

# **PREMAX UP**

**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.



## **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

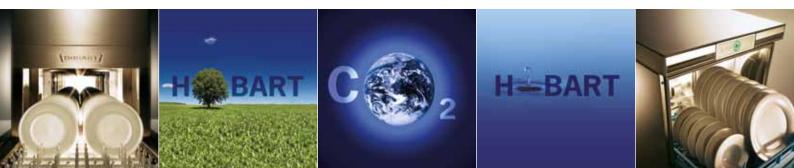
The HOBART environmental protection program CO<sub>2</sub>NSEQUENT has been in existence for some time. The program includes a large number of measures that are all related to protecting the environment. These measures are implemented in production, purchasing, the development and sale of products and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

made in germany







1 "Since we use the UP, our pre-washing expenses have decreased considerably. This makes our work much

Tom Baker

Hotel, London, Great Britain 2 "For us, the reduced energy consumption due to the the heat recovery was a key sales argument. Owing to the large number of electrical devices we use in bur company, we need to pay particularly close attention to energy costs."

Peter Taylor Butchery, Denver, USA 3 "Thanks to the new UP, we are able to wash three times more GN plates than used to be the case. This saves us a lot of time, which is areat."

Canteen, Nürnberg, Germany 4 "Finally a solution is available for food residue that are baked onto bakir pans."

Pavlos Ligeia Bakery, Piräus, Greece

AU

M

\$14464411







# PREMAX UP

## **EFFICIENT – RELIABLE – INNOVATIVE**

## WASH RESULT

## PATENT

## 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 fresh hot rinse water. This optimal regeneration ensures a perfect wash result. The GENIUS-X<sup>2</sup> cleans itself during the draining phase. The fine filter system GENIUS-X<sup>2</sup> reduces detergent consumption by up to 30%.

## 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 wash system ROTOR-X consists of two 4-spoke wash arms, one above and one below, with 50% more nozzles than conventional wash arms. The rotation of the wash arms and a high circulation rate create the necessary mechanical wash action for a guaranteed outstanding cleaning result over the entire surface.

## **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.



The fine filter system GENIUS- $X^2$  reduces detergent consumption by up to 30%.

## **UNIFORM – GUARANTEED**





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

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





## WASH RESULT

## HEAT ELEMENT ECOTHERM

1

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 60°C even during continuous use. The extra heat absorbed by the washed ware also improves the drying result.

## 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.

## **DRY – CONSTANT**



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

# **PREMAX UP**

## **EFFICIENT – RELIABLE – INNOVATIVE**

## WASH PROGRAM POWER-PLUS

The more time that elapses between utensil, pot and pan use and cleaning, the more encrusted the food is on the wash ware. If the food is left on the wash ware for a lengthy period, 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 wash program POWER-PLUS generates stronger washing pressure that looses and rinses away even the most encrusted food without prewashing. Thanks to the program's special pulsing nozzles, POWER-PLUS also guarantees impeccably hygienic results, even with difficult to remove food residues.

### **STEAM WASHING**

Heavily encrusted food residues, particularly starches and proteins, pose a challenge for any utensil washer. In the PREMAX UP, as a supplement to the wash program POWER-PLUS, steam helps to remove heavily encrusted food during the wash cycles without any additional mechanical devices. Starch and protein residues are softened and removed. The steam also increases the wash temperature up to 70°C, thus improving the efficiency of the cleaning chemistry.

## **DIRECT DETERGENT SPRAYING SYSTEM**

Manual wash ware presoftening and prewashing is a timeconsuming process, but is necessary in order to obtain optimum wash results with conventional technologies. The HOBART direct detergent spraying system soaks the wash ware following the detergent prewashing cycle and softens even the most severely encrusted food residues. This removes severely encrusted food residues from washware so that they can be washed away during the ensuing wash process. This also reduces the need for washware presoftening and prewashing to a absolut minimum.

