



WAREWASHING RACK-TYPE DISHWASHER

CP | CN





BETTER OR BEST – IT'S YOUR CHOICE!



PROFI-LINE

The **PROFI**-line – everything a professional operator needs. The successful product series from HOBART can be found working wherever the highest standards of cleanliness are required. It combines an efficient rinsing technique with ultimate user-friendliness and low operating costs. Numerous equipment options make **PROFI**-line a perfectly suited warewashing solution to suit any operation.

PREMAX-LINE

The **PREMAX**-line are the perfect models for operators that need a higher level of proficiency. Because **PREMAX** sets standards in all areas: minimal operating costs and impressive user-friendliness, combined with maximum performance.

The **PREMAX**-line is the most economical and innovative line of dishwashers on the market. In addition to the features of **PROFI** models, **PREMAX** wins over users with its unique product characteristics and is the ideal partner for the highest standards in a perfect warewashing operation.

PREMAX-LINE EXCLUSIVE

The most exclusive **PREMAX** features are labelled with this writing and a gold background.

UNIQUE INNOVATIVE PRODUCT FEATURES FOR MAXIMUM ECONOMY

HOBART products have long been at the pinnacle of technological innovation in modern dishwashing technology. Alongside guaranteed hygienic wash results, HOBART also offers you operational reliability combined with minimum consumption. These high quality machines also boast a number of groundbreaking features – only from HOBART.



- The machine thinks – you save. The SENSOTRONIC washing intelligence identifies such things as empty racks or mixed wash ware and automatically adjusts the wash parameters and consumption accordingly.
- The highly efficient heat recovery systems set new standards in terms of economy and ecology.
- The water quality in the machine remains permanently high thanks to the efficient PERMANENT CLEAN Filter System for soil removal.

NEW APPROACHES

Innovative concepts often lead to new solutions that go beyond existing standards and regulations. Independent reports prove the point: **PREMAX** exceeds the requirements for hygienic wash results laid down in DIN 10510 – at greatly reduced operating costs.

„From the hygienic point of view the results show that with a modified temperature profile safe disinfection is achieved according to the regulation of the former German Public Health Department for the inspection of thermal disinfection. This regulation was one of the fundamentals for the formulation of DIN 10510.“
PD Dr. med. M. Dettenkofer, Prof. Dr. med. F. Daschner
University Clinic Freiburg

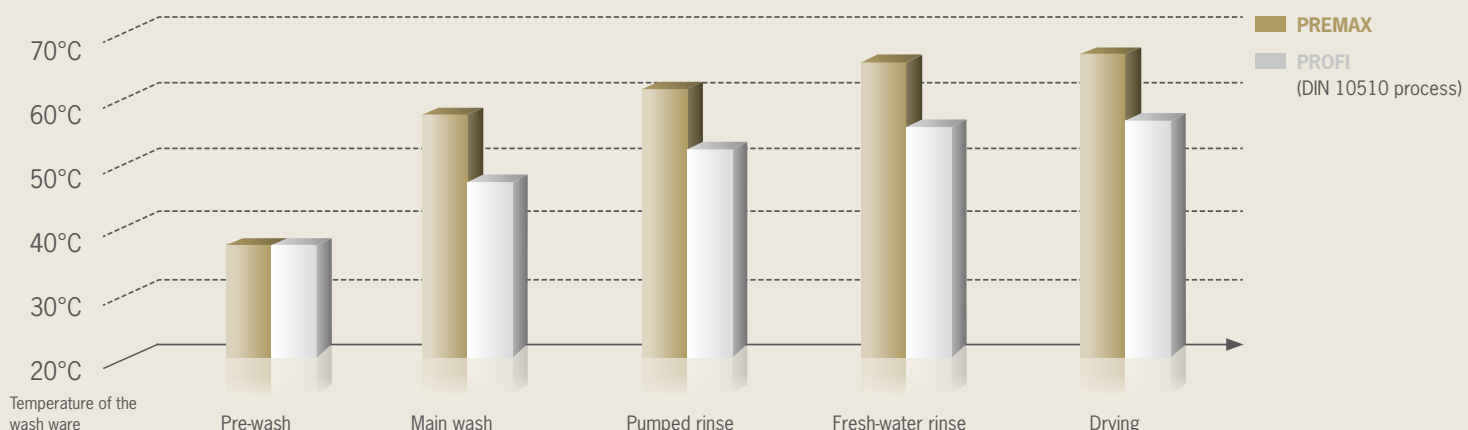


YOUR BENEFITS COMPARED TO CONVENTIONAL TECHNOLOGY

- Up to 60 % less water consumption
- Up to 80 % less detergent
- Up to 30 % less energy
- Up to £5,000 less in operating costs per year

WASH WARE TEMPERATURE IN OUR MACHINES

The hotter the wash ware, the more hygienic the wash results.





