

# PT | THE SPEED CLEAN.

It's versatile. Washes perfectly. And it's fast. The efficient pass-through dishwasher. Ideal for large loads.





One machine for perfect cleanliness and hygiene. Perfectly coordinated accessories. Specially-developed chemicals. Advice. Training services. Service. All that and more from Winterhalter.



#### RAPID WASHING SPEED

Washing with the PT means saving time: hood up, rack out, new rack in, hood down. And while the machine gets to work, the clean dishes can be cleared away and the next rack filled.

#### PERFECT WASH RESULTS

The PT Series is full of technical innovations: the sum of all the carefully designed details makes this warewashing system extremely efficient. And ensures first-class cleanliness and hygiene.

#### SIMPLE TO USE

Touch screen with self-explanatory pictograms. Start button for single-button operation. Guided self-cleaning programme. Another distinctive feature of the PT Series: refreshingly simple and intuitive operation.



## PIECEWORK.

Rush hour in the kitchen. The PT from Winterhalter is at the heart of it all. Racks with dirty dishes are loaded from the inlet table. The wash cycle starts. The clean dishes are taken out on the other side. No unnecessary waiting. Everything is perfectly coordinated, everything runs smoothly. A perfect washing process. The PT Series makes this possible: its innovative technology is designed to meet the highest demands and is streamlined for maximum economy. An all-rounder for a wide range of wash items. Fast, economical and efficient.

### CUSTOMISED SOLUTION

Perfectly adapted to the space available to you and your dishes: the PT is available in sizes S, M, L and XL. There are four different variants for you to choose from: a dish, glass, bistro and cutlery washer. Each of these has up to three standard programmes as well as other individual setting options.

### ECONOMICAL AND EFFICIENT

Intelligent use of energy. Low water consumption. Perfect wash results. The PT warewashing system is a lesson in how to combine first-class wash results with maximum cost-effectiveness.



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

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



### **VARIABLE WASHING PRESSURE ADJUSTMENT**

Every PT comes with variable water pressure regulation as standard: »VarioPower« adjusts the washing pressure precisely to the type of wash items and how dirty they are. Fine glasses and fragile bowls are washed at low water pressure, while sturdy dishes are washed at a higher water pressure. Soiling is removed without fail in this way – while the dishes are treated gently.

### **FULL-FLOW FILTRATION**

The cleaner the wash water, the better the wash result. That's why the PT comes with full-flow filtration. During stage 1, the tank cover feeds all of the water into a filter cylinder. During stage 2, the coarse dirt particles are removed, followed by the finer particles. The Mediamat then filters out the finest particles, such as coffee grounds, during stage 3. Finally, during stage 4, the pump inlet filter gets to work, protecting the pump from mechanical damage. As a result, the wash water remains clean at all times.

### **WASTE WATER HEAT RECOVERY**

The standard equipment of the PT Series includes »EnergyLight« waste water heat recovery: the heat exchanger uses the energy from the waste water to heat the cold inlet water. The advantage: you save on resources and energy costs are reduced by up to 10 % per wash cycle.

### **EXHAUST AIR HEAT RECOVERY**

This option pays for itself quickly: in contrast to the »EnergyLight« waste water heat recovery system that is fitted as standard, »EnergyPlus« offers both a more efficient waste water heat exchanger and an exhaust air heat exchanger. It uses the energy from the hot steam to pre-heat the cold inlet water. The advantage: up to 20 % of the operating costs are saved every wash cycle. When you open the machine, hardly any steam escapes.

### **HEAT PUMP**

In addition to the two systems for waste water and exhaust air heat recovery, the »ClimatePlus«\* heat pump is also available as an option for the PT in sizes M and L: this not only draws on the thermal energy from inside the machine to heat the tank and rinse water – it also uses the heat from the air in the room. This reduces the operating costs by up to a further 50%, lowers the humidity level in the air and makes for a much more pleasant kitchen environment thanks to its air-conditioning effect.

### **DRIVEN RINSE SYSTEM**

Take advantage of every opportunity to make savings: the PT comes with a driven rinse system as an option. Unlike conventional systems, a small electric motor provides the drive. As a result, the rinse water volume is reduced by up to 17 %. Your operating costs are reduced accordingly.

\* Fluorinated greenhouse gases contained in a hermetically sealed device; refrigerant R134a, 0.75 kg, 1.07 tonnes of CO<sub>2</sub> equivalent; greenhouse gas potential 1430.

