



WAREWASHING  
HOOD-TYPE DISHWASHER

# PREMAX AUP

EFFICIENT – RELIABLE – INNOVATIVE



## MADE IN GERMANY

„Made in Germany“ has been synonymous with quality and reliability in the premium segment for a long time and still is today. A company can only maintain its hold on the market by keeping its promise to continually deliver high quality.

## WORLDWIDE

Whether you need a completely new kitchen or a replacement item our competent subsidiaries and partners all over the world would be pleased to support you. It's nice to know we are always there.



1883 Mr. Charles Clarence Hobart builds his first engines and generators in Middletown, Ohio.

1886 J.C. Cochran receives the patent for the first dishwasher.

1897 The HOBART ELECTRICAL MANUFACTURING COMPANY was founded in Troy Ohio, through the acquisition of the engine and generator factory of the HOBART family.

1903 HOBART builds the first food processor (a self-contained powered coffee mill).

1926 HOBART purchases The Crescent Washing Machine Company, and enters the commercial warewashing market: the first warewashing machine carrying a HOBART label.

1930 Foundation of the HOBART MASCHINEN GESELLSCHAFT in Hamburg, Germany.

1953 HOBART receives the patent for the first flight-type dishwasher.

1960 Acquisition of the dishwashing department of the company K. Martin, Offenburg, Germany.

1980 Production plant in Elgersweier, Germany, was newly built.

1986 PREMARK INTERNATIONAL GROUP was formed in Deerfield, Illinois.

1997 HOBART CORPORATION'S 100th anniversary.

1999 Integration of PREMARK into ITW.

2007 HOBART presents its new dishwasher generation PREMAX.

# PREMAX AUP

EFFICIENT – RELIABLE – INNOVATIVE

## HOBART PHILOSOPHY

### UNDERSTAND – SIMPLIFY – FOCUS – INNOVATE

This philosophy provides the continuing motivation to develop innovations, which are the best driver of economic development and a guarantee for job security. It is a philosophy of the essential, of customer value, of simplicity. A philosophy built on the conviction that things created for a purpose and with logic, do not need to be completely renewed, but must instead be subject to continuous evolution.

## HOBART VISION

### “WASH WITHOUT WATER“

Before PREMAX, a flight-type dishwasher with a 50% water saving would have been utopia. At HOBART, efficiency and responsible use of natural resources when developing new machines have always gone hand in hand. With PREMAX, the company has set a further milestone, and has further extended its leadership in innovation. But even so, HOBART is not satisfied with this. The company will not diminish the pace of its innovation, and will look for further opportunities to save even more. When the day arrives that a machine is able to wash without water, we already know, it will be a PREMAX.

## HOBART FOCUS

### INNOVATION

Without the readiness to invest in the future, without the natural reaction of always questioning ourselves, without interdisciplinary basic research and consistent customer focus, PREMAX would be inconceivable.

Worldwide, over 300 research and development engineers and global marketing teams, who identify customer requirements, as well as the company's own Tech-Center, with over 1,000 patent applications annually, develop innovative technology and make PREMAX possible.

### ECOLOGY

The HOBART environmental protection program CO<sub>2</sub>NSEQUENT has been in existence for some time. The program includes a large number of measures that are all related to protecting the environment. These measures are implemented in production, purchasing, the development and sale of products and in additional projects.

### ECONOMY

Already in the early 1980s our E-formula set standards in energy saving and recovery which are still unique today. This innovative spirit found its fulfillment in the PREMAX line. The PREMAX flight-type dishwasher saves up to 50% water, 30% energy, and 80% chemicals in comparison with conventional technologies, making HOBART a model in terms of efficiency and economy.



1

2

3

4

1 "For larger events we need a machine which fulfills our capacity requirements and provides a consistently good dishwashing result – the PREMAX AUP is exactly the right machine for our needs."

2 "The STARCH-REMOVAL wash program is a brilliant invention – it's great that time consuming manual deep cleaning is not necessary anymore."

3 "The way that prices are increasing, we keep a very close eye on our consumption – it's good that ours has fallen significantly since we have been operating the new PREMAX machine."

4 "In the past we had to wash our pans by hand – but with the POWER-PLUS wash program we can now wash everything in the machine."

