GRANULE CONBI®

THREE MACHINES IN ONE.





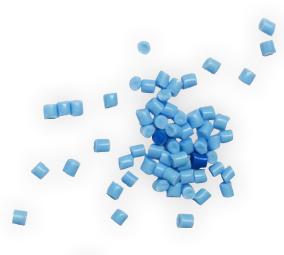
PURE POWER.

In a professional kitchen, you can't spend too much time washing up. Granule pot washing machines from GRANULDISK of Sweden gives you access to innovative, powerful technology to streamline pot washing. More emphasis on food – fewer resources for getting your pots clean.

Traditional pot washing has always been a laborious, resource-intensive task in any production kitchen. GRANULDISK technology has turned things on their head and revolutionised washing-up areas by making hard work easy. Our PowerGranules® blast the pots clean mechanically using high-pressure water and a small amount of chemical. Even stubborn food debris is removed with ease, and this technology saves energy, time and money while also reducing environmental impact and improving the work environment.

Manual pot washing requires soaking, scrubbing and sinks full of water. The GRANULDISK concept represents something completely different. Our pot washing machines take care of the entire job, thus eliminating the need for prewashing. We refer to this concept quite simply as "No Pre-Washing". In just a few minutes, your pots are both visibly and hygienically clean thanks to a power similar to the efficiency of thousands of people washing by hand. The overall result is a more productive washing-up area and less of the things which cost money and impact upon the environment.







SAYYES TO NO PREWASHING.



No soaking required.



No scrubbing required.



No prewashing. PowerGranules® eliminate the need for pre-washing. All you have to do is scrape the dishes, press the button and let the dishwasher do its job.







From dirty to clean in just 2 minutes and 20 seconds with the help of PowerGranules®, water and a small amount of chemical.







Potwashing is a job which often involves burnt or dried-on food. Achieving good, fast results requires an outstanding washing method. When our PowerGranules® are set in motion in the machines, it's as though thousands of people are washing the pots by hand in terms of power and efficiency. Used together with high-pressure water and a

small amount of chemical, our PowerGranules® achieve mechanical cleaning of anything coming out of the professional kitchen. Even stubborn food can be removed with ease, and every time a washing programme ends there's just one thing left – dishes which are both visibly and hygienically clean.



PATENTED SENSOR.

Detects the type of pots inserted and automatically selects the correct wash programme.

3 in 1

GRANULE COMBI®

Our unique Granule Combi® model combines our award-winning efficient Granule technology for potwashing with traditional crockery and cutlery washing technology. Used as a 3-in-1* solution in smaller kitchens or as a powerful potwashing machine with crockery and cutlery support in medium-sized to large kitchens.

Like other GRANULDISK products, Granule Combi® makes potwashing considerably more efficient than traditional methods. The Granule technology blasts the pots, making them both visibly and hygienically clean The entire GN range – GN 1/1 and the range of small containers – can be loaded directly into the basket, and a simple accessory also allows GN 2/1, grill racks, chopping boards, etc. to be loaded easily. The machine is a through-feed model which is used with infeed and outfeed benches and can be utilised either in a compact corner configuration or placed in a standard straight line configuration.

But Granule Combi® isn't just a Granule potwashing machine. It can also replace* conventional hood type dishwashers in kitchens serving up to 300 meals a day. Plates, coffee cups and other china are washed clean in a traditional way, with a noise level which is probably the lowest in the industry. Our patented sensor allows the machine to detect what type of wares have been inserted, and the correct wash programme is set automatically. For larger kitchens, the crockery and cutlery function helps out when the kitchen is particularly busy or can provide a more economic alternative than starting up the tunnel machine when there's no great need for it.



CONTROL PANEL.

User-friendliness is always a key focus for our control panels and the display, symbols and messages are easy to understand, making it easy to select the correct wash programme. Choose with or without PowerGranules and programme lengths Eco, Short or Normal. The fully automatic hood closes as soon as a programme is selected and rises again once the cycle is completed, eliminating all manual handling for this process. When the machine is in use, the display changes into a countdown timer, showing the remaining time in large digits.

