



# SPEED UP!

The new C50. A modular system for high capacity.





# SPEED UP!



Restaurants, hotels, refectories and canteens. Those working here know: Sometimes, it has to go really fast. Also in the kitchen. Stacks of plates, cups, glasses and cutlery must be hygienically cleaned in no time at all. This is precisely why Winterhalter has developed the C50 rack conveyor dishwasher: The warewashing system was developed for maximum performance and is designed for maximum speeds. With compact dimensions and modules that can be combined individually. For first-class wash results while requiring little space.

**RAPID WASHING SPEED.** The major strength of the C50 is in its capacity: It can reach up to 260 racks per hour. And all this with compact dimensions and low space requirements. Three different speed levels allow you to adjust the wash cycle to suit the volume of wash items. With this, you are ready for anything. Even at peak times.

**MAXIMUM FLEXIBILITY.** The C50 gives you full flexibility: The machine is available in two basic versions »single rinse« and »dual rinse«. The modular system also offers different configuration and installation options. Pre-cleaning zone or drying zone? Possibility for HighTemp mode? Mechanical or electrical corner conveyor? Linear or corner inlet table? It is all possible – and can of course be upgraded later.

**HYGIENE SAFETY.** The C50 is specifically designed for first-class wash results, hygienic cleanliness and excellent drying: With a standard tank heating performance of 18 kW, upgradeable to a whopping 27 kW (HighTemp), and a thoroughly considered hygiene design. The boiler heating always operates with a stable 27 kW independent of the water pressure provided on site: This guarantees consistent and perfect rinse results.

**USER-FRIENDLY.** The C50 is simple: Simple to install, simple to operate and simple to clean. The display is self-explanatory and language-neutral. Automatic programmes help you during the cleaning and ensure fast emptying and filling of the machine. Thus, your C50 is ready for use in no time at all.



# READY, SET, GO!

## MACHINE VERSIONS

Available in the »single rinse« version with compact external dimensions and optimised intervals between the internal washing process. Also available in the »dual rinse« version with only a little more space requirement but with an additional pump rinse for the optimum removal of particles.

## BACK PANEL OF THE MACHINE

For working conveniently and an energy-efficient operation: Standard machine rear cover to reduce noise and heat emissions. With a smooth inner surface for easy and fast cleaning.

## PRE-CLEANING ZONE

Is available as an optional module, which extends the main wash zone and increases the rack capacity of the machine: Separated by a long curtain, large pieces of food are removed with the aid of additional wash arms. Can also be upgraded.

## HYGIENE CONCEPT

Washing quality and hygiene of the highest standard: Hygiene design with double-skinned hygiene doors and deep-drawn tank base. Double filtration system with a pump inlet filter and a fully covering flat strainer. Non-pressurised boiler, powerful tank heating and optional HighTemp kit.



**Custom configuration options.** The C50 can be tailored exactly to your requirements and your situation on site. In addition to the pre-cleaning and drying zones, as well as the HighTemp option, exhaust air adapters and other accessories are also available: Inlet and outlet tables made of stainless steel; the inlet can also go around the corner. Stacking, sorting and clearing stations. Mechanical and electrical corner conveyors at 90- and 180-degree angles. This means: You are free to plan and have a wide range of installation options. For an individually-tailored and efficient washing process.

## WASHING PERFORMANCE

Fast and efficient: Up to 260 racks per hour. High performance with compact dimensions and low space requirements. And three individually adjustable speeds according to customer requirements: Intensive, Standard, Fast. Automatic rack-controlled activation of the individual wash zones for cost-effective operation.



## DRYING ZONE

Available as an optional module and can be retrofitted later. This allows for the wash items to be used again straight away.

## OPERATION

Self-explanatory, language-neutral and colour-coded display for easy operation. With automatic programmes for cleaning support, quick emptying and quick filling. This allows the C50 to be ready for operation in around 15 minutes. Including drain pump and an automatic programme for emptying the machine as standard: without contact with the wash water. For more comfort and work safety.



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.



# 1.900

### 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.

### *An Asian Success Story*

On 27 June 2015, the time had come: The factory Winterhalter Asia Co. Ltd. was officially opened in Rayong (Thailand). After Meckenbeuren and Eendingen in Germany and Rüthi in Switzerland, this is Winterhalter's fourth production facility.