Andreas Huber  
Golden Star Resort  
Dubai

Jean Botha  
Restaurant de Jean  
Franschhoek, South Africa

Anna Thaler  
Hotel Krone  
Düsseldorf, Germany

Conor O'Donoghue  
O'Donoghue's Restaurant  
Dublin, Ireland



# PREMAX AUP

EFFICIENT – RELIABLE – INNOVATIVE

## 1 | WASH RESULT

**PATENT  
PENDING**

### FINE FILTER SYSTEM GENIUS-X<sup>2</sup>

Permanently clean wash water is the key requirement for an optimal wash result with less detergent and water consumption. In the next generation GENIUS-X<sup>2</sup> fine filter system, the wash water is continuously led through a system of filters.

During the wash cycle the majority of soil particles are removed during the first phase of draining. Any remaining soil particles are retained in the filter and are then removed during the second stage of draining, just before the final rinse. The tank water is then replenished with 2,3 liters of fresh hot rinse water. This optimal regeneration ensures a perfect wash result.

The GENIUS-X<sup>2</sup> cleans itself during the draining phase. GENIUS-X<sup>2</sup> helps to reduce water usage by up to 30 %.

**PATENT  
PENDING**

### WIDE ANGLE NOZZLE FAN

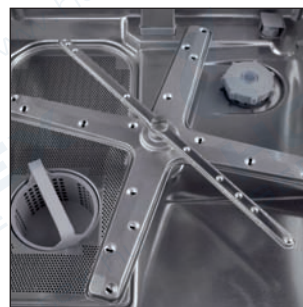
Wash efficiency depends largely on the distribution of the wash water and on avoiding any masked areas. Spraying angles and the precision of the wash jets are vital factors in achieving a powerful, searching wash action and the HOBART designed wide angle nozzles FAN provide a substantially broader and more precise spray pattern. Compared with conventional and fixed wash arm systems the wash water is distributed more efficiently, masking is avoided and the wash result, especially in the corners, is considerably improved.

### WASH SYSTEM ROTOR-X

A perfect wash result is only achieved if the detergent makes contact with the entire surface of the wash ware items, dissolving and binding the soil. Therefore the wash water must reach every point of the items, and the more thoroughly and intensively this occurs, the better the result. The rotating ROTOR-X wash system consists of two 4 spoke wash arms, one above and one below. The rotation of the wash arms creates the necessary mechanical wash action, and at the same time the precise wash pattern of the FAN wide angle nozzles ensure that the wash water reaches every part of the wash ware.

The ROTOR-X wash system guarantees an outstanding cleaning result over the entire surface.

## EVERYWHERE – CONSTANT



The rotating 4 spoke wash arms create a deflection off the internal walls of the hood, and thereby intensify the wash action.

## STRONG – HYGIENIC – CLEAN



The fine filter system GENIUS-X<sup>2</sup>, with integrated pre-washing process, filters the wash water continuously and then pumps out the soil particles.



With the ROTOR-X wash system, the detergent works over the entire surface of the items being washed.

# HOBART



## 1 | WASH RESULT

### PERMANENT WASH PROGRAM

The permanent wash program is built-in as standard and can be adapted anytime to heavily soiled wash ware. No need to run a second cycle, only the wash phase is extended. No additional detergent dosing or rinsing is necessary. Time is saved and operation costs are reduced.

### HEAT ELEMENT ECOTHERM

A consistently high wash temperature extracts maximum cleaning performance from the wash water. HOBART research has established that higher washing temperatures optimize detergent performance. ECOTHERM ensures a constant 63°C even during continuous use. The extra heat absorbed by the washed ware also improves the drying result.

## EFFICIENT – CONSTANT



The ECOTHERM heat element maintains the wash water at a constant temperature even in continuous operation.

# PREMAX AUP

EFFICIENT – RELIABLE – INNOVATIVE

## WASH PROGRAM POWER-PLUS

The longer the dishes are left before being washed, the harder food residues stick to the crockery. After an extended period of drying on, it may be necessary either to prewash the ware, or to run it several times through the dishwasher in order to achieve a hygienic wash result. The POWER-PLUS wash program delivers increased washing pressure, through pumps connected in series. Contrary to conventional programs, even difficult to remove food residues are washed off without the need for pre-cleaning. The POWER-PLUS wash program guarantees a perfect wash result even with difficult to remove food residues.

## CLEANING CYCLE STARCH-REMOVAL

Depending on the type of food, and plate warming during meal distribution starch deposits will appear on the ware over time. The STARCH-REMOVAL deep clean wash program removes the starch from the crockery. Inconvenient and time consuming manual handling using aggressive detergents is eliminated. The STARCH-REMOVAL deep clean wash program assists the staff and guarantees shining crockery.