Wash and rinse tank temperatures are shown in the display at all times and with a simple command, you can view HACCP data for up to 200 of the previous wash programmes. The display also displays automatic reminders from integrated function GD Memo™ regarding more general maintenance tasks, such as replacing PowerGranules®, changing water in the wash tank or to book a service appointment.

USB PORT.

The operating system in GRANULDISK pot washers logs all HACCP-essential information for up to 200 wash cycles. The data, containing valuable information such as wash and rinse water temperatures, programme lengths, interruptions and delays is easy to follow up and helps you ensure that your pot wash operation always complies with HACCP protocol.

The cycle data can be accessed and viewed directly via the display in the control panel or downloaded to a USB stick through the built-in USB port in the machine side. Import the data to a computer for storing and for adding it to your HACCP reports.

EFFICIENCY.

GRANULDISK increases efficiency in the washing-up area – one of the most thankless tasks in the kitchen.

ECOLOGY.

Reduce your environmental impact with GRANULDISK – halve your consumption of water, electricity and chemicals.

OUTSTANDING HYGIENE.

We guarantee hygienically clean pots with a surface temperature of at least 72 °C when the wash programme is complete.

ERGONOMICS.

A better work environment and an easier working day – for everyone involved.

EXTRA TIME.

Spend an hour washing up 161 GN 1/1 with Granule Combi® – instead of spending 5-6 hours washing them by hand.

FINANCE.

Investing in a GRANULDISK solution will really pay off – sooner than you think! Our customers normally have a pay-off time of less than 24 months.

POWERGRANULES®

PowerGranules® are specially designed for use with GRANULDISK products. They make your pans and containers visibly and hygienically clean.

PowerGranules® are made of a plastic which has been tested and approved for contact with food. The unique mix of sizes and the composition of the material give you an exceptional removal rate and clean products which shine. The fact is, after using PowerGranules® for a time your pans and containers will shine like new.

10 litres | Art no. 22633 20 litres | Art no. 22634

MAINTENANCE.

Our machines are designed to be cleaned simply and efficiently. That's because we know the importance of daily cleaning for optimal wash results. It's every bit as important to make sure that the machine is maintained with regular servicing, ensuring simple and worry-free use and extending the service life of your machine.

Does any part of your machine need to be replaced? We guarantee spare part availability for at least 10 years once the model has been taken out of production.

RECOMMENDED BENCH SYSTEM FOR GRANULE COMBI®

Our recommendation is to combine our hood machine, Granule Combi®, with infeed and outfeed benches. This allows the work to be carried out quickly and safely throughout the entire flow from dirty to clean crockery and cutlery.

The bench systems for Granule Combi® should be specially designed for our machines with a view to enhancing efficiency in the kitchen and fitting in with our potwashing concept without prewashing. This unique solution should consist of an infeed bench and an outfeed bench which are to be installed so that the machine is set up in the corner or along a wall. We recommend that the legs of the bench should start 400 mm away from the machine so that the machine can be accessed easily for servicing. A track should allow the potwash basket and cutlery and crockery basket to slide easily along the bench and end up positioned correctly. If anything is in the way when you come to close the hood, the machine detects this by means of a built-in trap guard and stops the motion of the hood.

The position of the machine and bench system is determined by the flow of dirty and clean pots in the

washing-up area. No space is required in front of the machine for opening a door or hatch, so you can easily put it in a corridor. The advantage of being able to place the machine in a corner is that it allows for optimization of the workflow and space, especially where space is at a premium. In the case of projects where a new kitchen has been designed from the ground up, we recommend the unique bench solution which can easily be combined with a washing-up drop-off area or roller conveyors designed for cutlery and crockery baskets of a standard size of 500 x 500. If our Granule Combi® is used to replace a dishwasher, our recommended bench system can easily be integrated into existing roller conveyors. Fastenings are needed for connection to 500 x 500 mm roller conveyors for both infeed and outfeed benches.



Picture shows Granule Combi installed along a wall with recommended bench system that can easily be integrated into existing roller conveyors. Benches are not sold by GRANULDISK - contact your dealer for more information.

GRANULDISK offers a collapsible bench which is suitable for small and cramped kitchens with a small flow of crockery and cutlery and less potwashing. The bench has place for a basket of pots or a basket of crockery and can be folded away when not in use. It can be connected to be used along a wall or in a corner.