ECONOMY

50PERCENT FRESH-WATER RINSE

The task of the fresh-water rinse is to remove detergent from the wash items. The distribution of the fresh water is decisive for the water volume used. The patented 50PERCENT Fresh-water Rinse has special precision nozzles, which disperse the rinse water like a curtain to form a thin film of water on the wash items. As a result of the optimised water distribution this micro-thin film is sufficient to rinse off the soiled wash water from the wash ware. In addition to the conventional rinsing from above and below the 50PERCENT Fresh-water Rinse rinses the wash ware also laterally. The optimised arrangement of the nozzles achieve a precise spraying of the wash ware. The 50PERCENT Fresh-water Rinse reduces water consumption by up to 60 %, resulting in less rinse aid use and greater energy savings.

TOP-TEMP ENERGY MANAGEMENT

A conventional rack-type dishwasher loses about 40 % of the energy available in the machine by sensible and latent heat emission. The hot fresh water rinsing has a considerable influence. The heat loss of the fresh-water rinse takes place at the end of the machine. The heat energy escapes through the dryer to the outside. The TOP-TEMP Energy Management prevents losses before they occur. The high temperature wash zone HOT-TEMP is embedded between the low temp pre-wash and 50PERCENT Fresh-water Rinse zone. Here the pre-wash zone and the rinsing have the effect of a temperature barrier. The temperature equalisation takes place within the machine and so the heat energy can be saved. Energy loss - and costs are reduced by up to 20 %.



ECONOMY

LOW-CHEM DETERGENT SAVING SYSTEM

Detergent is dosed directly into the wash tank, which is continuously regenerated by fresh water from the rinse. Therefore detergent is added to maintain the concentration according to the added regeneration volume. The enhanced patented LOW-CHEM Detergent Saving System of the **PREMAX**-line directs only 75 litres of fresh rinse water (**PROFI**: 105 l) into the wash tank for regeneration. Ahead of the final rinse, detergent is flushed off the wash ware by the RADIUS Pre-rinse Nozzle and diverted back into the wash tank. The dosing of detergent depends on the regeneration water volume. As a result detergent consumption of the **PREMAX** models is reduced by up to 80 % compared to conventional systems (**PROFI** CN: 70 %).

EFFICIENT ENERGY MANAGEMENT

A conventional rack-type dishwasher loses 40 % of the energy available in the machine via the exhaust system. The distribution of water and the air stream have a considerable influence. The patented EFFICIENT Energy Management reduces the evaporation loss. The improved arrangement of the Wide Angle Nozzle FAN and the orientation of the wash arms reduce the air flow within the machine. The patented Wide Angle Nozzle FAN spreads out a 65 % wider and more even spray pattern. Therefore the recirculation of water can be reduced for the same wash result. In order to keep the system in balance less air/water steam has to be exhausted. The EFFICIENT Energy Management reduces the energy loss of the rack-type dishwasher by up to 15 %.

HOBART HEAT RECOVERY

HOBART's heat recovery system functions according to the countercurrent principle, using the energy from the extracted air to heat up the incoming water. The energy exchange takes place in the HOBART high-performance condenser. At the same time, the extracted air is cooled down and dehumidified. The HOBART heat recovery system reduces energy consumption of the **PREMAX** CP by up to 8.5 kW (**PROFI**: 7.5 kWh) and total connected load to 31.4 kWh (**PROFI**: 38.9 kWh).¹⁾ The extracted air can be led directly into the building's ventilation ducting.²⁾



HOBART HEAT PUMP

The HOBART heat pump uses the residual energy in the extracted air following heat recovery. A compressor and refrigerant are used to ensure efficient heat recovery. The amount of recovered energy is sufficient to heat the wash and rinse water. This innovative technology reduces energy consumption of the **PREMAX** CP by up to 10 kWh (**PROFI**: 11.5 kWh) and total connected load to 21.9 kW (**PROFI**: 29.4 kWh).³⁾ The temperature of the extracted air is reduced to approx. 22 °C.⁴⁾ The extracted air can be blown directly into the room.²⁾

¹⁾ Calculation example for the **PREMAX** CP S-A-DS, C20/ **PROFI** CN S-AA-DS, C20 compared to models without heat recovery

²⁾ Conditional on compliance with VDI 2052

³⁾ Calculation example for the **PREMAX** CP S-A-DS, C20, CHP/ **PROFI** CN S-AA-DS, C20 compared to the models without heat pump