*»It washes quickly and everything is pristine, it's super reliable and is kind on cutlery. So the PT does everything a chef needs: I don't have to worry about washing! And I can focus on what's important: preparing my dishes.«*

Ollie Dabbous, EXECUTIVE CHEF AND ONE OF THE FOUNDERS OF HIDE RESTAURANT |  
PICCADILLY, LONDON





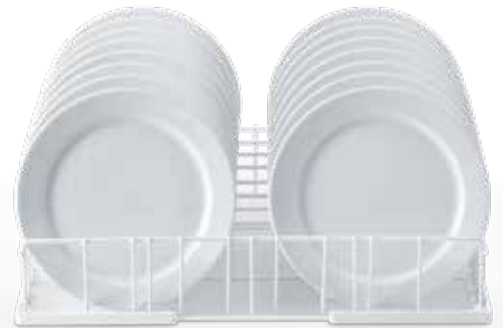


*Cleanliness and hygiene. Every single one of our products plays its part. Together they create the perfect wash result. Welcome to the complete Winterhalter system!*

## WASH RACKS

They are custom-made for glasses, 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 naturally they simplify handling and transportation of the wash items.

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

They are usually overshadowed by the machine. Often underestimated. But they have a crucial influence on the wash result: the chemicals. For this reason they are an extremely important component within the overall Winterhalter system.

At our headquarters in Meckenbeuren we have therefore established a research department with an in-house laboratory. Here we develop and test formulas for a premium range of detergents and hygiene products. These are precisely tailored to the different wash items and types of contaminants; they are economical and can be ideally combined with other products in the range. They thus work together perfectly and deliver a brilliant overall wash result.



## WATER TREATMENT

Deposits. Streaks. Spots. They are »little greetings from the kitchen« and the natural enemies of any restaurateur. Because they are a sign of poor washing quality. Because 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.

In addition to devices for softening, partial and full demineralisation, there is the AT Excellence-M premium solution to meet the highest demands: the external reverse osmosis device is specially designed for the high volumes of dishes dealt with by the PT Series and removes 98% of all substances dissolved in the water. The limescale and mineral-free osmosis water protects the warewasher and prevents any deposits on glasses, dishes and cutlery. The result: brilliant wash results straight from the machine – with no manual polishing.



## ADVICE AND PLANNING

Winterhalter is the specialist in commercial warewashing systems. Our knowledge encompasses the widest range of kitchens in the world. We know which aspects are important when it comes to washing, and what has to be taken into consideration. And: we enjoy passing this knowledge and experience on to our customers.

**The aim: a perfect washing process.** A big advantage of the PT Series is its flexibility. The machine adapts to the space you have on site and your working processes perfectly. Which installation variant offers you the best logistics? Are the inlet tables and drain tops in a line or arranged around a corner to save space? On which side do you want to remove the clean dishes; in other words, what is the pass-through direction? Would a TwinSet with two connected machines make sense? Or a heat recovery system? We help you answer every single question. So that you can make the right choices when you make your investment.

**Your partner, Winterhalter.** Our team of advisers and planners analyse your individual on-site situation: the layout, the room arrangement, the processes. We plan your estimated requirements and calculate the necessary equipment. We help you organise your washing operation, optimise the washing logistics and provide instruction and training sessions for your employees. In short: when it comes to washing up, we're always there for you. From the start. And we help you to make your washing process as professional and efficient as possible.

**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.



# 1.700

### 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«*

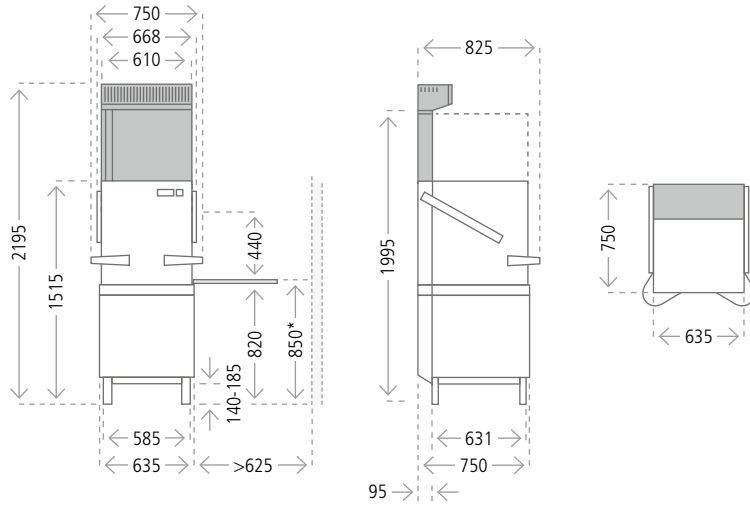
Customers often own a Winterhalter warewasher for 15 or 20 years. So our customers only have to worry about disposing of their old equipment once every few decades. What's more, we take care of this ourselves. We design our machines as modular systems, so they are easy to dismantle if ever the need arises. 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