## STRAINER CONTROL SYSTEM PROOF

Clean wash water and accurate detergent dosage are key factors in achieving a clean and hygienic wash result. An efficient filter system is useless if it is not in the right position. The strainer control system PROOF has an interlock which is continuously monitored by the SMARTRONIC control. The wash cycle can only be activated if the filter is correctly positioned.

## HOT-TEMP WASH

The washing is the result of a combination of temperature, mechanical action and chemistry. The water temperature has the biggest influence on the wash result – significantly more than wash pressure. In conventional dishwashers the wash temperature is at approx. 60°C, but with the HOT-TEMP wash, the wash ware is washed at approx. 63°C. This improves the efficiency of the detergent – the wash ware is cleaned faster whilst the capacity of the machine is raised by up to 75 racks/h.

## FLEXIBLE – RELIABLE



The STARCH-REMOVAL deep clean wash program eliminates the need for manual scouring.

## THOROUGH – SAFE



If the filter is missing or not inserted correctly, the SMARTRONIC displays a warning.

# HOBART

## 2 | HANDLING

**PATENT  
PENDING**

### SINGLE BUTTON SMARTRONIC

In any busy establishment the dishwasher must be easy to operate and customers tell us that having simple, understandable controls is of big importance. The SMARTRONIC control with single button operation indicates the machine status in clear, self explanatory colours. Only the essential functions such as filling and heating, washing and rinsing, ready for use, and draining are indicated. Incorrect operation and misuse are eliminated. Additional functions can be accessed as required.

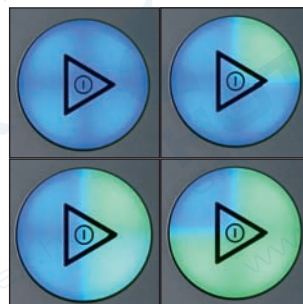
### REMAINING TIME INDICATOR

The remaining time indicator visibly shows the progress of the running wash program. The four segments of the STARTER colour up clockwise in sequence. Even in peak times personnel can set their priorities at a glance and work more efficiently.

### EASY – INTELLIGENT



The simple SMARTRONIC control combines the most important functions into just one STARTER button.



The STARTER button shows the remaining cycle-time and the operation status in self-explanatory colours.





# PREMAX AUP

EFFICIENT – RELIABLE – INNOVATIVE

## REFILL SIGNAL

The integral low level signal indicates when detergent and rinse agent need refilling. This guarantees a perfect wash result every time.

## WATER SOFTENING SYSTEM NONSTOP

Lime scale is a major cause of poor wash results and machine problems. Deposits build up on machine parts, in the boiler and on heating elements reducing efficiency, increasing running costs and causing failures. Detergent performance is also significantly reduced.

The optional NONSTOP integral water softening system provides continuously and automatically soft water and eliminates the downtime or extended program times typically associated with other integral softener systems. The dishwasher, and in particular, the heating elements are maintained in optimum working order for efficient performance.

## FILTER OBSTRUCTION SENSOR

If there is a lot of soil in the machine, the filter may become clogged. The filter obstruction sensor registers this, and displays a warning on the control panel. This function assists the operating personnel and ensures proper ongoing dishwashing operation.

## CONTROL – PERMANENT



An easily accessible filler cap and a large refill opening allow quick and simple salt replenishment for the water softener NONSTOP.

**PATENT  
PENDING**

## HYGIENE CYCLE ACTIVE

A dirty dishwasher cannot deliver clean results and over a period of time dirt particles, starch and sometimes lime can build up inside the machine leading to bacteria and poor machine hygiene.

Together with the specially formulated INTENSIVE tablets HOBART's ACTIVE hygiene cycle effectively removes these deposits from the wash tank and chamber leaving a clean machine with a fresh smell.

## HOOD DESIGN EASY-LIFT

The physical effort required to open and close the hood when loading and unloading the machine is reduced considerably.

This is significant from an ergonomic point of view.

The EASY-LIFT hood is the easiest hood on the market to operate, thanks to its innovative design. The effort needed for opening is 50% less than with normal machines. This reduces the strain on operators and makes their work easier.

## HOOD LIFT

The optional automatic hood lift opens the hood automatically at the end of the program, and closes it at the push of a button.

The automatic hood lift delivers maximum convenience for the operators.

## SAFE – CONVENIENT



The EASY-LIFT hood design reduces the physical strain on operators.