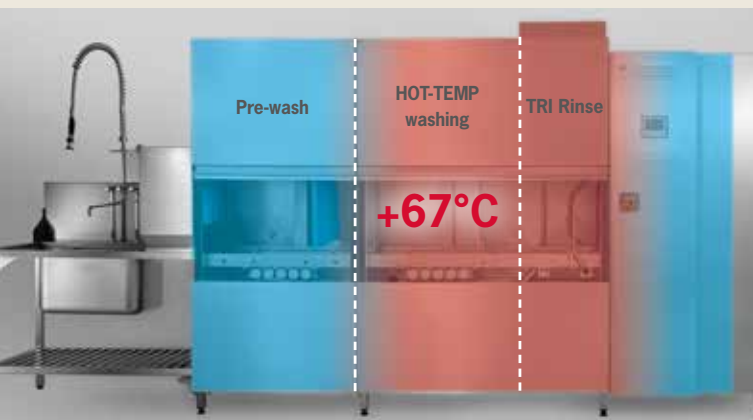
⁴⁾ Values in continuous operation +/-10 % depending on room air supply and fresh water temperature (values based on 10 °C water supply and 23 °C indoor air temperature)

WASH RESULT

PREMAX LINE EXCLUSIVE

HOT-TEMP WASHING

Washing is the result of the combined action of temperature, time, mechanical action and chemicals. Water temperature has the biggest influence on the wash result, much more than the wash pressure. In most dishwashers the wash temperature is set at approx. 60 °C. The hot wash of the HOT-TEMP Washing of the **PREMAX** CP washes at an initial temperature of approx. 67 °C. This leads to a significant increase in the efficiency of the detergent – and the wash ware gets clean faster, which confirms us as leading manufacturers in the warewashing industry. The hot wash of the HOT-TEMP Washing increases the capacity of the machine by up to 50 %. In turn, it means the machine also takes up less space.



CONTACT-PLUS WASH SYSTEM

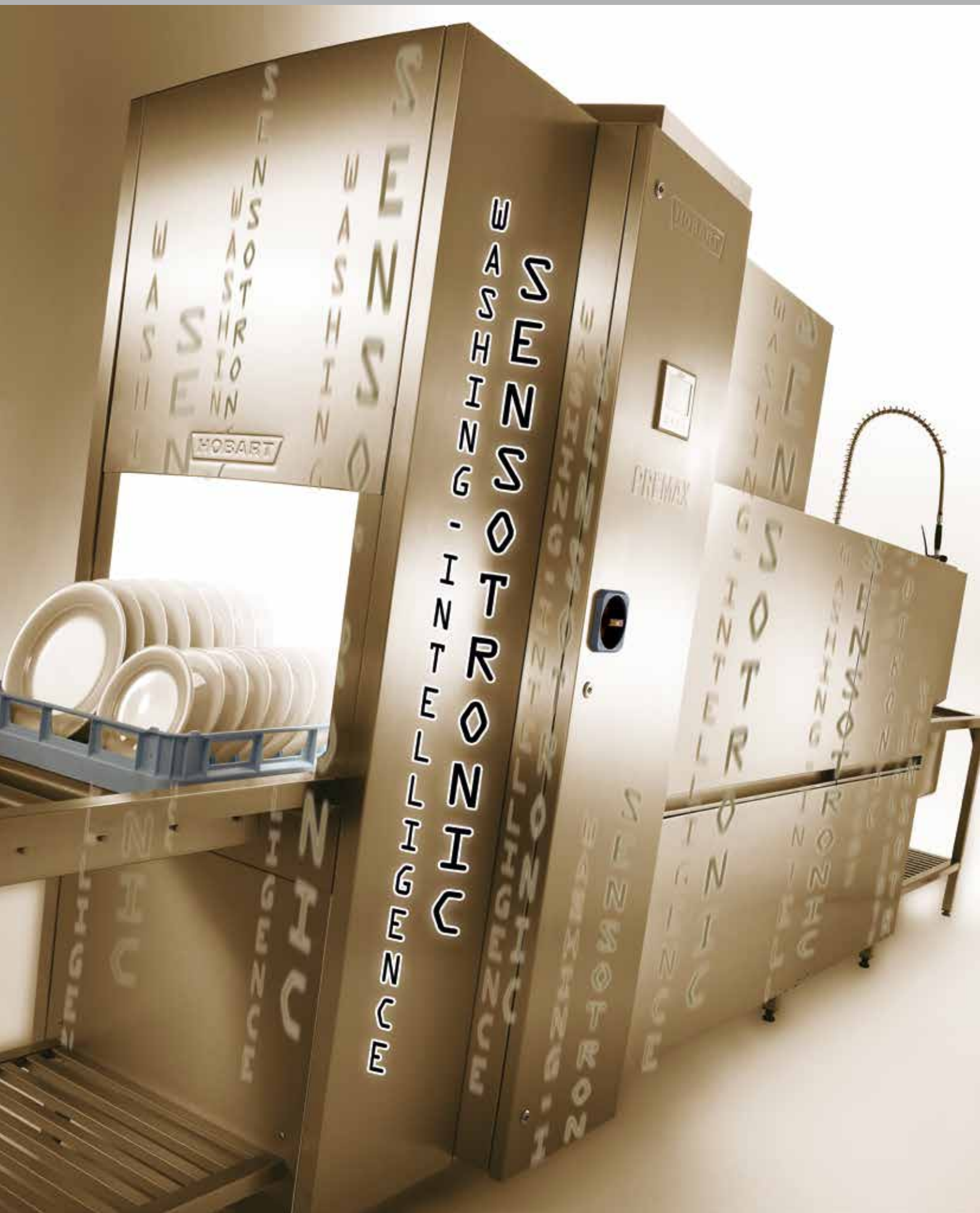
The impact with wash water via the wash arms is, apart from the temperature, the main factor influencing the cleaning result. The precision of the Wide Angle Nozzles FAN makes it possible to reduce the distances between the wash arms. The wash arms are located very close to one another and thus achieving full cleaning performance. In connection with the 65 % wider wash jets the new configuration of the Wide Angle Nozzles FAN washes the items three times per wash arm. The patented CONTACT-PLUS Wash System with its 6 wash arms above and 5 wash arms below guarantees an optimal wash result.