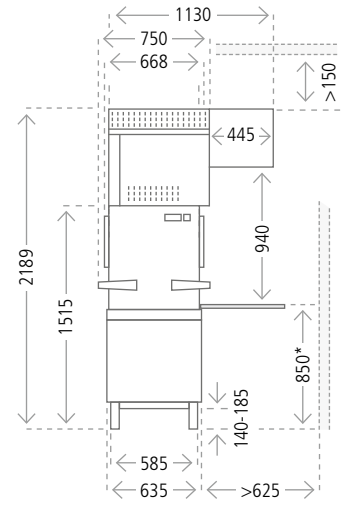
As ever, it is not simply an indication of origin, but a seal of quality: products made in Germany and Switzerland are recognised worldwide for their premium quality and total reliability. For engineering skill, ingenuity and precision. Winterhalter is the perfect testament to this: in Meckenbeuren, 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.

**PT-M / PT-M EnergyPlus**



color gray = only at PT EnergyPlus

**PT-M ClimatePlus**



**ELECTRICAL DATA**

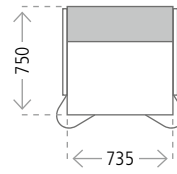
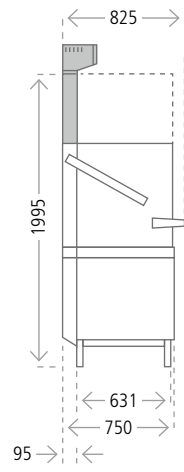
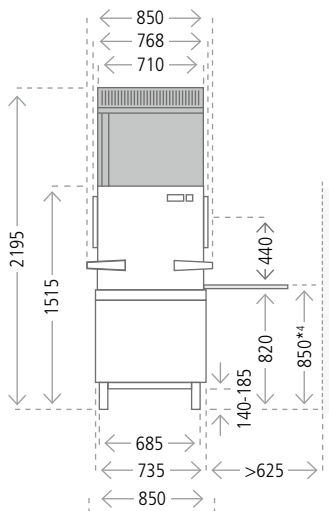
Voltage	Fuse protection	Total connected load		Countries
		Tank heating 2.5 kW** (Cool: 2 x 2.5 kW**) Boiler heating 6.4 kW**	Tank heating 2.5 kW** Boiler heating 10.8 kW**	
380 V, 3N~, 50 Hz / 60 Hz	16 A	7.1 kW	8.3 kW	Worldwide
	16 A	7.9 kW (Cool: 8.1 kW)	9.1 kW	
400 V, 3N~, 50 Hz / 60 Hz	25 A	10.2 kW	13.2 kW	
	32 A	Cool: 11.5 kW	14.7 kW	
415 V, 3N~, 50 Hz / 60 Hz	15 A	6.9 kW	9.5 kW	
	16 A / 20 A	8.4 kW (Cool: 8.6 kW)	9.7 kW	
	25 A	10.9 kW	14.2 kW	
230 V, 1N~, 50 Hz / 60 Hz	32 A	6.9 kW	–	
	25 A	5.1 kW	–	
	32 A	6.8 kW	–	
240 V, 1N~, 50 Hz / 60 Hz	40 A	8.4 kW	–	
	50 A	10.9 kW	–	
	25 A	7.8 kW	–	
230 V, 3~, 50 Hz / 60 Hz	32 A	10.1 kW	–	Belgium
	50 A	–	14.5 kW	
200 V, 3~, 50 Hz / 60 Hz	25 A	6.6 kW	7.1 kW	Japan
	32 A	8.0 kW	8.1 kW	