## STRONG – RELIABLE



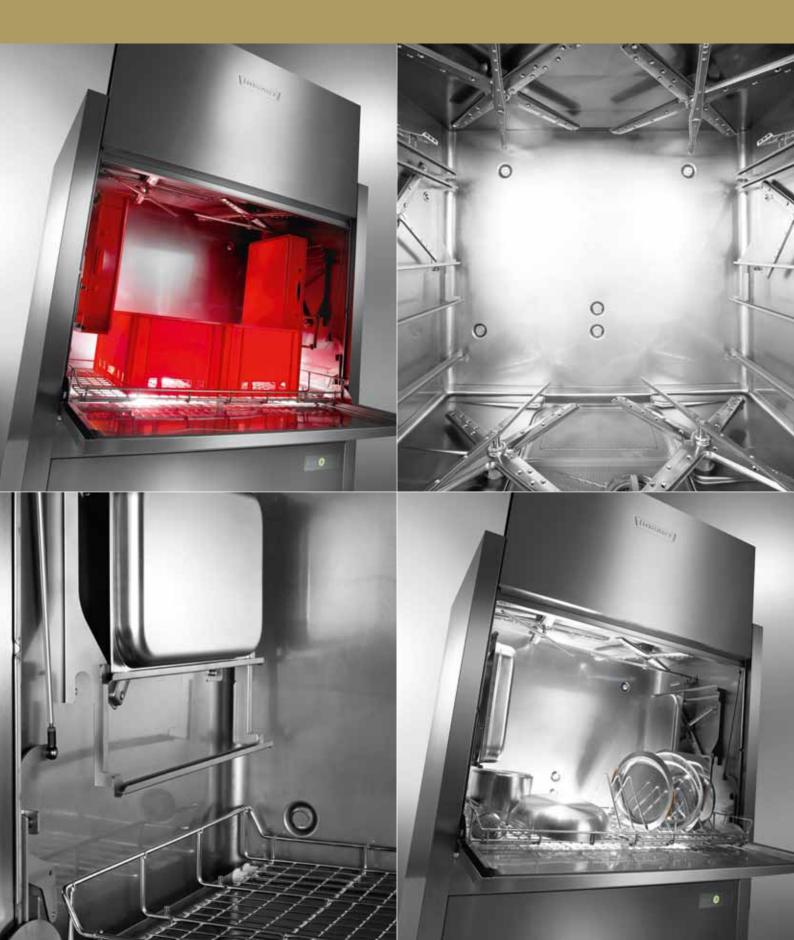
Special pulsing nozzles generate stronger washing pressure that guarantees impeccable wash results.

## TIME-SAVING – CONVENIENT



The HOBART direct detergent spraying system softens even the most severely encrusted food residues.





# **PREMAX UP**

## **EFFICIENT – RELIABLE – INNOVATIVE**

## 

## **HEAT RECOVERY E-SAVE**

In conventional commercial 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.  $45^{\circ}$ C. As a result, the energy required to reach the final rinse temperature of approx.  $85^{\circ}$ C is reduced, depending on the model, by as much as 12.9 kWh and saves up to  $3,530 \in$  per year.\*

E-SAVE heat recovery uses the energy already in the machine, and saves operating costs.

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

## **EXHAUST HEAT RECOVERY**

The exhaust heat recovery including an integrated door opening VAPOSTOP uses steam to heat fresh feed water. The feed water is led through a heat exchanger that increases the water temperature by around 20°C, reducing the amount of power needed to reach the final rinse temperature by up to 7.8 kWh and potentially saving you up to 2,140  $\in$  per year.

## ECONOMICAL – THRIFTY

## ANNUAL SAVINGS WITH EXHAUST HEAT RECOVERY

	Operation time per day				
Operating days per year	2	3	4	5	
220	516€	774€	1,032 €	1,290€	
300	703€	1,055 €	1,407 €	1,758€	
365	856 €	1,284 €	1,712€	2,140 €	

Calculation basis UPT:

Running at full capacity at 30 racks/h average (Theoretical rack performance) Electricity costs at 0.15  $\in$  per kWh



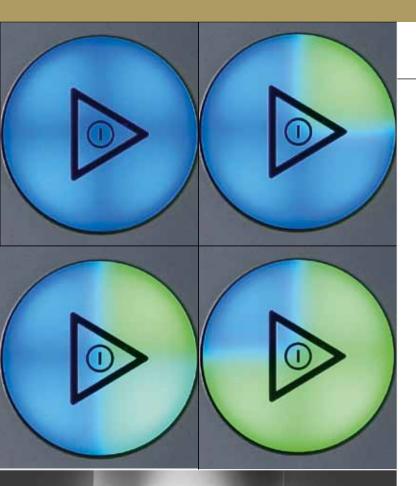
Exhaust heat recovery transfers heat from steam to fresh feed water.

## **ECOLOGIC – EFFICIENT**



Up to 4,570 € less energy costs (depending on the model) thanks to heat recovery E-SAVE.





(recording)



## RINSE SYSTEM ACCURINSE

Ensuring constant temperature and volume of clean rinse water is vital to achieve not only clean, but hygienically clean wash 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 external cold water.

Depending on the program the ACCURINSE system delivers precisely the same amount of fresh water at over 80°C every cycle to ensure perfect hygiene standards. In addition the precision of ACCURINSE saves up to 30% water, energy, detergent and rinse aid.