»We are at a point where it is no longer enough to be a German company with a large export share. Our markets are at a different stage of development and have different needs. As an international company the German market is one of many we serve.«, says Ralph Winterhalter. Warewashers are produced in Rayong that are designed specifically for the Asian market. The advantage: They are perfectly matched to the requirements and wishes of Asian customers. And this is precisely why it is so successful.

## WINTERHALTER ASIA CO. LTD.

Location:	Rayong, Thailand
Production space:	3,500 m <sup>2</sup>
Features:	ISO 9001 certification and BOI registration
Products:	U50, P50, C50



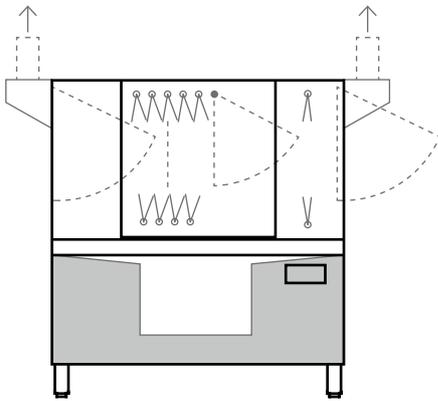
## GERMAN TECHNOLOGY

One ought to hand it to the Germans: In terms of inventiveness and engineering, nobody can outdo them. This is known and treasured by our customers throughout the world. It is therefore all the better when it comes to successful international cooperation: When engineers from Germany develop the technology, but the products are manufactured and sold directly in the target market – for example, in Asia. Such as our C50.

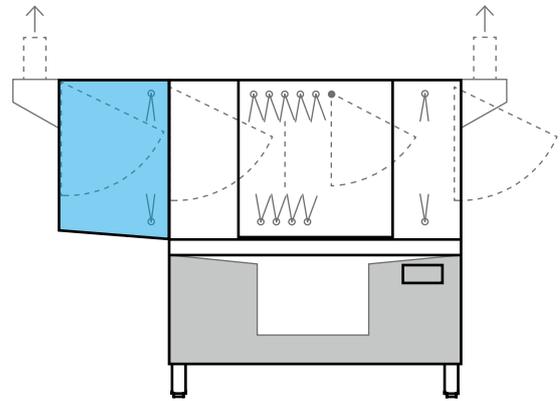
# MACHINE CONCEPT AND VARIANTS

## SINGLE RINSE

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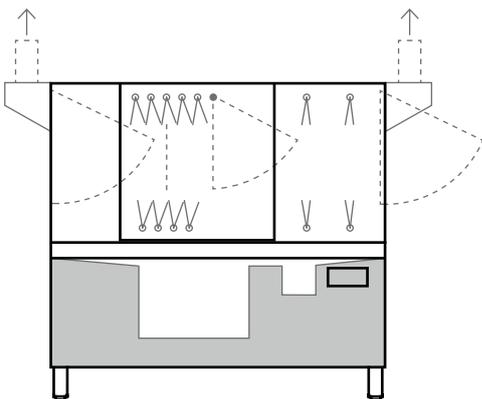
**BASIC MACHINE.** With single rinse and compact dimensions. In linear configuration or as corner installation. Ideal for small and angled spaces.



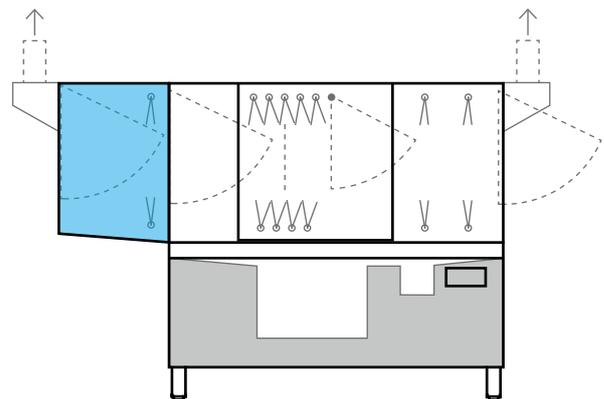
**WITH PRE-CLEANING ZONE.** For increasing the machine capacity with a higher volume of wash items. Optionally available and can be retrofitted later.

