short period of time.«*

Falko Geis, COMPANY TECHNICIAN, AVIRA | TETTANG





*Cleanliness and hygiene. Every single one of our products plays its part. Together they create the perfect wash result. Welcome to the complete Winterhalter system!*

## WASH RACKS

Custom-made for glasses, trays, dishes or cutlery. With their functional design they adapt precisely to the respective wash items, protecting them and preventing damage. They ensure ideal water and air circulation and fast drying. And of course they make handling and transporting wash items easier.

Wash racks have a decisive influence on the quality of the wash result and the total operating costs. We advise which racks best suit your requirements. Culminating in the best solution for you.



## CHEMICALS

Usually overshadowed by the machine. Often underestimated. But they have a crucial influence on the wash result: the chemicals. This is the reason they are an important component of the overall Winterhalter system.

We therefore established a research department with an in-house laboratory many years ago at our headquarters in Meckenbeuren. Here we develop and test formulae for a premium range of detergents and hygiene products. They are perfectly tailored to the various types of wash items and soiling, economical to use and perfectly coordinated to the other products in the range. They work together perfectly and deliver brilliant wash and drying results.



## WATER TREATMENT

Deposits. Streaks. Marks. They are »unwanted gifts from the kitchen« and the natural enemies of any restaurateur. They are the hallmark of a poor wash result. Limescale impairs the effect of detergent and rinse aid, and damages the machine in the long-term. The problem is water quality – the solution is professional water treatment. Specifically for powerful machines such as the CTR, Winterhalter offers the DuoMatik 3 softener: Winterhalter developed the DuoMatik 3 softener: The external device requires no power supply and works mechanically to ensure consistently high-quality water – and it does this without a regeneration break due to two alternating ion exchange cartridges. If you demand even higher water quality: The compact RoMatik 420 reverse osmosis device achieves almost 100 % demineralisation, even where large volumes of water are required. The result is gleaming wash results, with no need for subsequent polishing.



---

## ACCESSORIES AND SPACE PLANNING

**The product: first class.** Washing technology from Winterhalter stands for the highest standards of wash results. However, as the worldwide washing specialists, our demands are higher: Our objective is not just to offer our customers first-class wash results. Our desire is to design their washing process as efficiently as possible. The original Winterhalter accessories create the basis for this.

**The tailor-made solution:** Washing technology is only perfect when it is precisely tailored to meet individual requirements: the space and the employee environment, the capacities and the special requirements and demands. Winterhalter has developed a diverse range of handling systems: Inlet or outlet tables, in linear or corner configurations. Mechanical and electrical corner conveyors, at an angle of 90° or 180°. Clearing and sorting stations, drying zones, roller tables and rack shelves. This provides a wide range of installation and combination options: for flexible space planning. And the optimal washing process for you.

**What can we do for you? Let's talk about it: Tel. +49 7542 402-5408 or [www.winterhalter.com/contact](http://www.winterhalter.com/contact)**



Karl Winterhalter



Jürgen Winterhalter



Ralph Winterhalter

## »We are family people!«

Down-to-earth. Forward-looking. With a focus on family. The culture and values of our family have shaped the Winterhalter company for three generations. Close to staff, customers and partners. Long-term thinking with a view to the generations to come. Taking personal responsibility – all typically Winterhalter. We are proud of our family company. And we are pleased to grow a little more every day.

### THE FIRST WINTERHALTER



It all began in 1947: Karl Winterhalter established his own company in Friedrichshafen. He started by salvaging scrap metal from the war, which he used to manufacture household goods. Cooking pots and ovens, for example. A short time later he specialised, and in 1957 launched the GS 60 model: the first commercial warewasher from Winterhalter. That was the starting signal. Since then the company has always pursued a single goal: perfect wash results as part of an efficient washing process. With this holistic approach, Winterhalter has developed from a machine supplier to the full system provider of warewashing solutions it is today.

*»Products, advice, service – three factors that intertwine seamlessly at Winterhalter. And that makes our customers feel safe in the knowledge that they have the right partner for any issue relating to the washing process.«*

### FROM WAREWASHER TO WAREWASHING SOLUTION

In days gone by, all we needed to do was deliver the new warewasher to our customer's kitchen on a hand truck. Now it's about the development of a new, individual warewashing solution, which is perfectly coordinated with the on-site situation and the special requirements and preferences of the customer. A solution of this type is based on clear analysis and planning. To achieve this, we visualise the room layout using state-of-the-art CAD software in 2D and 3D. For a bespoke and efficient washing process.