## LATERAL WASH AND RINSE SYSTEM

GN containers are often used in the gastronomy industry. However, in conventional utensil washers, these containers can only be washed in the lower basket. The models PREMAX UP and UPT integrate two lateral wash systems with lateral guiding rails that accommodate GN containers. This in turn can double or triple the machine's GN container capacity, depending on the model. The lateral guide rails are also compatible with E-containers.





The lateral wash system increases the machine's capacity for boxes and GN containers.

# **PREMAX UP**

## **EFFICIENT – RELIABLE – INNOVATIVE**

## 3 HANDLING

# PATENT

## 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 colors. 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 and 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 color up clockwise in sequence. Even in peak times personnel can set their priorities at a glance and work more efficiently.

## DOOR SYSTEM VAPOSTOP

When opening a conventional utensil washer hot steam escapes from the machine. The door opening system VAPOSTOP with integrated exhaust heat recovery is equipped with a multi-stage ventilation system to extract saturated steam through a heat exchanger. Due to the exhaust the escape of steam is effectively avoided. So removing the wash ware is much easier for the personnel and the guests at the bar are not disturbed by escaping steam.

## **REFILL SIGNAL**

For machines with external containers the integral low level signal indicates when detergent and rinse aid need refilling. This guarantees a perfect wash result every time.

**GUARANTEED – VAPOUR-FREE** 

## **EVERYWHERE – CONSTANT**



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

# 

The STARTER shows the remaining cycle-time and the operation status in self-explanatory colours. Green = ready for operation.



The patent pending door system VAPOSTOP avoids effectively the escape of steam when loading and unloading the machine.







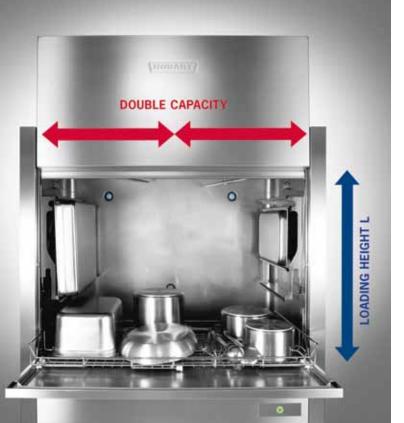
## WATER SOFTENING SYSTEM NONSTOP

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 reduce efficiency, increase running costs and cause failures. Detergent performance is also significantly reduced. The integrated water softening system NONSTOP automatically runs in tandem with the wash process and softens the water, thus ensuring smooth dishwasher operation. Continuous regeneration avoids downtime or extended program runs.

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 softerner NONSTOP.

# **PREMAX UP**

## **EFFICIENT – RELIABLE – INNOVATIVE**

## 4 FLEXIBILITY

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

## **CLEANING SUPPORT FOR MANUAL CLEANING**

Thorough cleaning of a dishwasher using a hose increases the machine's life time and is crucial for optimum operating hygiene. Due to the spray-washing, fresh water accumulates in the wash tank after draining off the wah water. The activatable draining cycle empties the tank without the need to turn on the machine again.

## LOADING HEIGHT L

The above-average loading height provides space (according to model) for up to four bakery racks, large serving trays and baking pans (600 x 800 mm).

## DOUBLE CAPACITY

The model UPT offers the ideal solu tion for large loads. Their double capacity provides space for up to 8 GN-plates (1/1), 4 bakery racks, 15 baking pans or 5 E-containers. The machine also avoids unnecessary waiting time and guarantees a continuous workflow.

## **SAFE – THOROUGH**



A clean machine guarantees perfect wash results over the long term, a long machine life time, and optimum operating hygiene.

## LARGE – FLEXIBLE



Optimum flexibility with the PREMAX UP series.