## DUAL RINSE

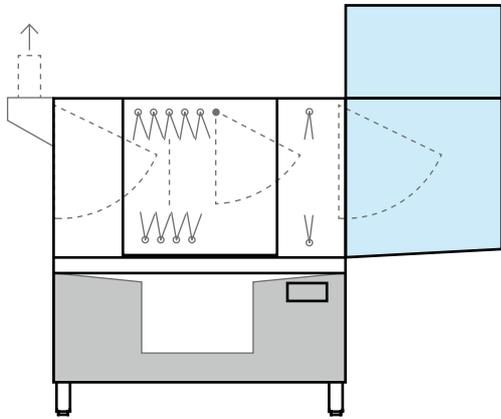
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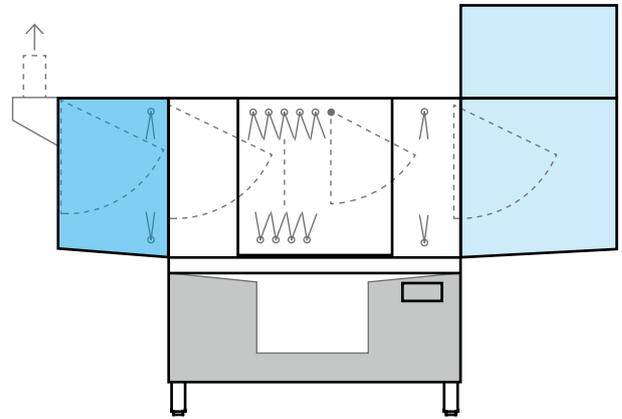
**BASIC MACHINE.** With pump rinse and compact dimensions. In linear configuration or as corner installation. Improves the rinse result and provides a slight increase in machine capacity.



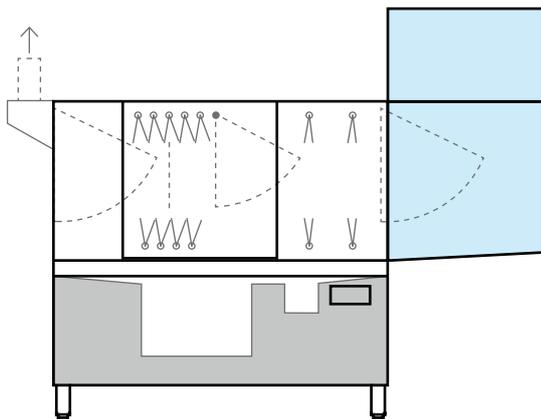
**WITH PRE-CLEANING ZONE.** For increasing the machine capacity with a higher volume of wash items. Optionally available and can be retrofitted later. Including pump rinse for an improved rinse result.



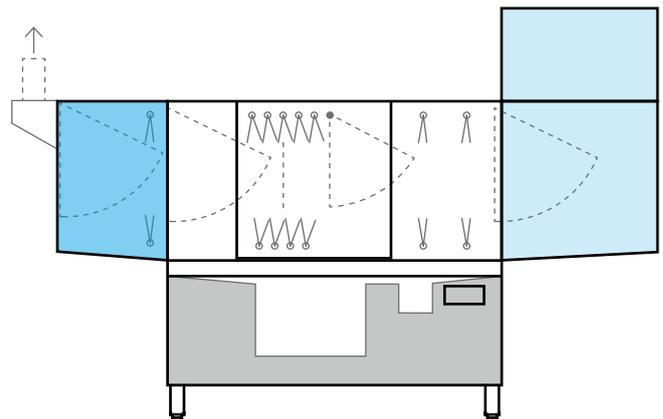
**WITH DRYING ZONE.** This allows the wash items to be used again straight away. Optionally available and can be retrofitted later.



**WITH PRE-CLEANING AND DRYING ZONE.** When the cleaned wash items have to be immediately reusable even at peak times. Both zones are optionally available and can be retrofitted later.