Regardless of whether the setup of tables is placed along a wall or in a corner, the infeed can be positioned from the right or the left. To achieve as smooth a flow as possible, the infeed bench should be adapted to make it just the right length for potwash baskets and crockery and cutlery baskets to be rinsed off or scraped down before being inserted in the machine. Talk to your local dealer for a solution to fit your needs.



Positioning along a wall, with the infeed from the right-hand side.



Positioning along a wall, with the infeed from the left-hand side.



Positioning in a corner, with the infeed from the right-hand side.



Positioning in a corner, with the infeed from the left-hand side.



Picture shows Granule Combi installed along a wall with recommended bench system that can easily be integrated into existing roller conveyors. Benches are not sold by GRANULDISK - contact your dealer for more information.

TECHNICAL DATA.

Design	Hood machine, through-feed model with support for crockery and cutlery.
	Rotary standard wash basket.
Outer dimensions	2 340 (± 25) x 850 x 1 002 mm (H x W x D)
Loading volume	220 litres (ø 700 mm x H 570 mm)
Weight	416 kg (filled machine)
	317 kg (empty machine)
Wash tank volume	83 litres
Granule volume	8 litres
Wash water temperature	65 °C
Rinse water temperature	85 °C
Wash programmes with Granules	ECO; 2 min, 20 sec
	Short; 3 min, 30 sec***
	Normal; 5 min, 30 sec***
Wash programmes without Granules	ECO; 2 min, 20 sec
	Short; 2 min, 50 sec
	Normal; 4 min, 50 sec
Wash programmes (Combi mode)	ECO; 1 min, 30 sec
	Short; 2 min****
	Normal; 2 min, 30 sec****
Max capacity per hour	161 GN1/1 or similar in other pots.
Normal capacity per hour	126 GN1/1 or similar in other pots.
Capacity per programme	6+1 GN1/1 65 mm or 3 GN1/1 up to 200 mm depth and 3 GN 1/1 up to 65 mm depth or similar in other pots.
Capacity per hour (Combi mode)	33 baskets (500 x 500 mm) (high capacity option 32A)
	26 baskets (500 x 500 mm) (normal capacity option 25A)
Rinse water volume	4 litres/ECO programme
	8 litres/Short and Normal programmes
	To achieve 3 600 HUE in accordance with NSF/ANSI 3, 8 litres is necessary.
Rinse water volume (Combi mode)	4 litres/programme
Electrical options**	$3\sim400$ V/50 Hz + PE (32A) water inlet 55-65 °C (33 crockery baskets/h)
	$3\sim$ 400 V/50 Hz + PE (25A) water inlet 55-65 °C (26 crockery baskets/h)
	$3\sim415$ V/50 Hz + PE (32A) water inlet 55-65 °C (33 crockery baskets/H)
	$3\sim415$ V/50 Hz + PE (25A) water inlet 55-65 °C (26 crockery baskets/H)
	$3\sim230$ V/50 Hz + PE (40A) water inlet 55-65 °C (26 crockery baskets/h)
Max output, water connection	12,6 kW (25A) 17,6 kW (32A)
Wash pump motor	2,6 kW
Wash pump motor (Combi)	0,7 kW
Rinse pump motor	0,37 kW
Wash tank element*	9 kW (25A) 14 kW (32A)
Rinse tank element*	9 kW (25A) 14 kW (32A)
Enclosure rating	IPX5
Sound pressure level	<70 dB(A) potwashing, 52 dB(A) Combi mode
Hot water connection	½" (DN15), 55–65 °C, 3–10 °dH
	Note: Reverse osmosis water and distilled water must not be used
	Water pressure/flow: 1–6 bar, 15 litres per minute
Cold water connection	½" (DN15), 3–10 °dH
	Water pressure/flow: 1–6 bar, 15 litres per minute. (for optional steam reduction, 3-6 bar is needed)
Recommended ventilation capacity	500 m ³ /h (without steam reduction)
	150 m ³ /h (with steam reduction)
Drainage pipe	Pipe ø 32 mm
Drain	Capacity requirement 50 I/min
	The machine must not be placed directly over a drain.
Detergent and drying agent are required	Detergent and drying agent; 230 VAC signal is available from a separate box. Max load total 0.5 A.