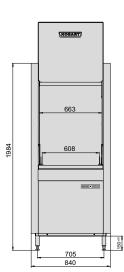


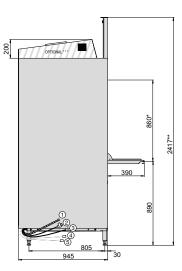
# 5 FEATURES

MODEL	UP			UPT			
MODEL TYPE	Fror	nt door		Fron	t door		
Wash ware	All types of pots, serving trays, utensils and 6 GN plates (1/1); 4 E-containers; 7 baking pans measuring up to 600 x 800 mm; 2 bakery racks		All types of pots, serving trays, utensils and 8 GN plates (1/1); 5 E-containers; 15 baking pans measuring up to 600 x 800 mm; 4 bakery racks				
WASH RESULT							
Fine filter system GENIUS-X <sup>2</sup>		•			•		
Wash system ROTOR-X		•		•			
Heat element ECOTHERM		•		•			
Wash program POWER-PLUS		•		•			
Strainer control system PROOF		•		•			
Steam washing		•		•			
Direct detergent spraying system	•			•			
ECONOMY							
Heat recovery E-SAVE	0			0			
Exhaust heat recovery	0			0			
Rinse system ACCURINSE	•			•			
Lateral wash system	•			•			
HANDLING							
Single button SMARTRONIC		•			•		
Remaining time indicator		•			•		
Refill signal		•			•		
Door system VAPOSTOP		0			0		
Water softening system NONSTOP <sup>1)</sup>	•			-			
Filter obstruction sensor		•		•			
Hygiene cycle ACTIVE	•		•				
Cleaning support	•		•				
Rinse aid and detergent dispenser	•			•			
FLEXIBILITY							
Double capacity				•			
Loading height L	•		•				
OPTIONAL EQUIPMENT	fitting equipment	Set 1 ML 71600	Set 2 ML 71601	fitting equipment	Set 1 ML 71656	Set 2 ML 71620	
Base rack 01-510508-1	Х						
Base rack 323741				Х			
Universal rack 323753	Х			Х			
Bakery sheet insert 323637	Х			Х			
Universal rack C-01-07	X			X			

# 6 DRAWINGS

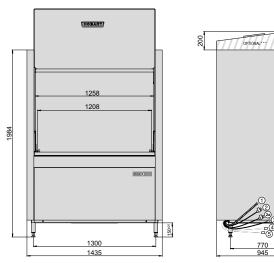
UP

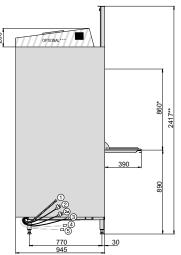




+/- 25 mm leg adjustment

UPT





+/- 25 mm leg adjustment

\*Loading height can be reduced to 650 mm – then no usability of lateral wash system \*\*Height can be reduced to 2,200 mm with the door open – then no usability of lateral wash system

- flexible drain hose
  fresh water connection Rinse
  fresh water connection tank contents
  power cord
  hoses for detergent (optional)
  frise agent

# **PREMAX UP**

**EFFICIENT – RELIABLE – INNOVATIVE** 

## 7 | TECHNICAL DATA

MODEL	UP	UPT
Cycle times in sec. [1]	150/280/400/>400	150/280/420/>420
Capacity [ 2 ]		
Washing cycles/h	24	24
Trays/h	168 (600 x 800 mm)	360 (600 x 600 mm) 360 (600 x 800 mm)
GN 1/1	144 (530 x 325 mm)	192 (530 x 325 mm)
GN 2/1	72 (530 x 650 mm)	96 (530 x 650 mm)
E-containers/h	96 (400 x 600 mm)	120 (400 x 600 mm)
Bakery racks/h	48 (400 x 600 mm)	96 (400 x 600 mm)
Temperature in °C		
Wash temperature approx.	65	65
Rinse temperature approx.	85	85
Tank volume liter	80	130
Klarspülwasserverbrauch per cycle liter	8	14
Fresh water consumption using steam washing and direct detergent spraying system	8/9/14	14/17/25
Pump capacity in kW/I/min	2.7/1,300	2 x 2.7/2 x 1,300
Heat output in kW		
Tank	3.3	6
Booster kW	15/9	18
Total loading in kW	18.2/15.4	24.2
Fuse in A	3 x 35 / 3 x 25	3 x 50
Nominal voltage in V / Hz / N-PE	400/50/3	400/50/3
Dimensions in mm		
Width	840	1,435
Depth	945	945
Height	1,984	1,984
Open hood height	2,417	2,417
Loading height	840	825
Rack size	600 x 760	1,240 x 700

WATER TREATMENT

## WATER SOFTENING SYSTEM

to protect against calcium deposits Mod. SE output 1,600 liter at 10° d (total hardness)



 The machine is equipped with an automatic cycle-time control in order to achieve a hygienic rinse temperature even for cold-water utilities or reduced heating performance. Warm water connection recommended.
 Theoretical performance

# **PREMAX UP**

**EFFICIENT – RELIABLE – INNOVATIVE** 

## **TRIPLE CAPACITY**

Baked-on cheese from lasagna, as well as encrusted residues of other baked items are standard in GN dishes.

Baked-on crust residues on baking pans or baking sheets are common in bakeries. Butcheries get encrusted GN dishes back from caterers only after a number of days have elapsed.

Our PREMAX UP series eliminates all such elements thanks to innovative and efficient technologies such as steam washing and detergent spraying systems without any additional mechanical devices.

The result: hygienically clean pots and pans, boxes, containers and baking pans.



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. www.hobart-export.com	de	
		EFFICIENT – RELIABLE – INNOVATIVE			
		Member of the <i>ITW</i> Food Equipment (	ent Group Europe		