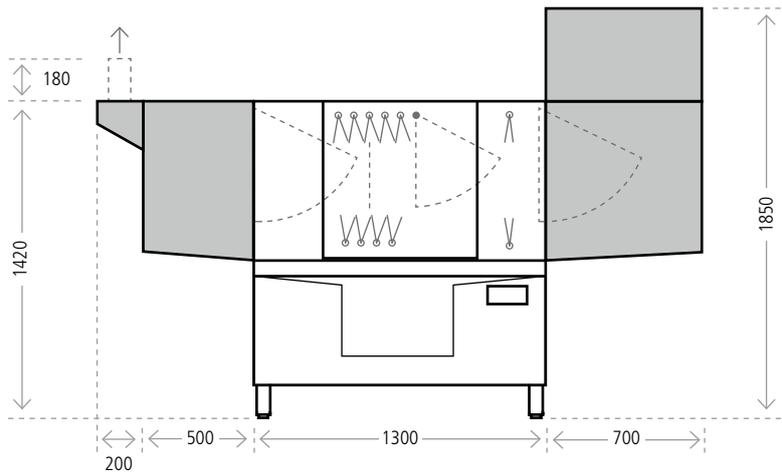
**WITH DRYING ZONE.** This allows the wash items to be used again straight away. Optionally available and can be retrofitted later. Including pump rinse for an improved rinse result.



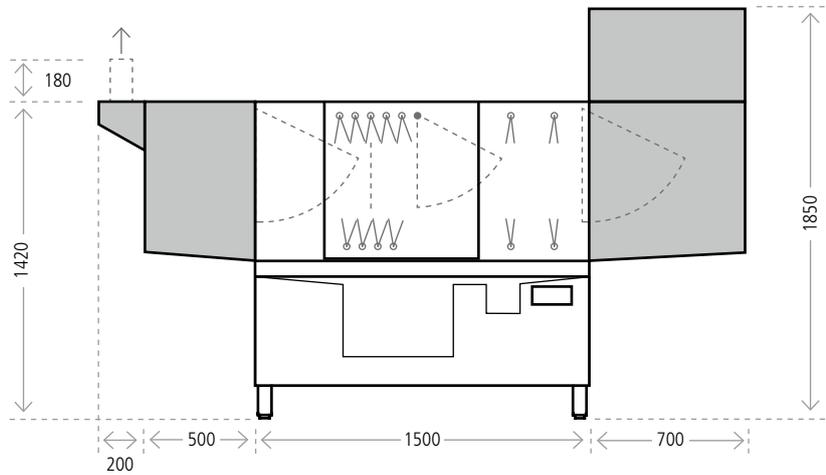
**WITH PRE-CLEANING AND DRYING ZONE.** When the cleaned wash items have to be immediately reusable even at peak times. Both zones are optionally available and can be retrofitted later. Including pump rinse for an improved rinse result.

# TECHNICAL DATA

C50 SINGLE RINSE



C50 DUAL RINSE



## OPTIONAL EQUIPMENT EX WORKS

- Direction of travel: left-right / right-left
- Dual rinse

## RETROFITABLE OPTIONAL EQUIPMENT

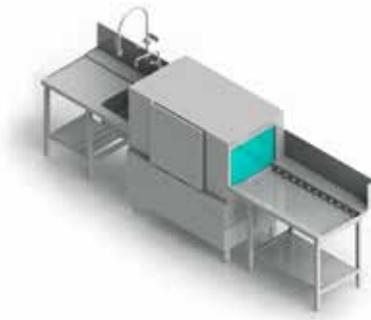
- Exhaust air adapter (inlet / outlet)\*3
- Working height 950 mm\*4
- Pre-cleaning zone
- Drying zone
- HighTemp
- Emergency stop switch
- Table limit switch
- 90° corner entry table
- Mechanical corner conveyor 90° (inlet / outlet)
- Mechanical corner conveyor 180° (outlet)
- Electrical corner conveyor 90° / 180° (outlet)

General data		C50 Single rinse	C50 Dual rinse
Tank capacity (rinse tank)	l	95	95 (12.5)
Rack dimension	mm	500 x 500	500 x 500
Clear entry height	mm	450	450
Passage width	mm	510	510
Working height (optional)	mm	900 (950)	900 (950)
Wash pump	kW	1.6	1.6
Noise emission	dB(A)	< 70	< 70
Splash guard		IPX5	IPX5
<b>Weight net / gross</b>			
Basic machine	kg	200 / 250	230 / 280
with pre-cleaning zone	kg	225 / 307	255 / 337
with drying zone	kg	266 / 348	296 / 378
with pre-cleaning and drying zone	kg	291 / 405	321 / 435
Max. inlet water temperature	°C	60	60
Required water flow pressure with non pressurized boiler	bar / kPa	1.5 – 6.0 / 150 – 600	1.5 – 6.0 / 150 – 600

\*1 Adjustable to individual requirements on site. \*2 Non-binding information. The actual rinse water consumption may vary depending on the on-site conditions.