OVER **2.000**  
EMPLOYEES WORLDWIDE

High quality standards. Diligence. Curiosity and ambition. These are the typical attributes of a Winterhalter employee. And with them, we have grown from a small Swabian family company into a global player: with over 40 branches worldwide and distribution partners in over 70 countries. We are proud of what we have achieved. And we are proud of each and every employee who has done their bit. So we would just like to take this opportunity to officially say »Thank you!«



## OUR ACADEMY OF WASHING SCIENCE

Almost 1,000 participants per year and 250 training days worldwide: as part of our training programmes we pass on our knowledge and experience in the discipline of »warewashing«. We provide training to our own personnel as well as to our retail and service partners. Our objective: every Winterhalter customer should receive informed advice and professional support in the specific situation. Whether it's an initial informative discussion, installing a warewasher, or service and maintenance appointments.

## IN-HOUSE LABORATORY FOR IMPROVED CHEMICALS

As a specialist in warewashing, do we want to rely on the products of other manufacturers? The answer to this question was an immediate and resounding »No!«. This was the moment when our in-house research laboratory was born: we have been developing our own formulas for original Winterhalter chemicals for many years now: from detergents and rinse aids to hygiene products.

### *Good to know*

As a specialist in warewashing, at Winterhalter we set high standards for ourselves: we don't just want to meet our customers' current requirements. We want to support them proactively and gain their trust for the long term. Service plays an important role here: our comprehensive network guarantees fast and professional support on site. Worldwide.

We and our service partners are there when you need us. On that you can always rely with Winterhalter.



What opportunities does new technology offer? How is our society and the world of work changing? Which trends and developments will shape commercial warewashing in the future? We find all of these questions extremely exciting. And that's why we are already working on developments that will affect us and our customers tomorrow, and the day after that. You can take a look at the solutions that we have developed in our NEXT LEVEL SOLUTIONS. Current examples include CONNECTED WASH and PAY PER WASH.

>> [www.connected-wash.com](http://www.connected-wash.com) >> [www.pay-per-wash.com](http://www.pay-per-wash.com)

### *»See you again soon!«*

Customers often own a Winterhalter warewasher for 15 or 20 years. So our customers only have to worry about disposing of their old equipment once every few decades. What's more, we take care of this ourselves. We design our machines as modular systems, so they are easy to dismantle if ever the need arises. We reduce the range of materials, use standardised construction materials and label plastic parts for easy recycling. Winterhalter warewashers have a particularly high recycling ratio thanks to these and many other measures.



## MADE IN GERMANY AND SWITZERLAND

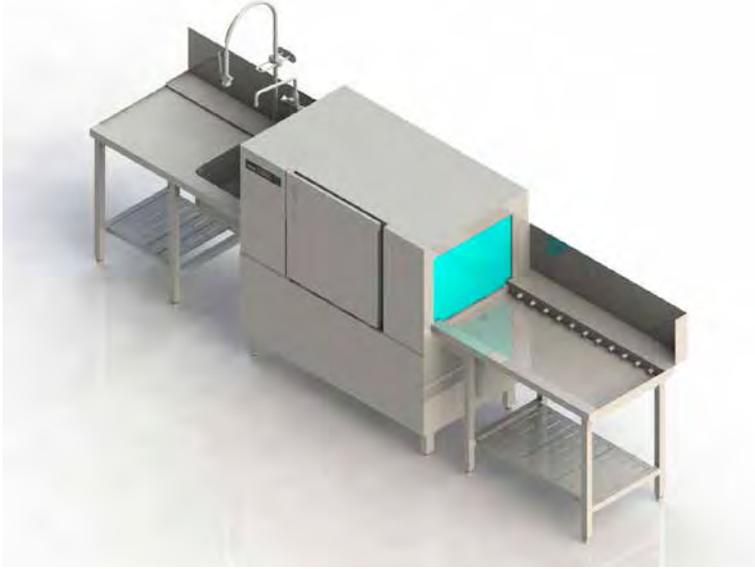
As ever, it is not simply an indication of origin, but a seal of quality: products made in Germany and Switzerland are recognised worldwide for their premium quality and total reliability. For engineering skill, ingenuity and precision. Winterhalter is the perfect testament to this: in Meckenbeuren, Edingen and Rüthi, we develop and produce solutions for first-class cleanliness and hygiene. This is our promise for every single warewasher that leaves our factory.

## CTR CONFIGURATION EXAMPLES

Ideal for any room: The CTR's various setup and combination options offer the best solution for every kitchen.