### 3 | ECONOMY

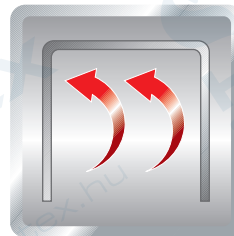
#### HOOD CONCEPT E-STORE

When opening the hood of a conventional machine, the hot steam escapes from the hood's open rear side. This cools the interior space and the hood itself. During the subsequent wash program, the cooled interior space and the cooled hood take heat from the wash water. To restore the necessary temperature in the machine, this energy loss must be compensated by extra heating power. The E-STORE hood concept is based on a fully enclosed 4sided hood. When the hood is opened, the hot steam remains in the hood. The heat energy is retained, and does not need to be replaced in the subsequent wash process. This saves up to 3 kWh or up to approx. 820 Euro per year\*.

The E-STORE hood concept saves energy and reduces operating costs.

\*based on 15 cents/kWh, 5h/day, 365 days/year

#### ECONOMICAL – OPTIMISED



With the E-STORE hood concept, the hot steam remains in the hood, saving energy and protecting your wallet.



The energy-saving E-STORE hood concept also improves the working conditions in the wash up area.

# PREMAX AUP

EFFICIENT – RELIABLE – INNOVATIVE

## HEAT AND SOUND INSULATED HOOD

15 mm hood insulation helps to retain further valuable energy during operation. The wash water does not lose heat through the hood which increases heat conservation and thereby saves energy. The fully enclosed hood enhances the energy-saving effect of the insulation.

## RINSE SYSTEM ACCURINSE

Ensuring constant temperature and volume of clean rinse water is vital to achieve not only clean, but hygienically clean table-ware.

The HOBART system “pulls” rather than “pushes” the rinse water through the booster and is totally independent of flow pressure on site thus preventing any mixing with incoming cold water.

The ACCURINSE system delivers precisely 2.3 l of fresh water at approx. 75°C every cycle to ensure perfect hygiene standards. In addition the precision of ACCURINSE saves up to 30 % water, energy, detergent and rinse aid.

## HEAT RECOVERY E-SAVE

In conventional professional dishwashers, the soil is pumped out of the tank with a fixed quantity of water after each wash cycle. The waste water has an average temperature of approx. 60°C, and so the energy stored in the water as heat is lost.

In the E-SAVE heat recovery system the hot waste water passes against the incoming cold water in a heat exchanger. The heat exchange which thus occurs heats the cold water up to approx. 45°C. As a result, the energy required to reach the final rinse temperature of approx. 75°C is reduced by as much as 6.5 kWh and saves up to 1,800 Euro per year.\* E-SAVE heat recovery uses the energy already in the machine, and saves operating costs.

\*based on 15 cents/kWh, 5h/day, 365 days/year

## POTENTIAL SAVINGS FROM HEAT RECOVERY E-SAVE

Operating days per year	Wash time in hours per day			
	2	3	4	5
220	437 Euro	655 Euro	874 Euro	1.092 Euro
300	596 Euro	894 Euro	1.192 Euro	1.490 Euro
365	725 Euro	1.087 Euro	1.450 Euro	1.812 Euro

Basis for calculation:  
Loading with 75 racks per hour on average (theoretical rack capacity)  
Energy costs 0.15 Euro per kWh