TRI RINSE

The HOBART TRI Triple Rinse consists of the RADIUS Pre-rinse Nozzle, a pumped rinse and a fresh water final rinse. The RADIUS Pre-rinse Nozzle rinses off most detergent from the wash ware before entering the rinse zone. The water is directed back into the wash tank, minimizing detergent addition into the recirculating rinse water.

HOBART



SENSOTRONIC WASHING INTELLIGENCE

UNIQUE TO THE
WORLD MARKET

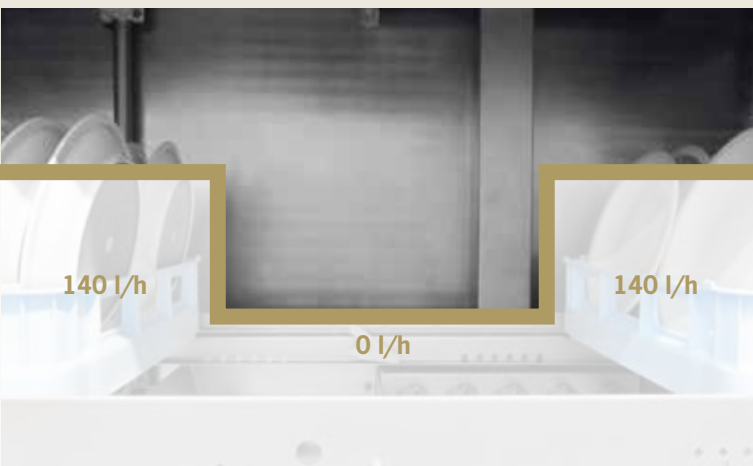
AQUA-ADAPT WATER CONSUMPTION CONTROL

Modern warewash systems have a range of speeds that you can set manually, according to the wash ware load, the level of soiling or the time you have available for dishwashing. The patent pending AQUA-ADAPT Water Consumption Control automatically adjusts the hourly fresh-water consumption of the **PREMAX** CP to the selected transfer speed, keeping water volumes per meter of the dishwasher at all times at an optimised level. In warewashing systems fitted with a tray-return conveyor belt the speed and fresh-water consumption are adjusted automatically. In dual-tank systems, one tank remains in standby mode until the dishwasher reaches full capacity to prevent water wastage at low machine speeds.



AUTO-SAVE COMPARTMENT DETECTION

Intermittent loading of ware during the dishwashing shift means that your appliance is not running at capacity. Gaps will arise in your wash ware load; on average, they will amount to around thirty to forty percent of your wash ware compartments throughout the washing period, depending on how you use the appliance. The patent pending AUTO-SAVE Compartment Detection of the **PREMAX** CP automatically detects these gaps, and immediately reduces the fresh-water supply down to the minimum necessary for a perfectly hygienic result while cutting water, power and detergent consumption.



BEST-START SYSTEM CHECK

Each time the machine is filled with fresh water, the relevant parameters for hygiene and proper washing, such as the heating system, pump and wash arm are automatically checked for correct positioning and operation. The result of the patent pending BEST-START System Check of the **PREMAX** CP is displayed on the colour touch screen of the control system. If there are deviations from the nominal status, the machine operator is informed by means of clear symbols and plain text explanations. The intelligent system also suggests measures to be taken to rectify the situation.



ACTIVE WASH WARE DETECTION

In most cases, glass and cutlery racks are also washed in a flight-type or rack-type dishwasher. ACTIVE is an optional wash ware detection system that adjusts the wash process of the **PREMAX** CP to the high demands of glassware and cutlery washing. Coded glass racks are automatically detected in the machine, and the wash parameters are configured to match the new requirements. ACTIVE Wash Ware Detection ensures an optimised wash result – at all times.