Granule Combi* is supplied with a power cable 2 metres long (without a plug) for connection to an approved main switch. The main switch is not included in the delivery.



HIGH CAPACITY.

Washes up to 6+1 GN1/1 per programme or 161 GN1/1 per hour.



TIME-SAVING.

Clean pots and pans from 2 minutes, 20 seconds - no prewashing needed.



WATER-SAVING.

The ECO programme saves up to 1 600 litres per day and up to 480 000 litres per year compared with manual washing-up in sinks (600 meals per day, 300 days per year).



SAVING ON CHEMICALS.

Saves up to 3.5 litres per day and up to 1 000 litres per year compared with manual washing-up in sinks (600 meals per day, 300 days per year).



FOOD SAFETY.

All programmes of the Granule Combi® pot and pan washer comply with the hygiene guidelines of the DIN 10512 standard.

^{**} For specific data on machines supplied, please see the rating plate on the machine.

^{*** 30} sec longer with steam reduction.

^{**** 20} sec longer with steam reduction.

ACCESSORIES.

GRANULDISK always allows you to adapt every solution according to your needs. Choose from our range of smart accessories to further increase the capacity of your machine.

To see how these accessories can be loaded and utilized go to www.granuldisk.com.



www.granuldisk.com/granule-combi-accessories



STANDARD WASH BASKET*.

ART NO. 19999

Capacity: 6 GN 1/1 65 mm or 3 GN 1/1 up to 200 mm + 3 GN 1/1 up to 65 mm. Equipped with small hooks which enables up to 12 small containers (1/4, 1/6, 1/9) to be loaded directly into the wash basket.



INSERT FOR TRAYS.

ART NO. 19992

To be placed inside standard wash basket. Holds 2 GN 2/1 or, 6 baking trays 600 x 400 mm up to 20 mm edge and 2 GN 1/1 sized trays, up to 16 grids, up to 8 chopping boards and GN 1/1 lids.



HOLDER FOR BOWLS & POTS WITH INTEGRATED LADLE HOLDER.

ART NO. 13756

To be placed inside standard wash basket. Capacity: up to 5-6 bowls or pots. Height of ladles up to 500 mm.



MULTIFLEX HOLDER FOR SAUCEPANS, SMALL BOWLS, SIEVES.

ART NO. 20554

To be placed inside standard wash basket. Capacity: up to 3-4 saucepans or up to 4-5 small bowls, sieves etc.



POT BASKET.

ART NO. 21423

Holds 2 large pots (200 mm) or 1 large pot (400 mm). Placed in machine instead of Standard Wash Basket.



FLEXIBLE POT HOLDER.

ART NO. 13789

Rubber strap with two hooks. Rubber strap to be placed around pot and hooked on to the basket.



ABC POTWASH BASKET.

ART NO. 21407

Available to order. Estimated delivery time approximately 6 weeks. ABC potwash basket, suitable for ABC canisters and containers.



FOLDING TABLE.

ART NO. 19570

Can be installed on front or on side.



WASH BASKET FOR PLATES AND CROCKERY.

ART NO. 19882

500 x 500 mm.



SCRAPER*.

ART NO. 21838

For pre scraping.



GRANULE COLLECTOR*

ART NO. 21550

INSTALLATION.

- A = Hot water inlet 55-65 °C,
 - 3-10 °dH, 5-18 °f.
 - 1–6 bar, 15 L/min, max 6 bar static.
 - G ½" BSP female, flexible hose min inner ø 9 mm.
- B = Cold water inlet,
 - 3-10 °dH, 5-18 °f.
 - 1–6 bar, 15 L/min, max 6 bar static (for optional steam reduction, 3–6 bar is needed)
 - G $\frac{1}{2}$ " BSP female, flexible hose min inner ø 9 mm.
- C = Drain ø 32 mm. 170 mm from floor. Vertical pipe, capacity min 50 L/min.
- **D** = Detergent/drying agent connection, signal 230V AC.
- **E** = Electrical connection (technical data on page 10 or in user manual).



Ventilation capacity: With steam reduction 150 m 3 /h. Without steam reduction 500 m 3 /h.