### CTR M CONFIGURATION EXAMPLE

---



**Hotel, restaurant, canteen meals  
for 100 to 200 diners**

- Performance: up to 120 racks per hour
- Total length/depth: 3,800 mm / 815 mm
- Loading area: Inlet table with sink and pre-spray unit, space for two racks
- Unloading area: outlet roller table, space for two racks

### CTR M-M WITH ENERGY CONFIGURATION EXAMPLE

---

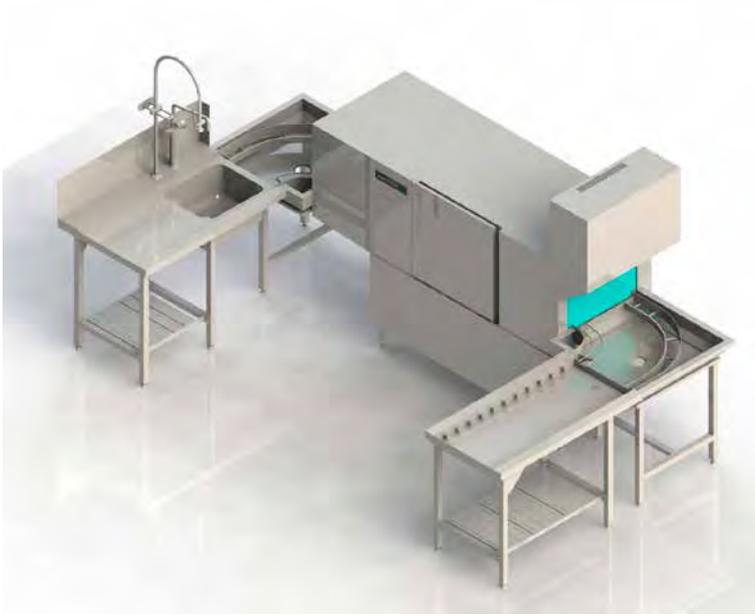


**Hotel, restaurant, canteen meals  
for 100 to 200 diners**

- Performance: up to 120 racks per hour
- Total length/depth: 4,100 mm / 1,550 mm
- Loading area: Inlet table with sink and pre-spray unit, space for two racks
- Unloading area: electric 180° outlet corner conveyor, rotating outlet roller table, space for two racks

## CTR SL WITH ENERGY CONFIGURATION EXAMPLE

---



### Hotel, restaurant, canteen meals for 150 to 300 diners

- Performance: up to 160 racks per hour
- Total length/depth: 3,800 mm / 2,100 mm
- Loading area: Inlet table with sink and pre-spray unit, space for two racks, mechanical 90° inlet corner conveyor
- Unloading area: mechanical 90° outlet corner conveyor, outlet roller table, space for two racks