MINIMAL RESOURCE MANAGEMENT

The soiling level and the drying time both play a major role in selecting a suitable wash programme. The patent pending MINIMAL Resource Management of the **PREMAX** CP gives you the ideal solution for low-soiled wash ware. Selecting the programme is simple and quick. The fresh-water consumption is automatically reduced so that operating costs are significantly lowered. The total savings for water, energy and chemicals can amount to up to 10 %, depending on the machine type.



PERMANENT CLEAN

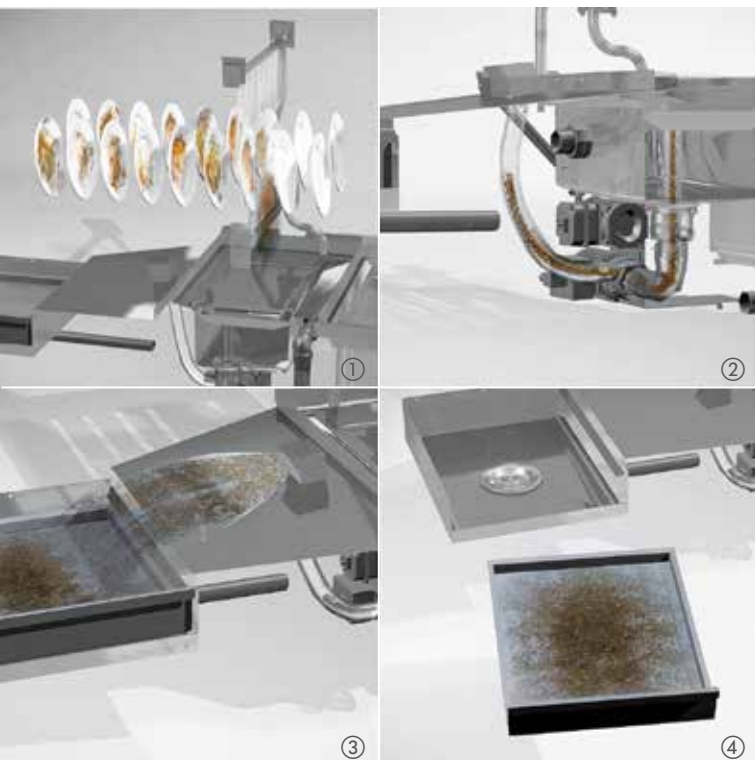
PERMANENT CLEAN AUTOMATIC SOIL REMOVAL

Available for models with L- or S-Pre-wash Zones

- Prevents soil transfer through the machine
- Actively removes soil within the zone
- Maintains high-level wash water quality
- Reduction in water, energy, and chemicals consumption
- Reduces refilling during operation
- Convenient removal of soiling at the end of the dishwashing shift

In busy kitchens, large amounts of dirt collecting in the pre-wash section of the rack-type dishwasher can normally not be prevented. This increases wash water soiling and more frequent tank water changes. Apart from that, this also has detrimental effect on waste water and degreasing. The PERMANENT Clean system automatically actively removes

coarse soiling from the appliance in the pre-wash phase using a well-designed and effective filter system. The coarse soiling in this zone is permanently filtered out and pumped into a filter drawer external to the machine to keep pre-wash results clean at all times. Food residues can then be conveniently removed from the drawer at the end of the dishwashing shift. This eliminates the time-consuming chore of emptying the filter basket, interrupting operation. PERMANENT clean removes soiling particles from the washing process before they adversely affect water quality, keeping wash water quality high while reducing detergent replenishment and eliminating the need to empty the tank during operation. This gives you further savings in operating costs while automatically reducing degreaser and waste water burden, and protecting the environment.



Phase ①:

Coarse soiling is removed from the wash ware early, in the pre-wash zone.

Phase ②:

The coarse soiling washed off is automatically and cyclically removed from the pre-wash zone.

Phase ③:

The process water available washes the coarse soiling into the filter drawer in the appliance intake.

Phase ④:

Convenient removal of the accumulated soiling residues at the end of the dishwashing shift.

DRYING RESULT

80DEGREES PUMPED RINSE

The temperature is an important factor for the drying of the wash ware. In conventional dishwashers the highest temperature is in the fresh-water rinse. For heating up the wash ware, there is only the volume of the fresh-water consumption available. In the patented 80DEGREES Pumped Rinse of the **PREMAX** CP the hot water is circulated several times and increases the temperature input on the wash ware. The better heating up of the wash items supports the selfdrying effect. It optimises drying results and reduces the energy required for drying.