**ELECTRICAL DATA ClimatePlus (PT-M / PT-L)**

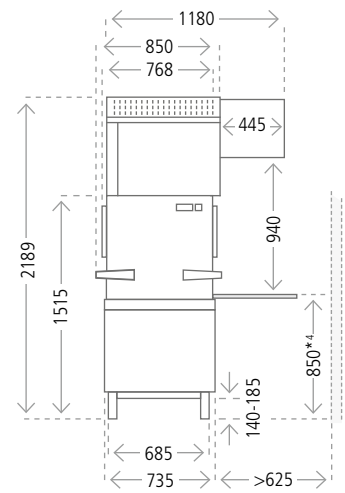
Voltage	Fuse protection	Total connected load	Countries
380 V, 3N~, 50 Hz	16 A	7.1 kW	Worldwide
400 V, 3N~, 50 Hz	16 A	7.9 kW	
	25 A / 32 A	10.2 kW	
415 V, 3N~, 50 Hz	15 A	6.9 kW	
	16 A / 20 A	8.4 kW	
230 V, 3~, 50 Hz	25 A	10.9 kW	Belgium
	32 A	7.8 kW	
		10.1 kW	

\* Standard working height is 850 mm which can be optionally increased to 900 mm. The vertical dimensions increase by 50 mm. \*\* The actual power varies depending on the mains voltage.

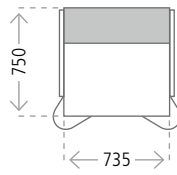
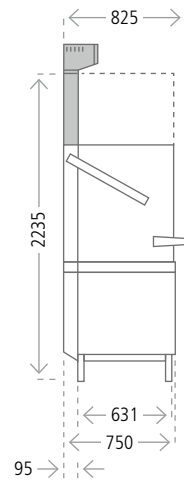
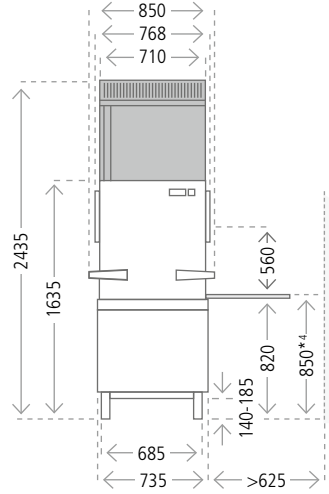
PT-L / PT-L EnergyPlus



PT-L ClimatePlus



PT-XL / PT-XL EnergyPlus



color gray = only at PT EnergyPlus

General data		PT-M	PT-L	PT-XL
Tank capacity	l	35	35	35
Rack interior dimensions	mm	500 x 500	500 x 500 / 500 x 600	500 x 500 / 500 x 600
Clear entry height	mm	440	440	560
Working height	mm	850	850	850
Wash pump	kW	1.0	1.5	1.5
Noise emission	dB(A)	max. 62	max. 62	max. 62
Splash guard		IPX5	IPX5	IPX5
Weight net / gross	kg	134 / 159	137 / 165	140 / 171
– with EnergyPlus	kg	157 / 185	165 / 196	173 / 207
– with ClimatePlus	kg	214 / 256	218 / 263	–
Max. inlet water temperature	°C	60 (EnergyPlus, ClimatePlus: 20)		
Required water flow pressure	bar / kPa	1.0 – 6.0 / 100 – 600		
– EnergyPlus + ClimatePlus	bar / kPa	1.5 – 6.0 / 150 – 600		

Specific data software		Glasses	Dishes	Bistro	Cutlery
Theoretical capacity standard*1	Racks / h	22 / 32 / 48	22 / 32 / 44 HighTemp: 15 / 20 / 25	28 / 32 / 40	11
Theoretical capacity short programme*1	Racks / h	38 / 55 / 77	38 / 55 / 72	49 / 55 / 72	21
Rinse water consumption per wash cycle*2	l	2.4 Cool: 4.0	2.4 HighTemp: 3.8	2.4	4.0
Rinse water consumption per wash cycle driven rinse system	l	2.0 Cool: 3.6	2.0 HighTemp: 3.8	2.0	3.6
Tank temperature	°C	62 Cool: 55	62 HighTemp: 66	62	69
Rinse temperature	°C	65 Cool:*3	85	85	86

\*1 Depending on local conditions (inlet water temperature / electrical supply), the values stated here may be reduced. \*2 Non-binding information. The actual rinse water consumption may vary depending on the on-site conditions. \*3 Depending on inlet water temperature, switchable to 65 °C. \*4 Standard working height is 850 mm which can be optionally increased to 900 mm. The vertical dimensions increase by 50 mm.



*»In this brochure, we have presented our PT Series: 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 PT anywhere. There is no better aid to making your decision.«*

*Jürgen and Ralph Winterhalter*