## CTR ML-M WITH ENERGY CONFIGURATION EXAMPLE

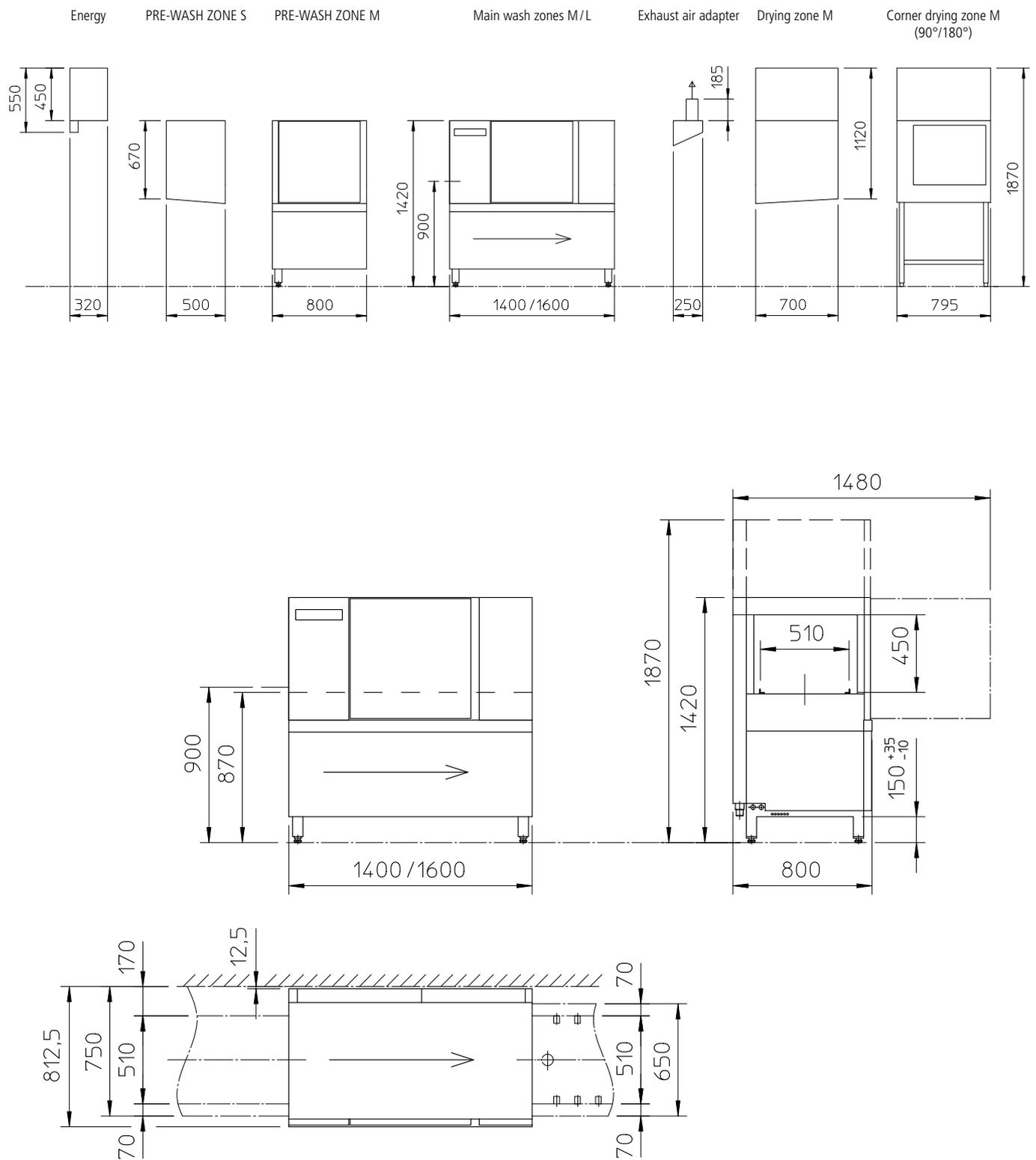
---



### Hotel, restaurant, canteen meals for 200 to 400 diners

- Performance: up to 195 racks per hour
- Total length/depth: 4,000 mm / 3,150 mm
- Loading area: clearing and sorting station, inlet table with sink and pre-spray unit, space for two racks, 90° corner inlet
- Unloading area: mechanical 90° outlet corner conveyor under corner drying zone, outlet roller table, space for two racks

# CTR TECHNICAL DATA



General data		CTR M	CTR L
		Single rinse	Dual rinse
Tank capacity	l	75	83
Rack dimensions	mm	500x500	
Clear entry height	mm	450	
Passage width	mm	510	
Working height	mm	900	
Wash pump	kW	2.2	
Noise emission	dB(A)	< 70	
Splash guard		IPX5	
Max. inlet water temperature	°C	60° (Energy: 20)	
Required water flow pressure with pressure boiler	bar/kPA	1.5–6.0 / 150–600	
Tank temperature	°C	55–65	
Rinse water temperature		85	

Weight optional (net/gross)		CTR M	CTR L
		Single rinse	Dual rinse
Straight drying zone	kg	61 / 109	
Corner drying zone	kg	110 / 158	
Energy	kg	38 / 40	

Specific data		CTR M	CTR SM	CTR MM	CTR L	CTR SL	CTR ML
Theoretical rack capacity	Racks/h	50/75/120	70/100/150	90/125/185	60/85/130	80/110/160	100/135/195
Average rinse water consumption *1	l/h	114	152	190	130	168	205
Weight net/gross	kg	212/264	249/315	340/418	244/296	281/347	372/450

\*1 Non-binding information. The actual rinse water consumption may vary depending on the on-site conditions.

## OPTIONAL EQUIPMENT

- Energy exhaust air heat recovery \*2
- direction of travel can be selected: left–right / right–left
- working height: 850 mm, 950 mm \*2
- base installation
- pre-wash zone S \*2
- pre-wash zone M \*2
- straight drying zone \*2
- corner drying zone \*2
- exhaust air adapter (only outlet end) \*2
- emergency stop \*2
- dual rinse
- increased boiler heating at the cold water connection \*2

\*2 These modules can be retrofitted.



*»In this brochure, we have presented our CTR: its product features, application options and what sets it apart. However we were not able to provide you with the strongest argument of all here: the positive experiences of our satisfied customers. Just ask next time you see a CTR anywhere. There is no better aid to making your decision.«*

*Jürgen and Ralph Winterhalter*