HANDLING

PROTRONIC CONTROL

The PROTRONIC Control System is standard equipment on the **PREMAX** CP and an optional extra for the **PROFI** CN. The innovative, multi-line text and symbol display is operated via a touch screen. This makes it easy to use and minimises operating errors.

Functions such as

- Switching the machine on and off
- Switching the transport on and off
- Menu selection
- Status
- Speed

can be selected directly on the control panel.

Operating status such as

- Filling/Emptying
- Prewash and wash tank processes
- Autostart activated
- Doors open
- Active zones

are also clearly displayed on the touch screen.

Hygiene-related parameters are also monitored constantly on the machine. Various levels of information are available, for which staff can be allocated access rights as required.



SUPPORT

SMARTRONIC CONTROL

The SMARTRONIC Control system is standard equipment for the **PROFI CN**. In busy periods, a machine must be ready to operate quickly and reliably. The SMARTRONIC single-button operation combines the main functions in the START programme: Switch on, wash and switch off. The START button shows, in clearly distinguishable colours, the current operating status: heat, wash, ready. Details can be accessed as required at the touch of a button. Operating errors and any related failures are virtually eliminated.



CODED WASH AND RINSE ARMS

The wash and rinse arms are clearly designed to prevent risk of confusion when inserting.

CODED CURTAINS

Easy to take out and insert. The clear marking on the wash curtains prevents confusion when inserting.

CLEANING ASSISTANCE

Additional cleaning nozzles in the wash system continuously clean the back of the door and wash system as well as the machine cover during operation. This minimises soiling residues on the inside of the appliance, reducing the effort needed to clean the appliance manually at the end of the dishwashing shift.

DROP-IN WASH SYSTEM

Simple removal and secure insertion of the wash system on drawer runners as well as easy opening and closing of the wash arm through a bayonet wash arm fitting.



MOULDED DRAIN ELEMENT

Dirt is directed via beading to a central point and into the drain. This prevents dirt accumulation in the tank.

COMPLETELY MOULDED TANK

The tank sump and tank bottom are moulded from one single part. There are no corners and edges or weld seams where dirt could accumulate. This optimises cleaning and hygiene.

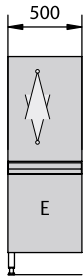
CONDENSER

Optimal accessibility for water spraying – by simply removing the front covering.

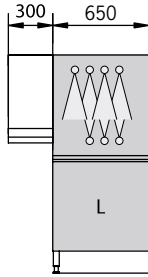
MODULE SELECTION

PRE-WASH ZONE

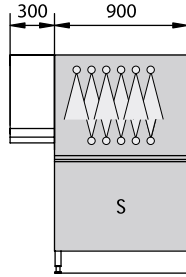
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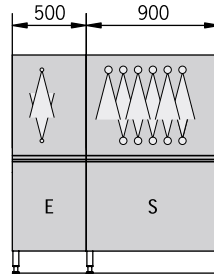
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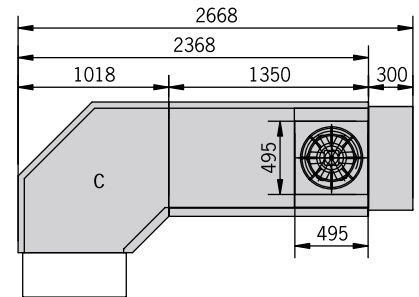
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CN | CP

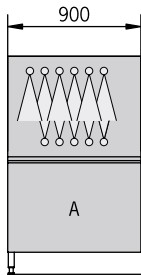


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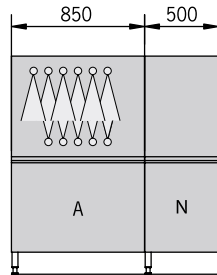