\*3 On outlet side not in combination with drying zone. \*4 Not in combination with mechanical corner conveyor.

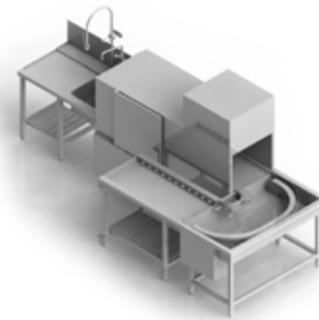
# INDIVIDUAL PLANNING – A PERFECT FIT IN ANY ROOM



## C50 SINGLE RINSE rack conveyor dishwasher

Hotels, restaurants, canteen meals for 200 – 400 diners

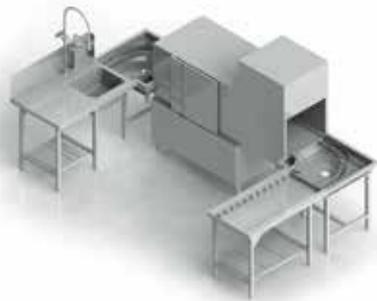
- Performance: Up to 165 Racks / h
- Total length / depth: 3,700 mm / 815 mm
- Loading area: Inlet table with sink and pre-spray unit, space for two racks
- Unloading area: Outlet roller table, space for two racks



## C50 SINGLE RINSE rack conveyor dishwasher with drying zone

Hotels, restaurants, canteen meals for 200 – 400 diners

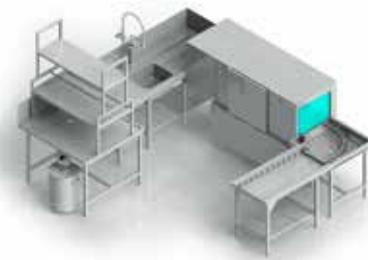
- Performance: Up to 165 Racks / h
- Total length / depth: 4,000 mm / 1,550 mm
- Loading area: Inlet table with sink and pre-spray unit, space for two racks
- Unloading area: Electrical 180° outlet corner conveyor, pivoting roller table, space for two racks



## C50 SINGLE RINSE rack conveyor dishwasher with drying zone

Hotels, restaurants, canteen meals for 200 – 400 diners

- Performance: Up to 165 Racks / h
- Total length / depth: 3,700 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, roller table, space for two racks



## C50 DUAL RINSE rack conveyor dishwasher with pre-cleaning zone

Hotels, restaurants, canteen meals for 300 – 500 diners

- Performance: Up to 260 Racks / h
- Total length / depth: 3,550 mm / 3,150 mm
- Loading area: Sorting station, inlet table with sink and pre-spray unit, space for two racks, 90° corner entry
- Unloading area: Mechanical 90° outlet corner conveyor, roller table, space for two racks

Specific data		C50 Single rinse	C50 Dual rinse
Theoretical capacity w/o pre-cleaning zone	Racks / h*1	70 / 110 / 165	80 / 140 / 210
Theoretical capacity with pre-cleaning zone	Racks / h*1	90 / 140 / 210	100 / 180 / 260
Rinse water consumption full capacity w/o pre-cleaning zone	l / h* 2	230	260
Rinse water consumption full capacity with pre-cleaning zone	l / h* 2	260	300
Tank temperature (HighTemp)	°C	62 (> 71)	62 (> 71)
Rinse water temperature	°C	85	85



*»A solution with a clear advantage. That is the aspiration behind every single product we develop here at Winterhalter. To do this, we must be close to our customers. In order to understand their routine work. To understand their special requirements. And to learn their wishes. It is exactly for this reason that we do not produce machines such as our C50 in Germany. But directly on site in Asia: In close cooperation with our Thai colleagues.«*

*Jürgen and Ralph Winterhalter*