## THRIFTY – ECOLOGICAL

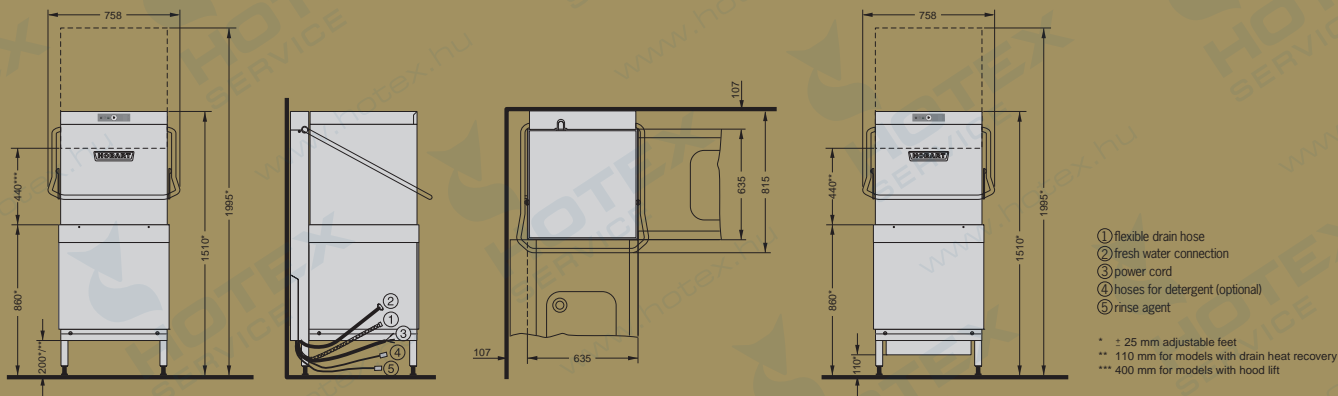


Just 2.3 l of clean water are efficiently distributed by means of the rinse arms.

## ECONOMICAL – EFFICIENT



Up to 1,800 Euro of savings thanks to E-SAVE heat recovery.



## 4 TECHNICAL DATA

MODEL	AUP	AUPR
<b>Cycle times</b> in sec. [1]	47 / 70 / 150 / > 150	47 / 70 / 150 / > 150
<b>Capacity</b> [2]		
Racks / h	75	75
Dishes / h	1350	1350
Glasses / h	2700	2700
<b>Temperature</b> in °C		
Wash temperature approx.	63	63
Rinse temperature approx.	75	75
<b>Tank volume</b> litres	40	40
<b>Fresh water consumption per cycle</b> litres	2,3	2,3
<b>Pump capacity</b> in kW/l/min	2 x 1,1 / 600	2 x 1,1 / 600
<b>Heat output</b> in kW		
Tank	2,5	2,5
Booster kW*	12,3 / 6,15	6,15
<b>Total loading</b> in kW	17,1 / 10,9	10,9
Fuse in A	3 x 35 / 3 x 25	3 x 25
Nominal voltage in V/Hz/N-PE	400 / 50 / 3	400 / 50 / 3
<b>Dimensions</b> in mm		
Width / Depth / Height	635 / 635 / 1510	635 / 635 / 1510
Open hood height	1995	1995
Loading height	440	440
Rack size	500 x 500 / 500 x 530	500 x 500 / 500 x 530
<b>Features</b>		
Heat Recovery E-SAVE	-	✓
Drain pump	✓	✓
Rinse System ACCURINSE	✓	✓
Rinse aid dispenser	✓	✓
Detergent dispenser	✓	✓
Corner version	✓	✓
Rack equipment	2 x plate rack 1 x universal rack 1 x cutlery rack	2 x plate rack 1 x universal rack 1 x cutlery rack

\*Under optimum conditions

## WATER TREATMENT

### WATER SOFTENING SYSTEM

to protect against calcium deposits

Mod. SE output 1,600 litres at 10° d (total hardness)

### PARTIAL DESALINATION CARTRIDGES

for sparkling wash results when the raw water contains minerals

Series TE output of 7,000 to 16,000 litres at 10° d (carbonate hardness)

### FULL DESALINATION CARTRIDGES

for sparkling wash results when the raw water has a high mineral content.

Series VE output of 5,000 litres at 10° d (total salt content)



[1] The machine is equipped with an automatic cycle-time control which ensures hygienic rinse temperatures even on a cold-water supply or with reduced heating performance.  
[2] Theoretical performance  
\*Multi-Setting: The heater output can be reduced at site from 12.3 kW to 6.15 kW if required.

WAREWASHING  
HOOD-TYPE DISHWASHER

# PREMAX AUP

EFFICIENT – RELIABLE – INNOVATIVE

## TOP PERFORMANCE

Where the toughest demands are placed on dishwashing results and quantities, the PREMAX AUP is the ideal machine.

The PREMAX AUP has an outstanding rack capacity. The HOT-TEMP wash produces a hygienically perfect dishwashing result in the shortest possible time. This saves time and creates space for what is important.

In addition to its increased capacity, the PREMAX AUP sets new standards in terms of efficiency. The PREMAX AUP achieves hygienically clean results at considerably lower operating costs.



WAREWASHING

COOKING

FOOD PREPARATION

WASTE TREATMENT

SERVICE

**HOBART GMBH**

Robert-Bosch-Straße 17

77656 Offenburg/GERMANY

Phone +49(0)781.600-28 20

Fax +49(0)781.600-28 19

email: [info-export@hobart.de](mailto:info-export@hobart.de)

[www.hobart-export.com](http://www.hobart-export.com)

**EFFICIENT – RELIABLE – INNOVATIVE**

Member of the *ITW* Food Equipment Group Europe