MAIN WASH ZONE/RINSE ZONE

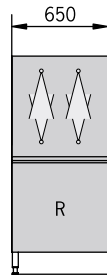
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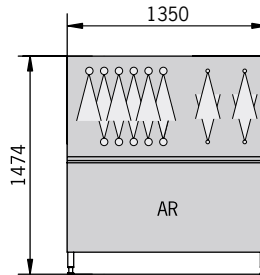
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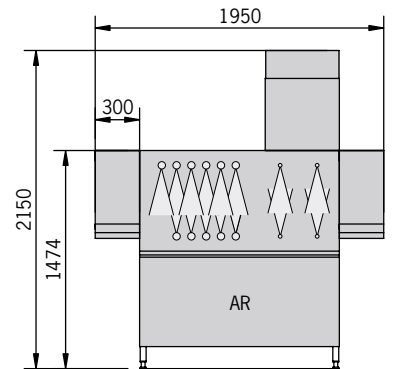
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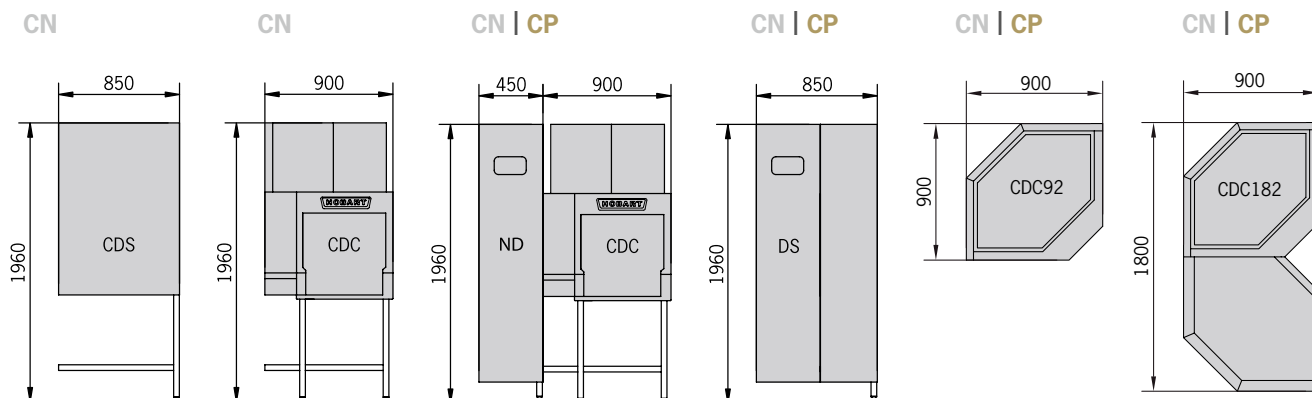
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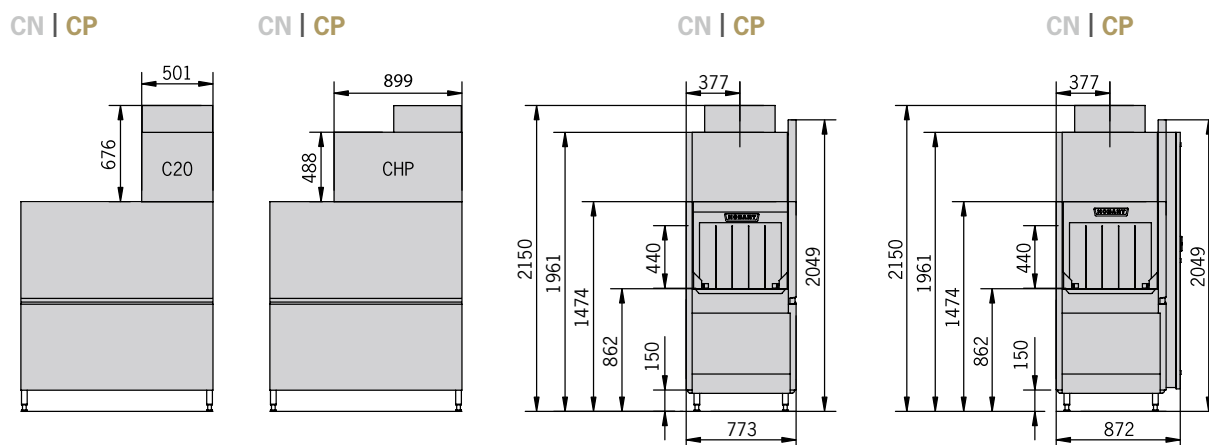
CN



DRYING ZONE



HEAT RECOVERY/HEAT PUMP



Loading width: 510 mm

Loading height: 440 mm



FEATURES

	PROFI-LINE	PREMAX-LINE
MODEL	CN	CP
ECONOMY		
50PERCENT Fresh-water Rinse	–	● PREMAX-LINE EXCLUSIVE
TOP-TEMP Energy Management	–	● PREMAX-LINE EXCLUSIVE
LOW-CHEM Detergent Saving System	●	●
EFFICIENT Energy Management	●	●
HOBART heat recovery	○	●
HOBART heat pump	○	○
WASH RESULT		
HOT-TEMP Washing	–	● PREMAX-LINE EXCLUSIVE
TRI Rinse	●	●
CONTACT-PLUS Wash System	●	●
SENSOTRONIC WASHING INTELLIGENCE		
AQUA-ADAPT Water Consumption Control	–	● PREMAX-LINE EXCLUSIVE
AUTO-SAVE Compartment Detection	–	● PREMAX-LINE EXCLUSIVE
BEST-START System Check	–	● PREMAX-LINE EXCLUSIVE
ACTIVE Wash Ware Detection	–	○ PREMAX-LINE EXCLUSIVE
MINIMAL Resource Management	–	● PREMAX-LINE EXCLUSIVE
PERMANENT CLEAN AUTOMATIC SOIL REMOVAL	○	●
DRYING RESULT		
80DEGREES Pumped Rinse	–	● PREMAX-LINE EXCLUSIVE
HANDLING		
PROTRONIC Control	○	●
SMARTRONIC Control	●	–
Coded wash and rinse arms	●	●
Coded curtains	●	●
SUPPORT		
Cleaning assistance	●	●
DROP-IN Wash System	●	●
Moulded drain element	●	●
Completely moulded tank	●	●
Condenser	●	●

TECHNICAL DATA

PROFI-LINE

RACKS in number/h all speeds: hygienic wash result based on DIN 10510			CONVEYOR SPEED	WATER CONSUMPTION ^[1]			ENERGY CONSUMPTION in kWh ^[2] (connected load in kW)		RECOMMEN- DED MODEL SELECTION	TOTAL LENGTH in mm without drying zone
speed 1	speed 2	speed 3	in m/min	in l/h	in l/rack ^[3]	with heat recovery	with heat pump			
–	80	120	0.67	170	1.4	25.1 (27.8)	17.4 (21.0)		CN-A	1,350
–	100	150	0.83	170	1.1	24.6 (27.9)	16.0 (21.2)		CN-E-A	1,850
–	120	180	1.00	180	1.0	28.1 (29.2)	18.5 (22.5)		CN-L-A	2,000
–	120	180	1.00	180	1.0	28.1 (29.2)	18.5 (22.5)		CN-C-A	2,375
–	150	220	1.25	180	0.8	29.6 (30.0)	20.0 (23.2)		CN-S-A	2,250
120	180	250	1.50	180	0.7	29.6 (31.9)	20.5 (25.1)		CN-E-S-A	2,750
120	190	280	1.58	210	0.7	38.9 (43.1)	29.4 (33.3)		CN-S-A-A	3,150

PREMAX-LINE

RACKS in number/h all speeds: hygienic wash result based on DIN 10510			CONVEYOR SPEED	WATER CONSUMPTION ^[1]			ENERGY CONSUMPTION in kWh ^[2] (connected load in kW)		RECOMMEN- DED MODEL SELECTION	TOTAL LENGTH in mm without drying zone
speed 1	speed 2	speed 3	in m/min	in l/h	in l/rack ^[3]	with heat recovery	with heat pump			
120	180	240	1.50	140	0.6	30.5 (32.3)	22.0 (25.5)		CP-L-A	2,000
120	190	300	1.58	140	0.5	31.4 (33.0)	21.9 (26.2)		CP-S-A	2,250
120	200	320	1.67	140	0.4	32.2 (33.0)	22.7 (26.2)		CP-E-S-A	2,750

[1] Official fresh-water consumption figure while using SENSOTRONIC under optimised conditions results may vary by costumer

[2] Energy consumption figures in a fully loaded machine

[3] Ideal values



INNOVATIVE



ECONOMICAL



ECOLOGICAL

THE COMPANY

HOBART is the world market leader in commercial warewashing technology and renowned manufacturer of cooking, food preparation, refrigeration, and environmental technology. Established 1897 in Troy, Ohio, HOBART today employs more than 6,500 employees around the world. At our manufacturing plant in Offenburg, Germany, HOBART develops, produces, and distributes warewashing technology worldwide. Internationally, restaurants, hotels, canteens, bakeries and butcher shops, supermarkets, airlines and cruise ships swear by our innovative products, which are considered to be economical and ecological market leaders.



WHENEVER THE FIRST
MACHINE WILL BE CAPABLE
OF WASHING WITHOUT WATER –
IT WILL BE A HOBART.

We provide this promise of quality to our customers,
and it represents our personal standard upheld
by all our staff at HOBART.

OUR VISION – WASH WITHOUT WATER

Intensive market research has shown, that our customers expect warewashing technology that combines efficiency with optimal performance. We hold ourselves to these claims, and they form the foundation for our vision of „washing without water“. This vision is our continuous incentive to walk on new paths in order to constantly reduce the water, energy and chemical consumption. Step by step, we would like to come closer to our goal with innovative excellence, and we already know: Whenever the first machine will be capable of washing without water – it will be a HOBART.

OUR FOCUS

INNOVATIVE – ECONOMICAL – ECOLOGICAL

This is our philosophy. To us, innovation means continuously setting new standards in technology, combined with real added value for the customer. An enterprise-owned technological centre and an innovation centre for warewashing technology at our headquarters in Germany make this possible. Highly efficient products are created with bundled innovation, which continuously confirm our status as technological leader. To be economical means to set standards in relation to the lowest operating costs and minimal use of resources, and to revolutionise the market continuously. To be ecological means a responsible handling of resources and a sustainable energy policy. This applies not only to the product in use, but in general to all areas of the organisation, such as purchasing or manufacturing.



2

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Member of the ITW Food Equipment Group Europe

