

spotless warewashing



The powerful, green solution for
washing pots and pans



Powerful **green** solutions for cleaning your pots and pans

FOR MORE THAN 20 YEARS, environmental awareness has been a vital part of the philosophy and development of GRANULDISK®.

Using our products, you will reduce your impact on our ecosystem, while at the same time saving money.

GRANULDISK® develop, produce and market high quality products that are energy efficient and will not waste precious resources. We comply with applicable local environmental legislation, regulations and requirements.

Our products provide outstanding wash results while consuming less water and energy and using less detergent than conventional pot and pan washers and/or sink-based solutions.

Energy and water prices are on a steady increase and after labour, electricity and water are the biggest running costs in a kitchen. We provide a solution to this problem.

More than 9 000 happy customers have already benefited from our solutions. We hope that we will have the satisfaction of helping you too to a better way of business and a lighter working day.

PowerGranules® makes the difference

PowerGranules® is the heart of a GRANULDISK® warewashing machine, and they make all the difference. Granule Optimised Washing Technology is what we call the specific warewashing technique where pots, pans and other dirty kitchen utensils are scoured clean using Granules, water and a small amount of detergent. Without the Granules, our solution would be "just" a very efficient, water-based pot and pan washer.

No soaking – no scrubbing

That is the simple truth which keeps our customers happy no matter what type of kitchen they run.

" 3 millimetres that changed my workday "


Thanks to the blasting power of the Granules, even burnt on food remains are removed in a matter of minutes. Our solution saves time and energy and improves overall hygiene conditions in the warewashing area.

From dirty to clean - in less than 4 minutes!



Man-hours spent to clean 150
GN 1/1 of 200 mm depth

GRANULDISK: 

Waterbased
pot-washer*: 

Manual: 

* including 50 % pre-washing

e inside

Washing with Granules is, and have always been, a more efficient alternative to sink-based ware washing solutions and conventional water-based machines.

Using less resources, such as water, detergent and energy, it is not only a cheaper way to clean pots and pans - it also causes less impact on our environment.

Instead of using countless litres of hot water, hazardous chemicals and detergent, tiny blue Granules blast off burnt-in food and stubborn residues.

Pots and pans come out sparkling and are both visibly and hygienically clean after only minutes, and with far less resources wasted. Why continue to literally flush money down the drain, in terms of used water and chemicals when you can let the Granules work their magic over and over again?



Back in the 1980's, we were pioneers in the ware washing business. With the Granule Optimised Washing Technology, we knew we had a revolutionary invention at our hands. Working continuously to improve the product ever since, has led us to where we stand today. The green issue and our suffering planet had us concerned and we decided to find out what we could do to minimise any waste of resources and make the machines even more efficient.

The new and improved technology, which we have chosen to call "e", offers the same exceptional wash results - at a lower consumption of resources.

Let GRANULDISK® help you save money while at the same time easing your environmental conscience!



e for efficiency

GRANULDISK® products offer the highest level of efficiency to one of the most thankless areas of the kitchen.

- No soaking, no scrubbing. Eliminates the need for pre-washing.
- Spotless warewashing - in a few minutes.
- Granules blast off burnt-on residues faster than water and detergent.

e for environment

A bright green "e" to emphasize a far less impact on the environment.

- Wash tank water is used multiple times.
- No pre-soaking needed - dramatically decreased water and detergent consumption.
- During every rinse cycle, rinse water of 85 °C enters the wash tank, refreshing and heating it at the same time. Therefore, energy is saved as heating of the wash water is rarely needed.

e for ensured hygiene

A temperature of 72 °C on the surface of washed items **guarantees hygienically clean pots and pans.**

- We **guarantee high hygiene** for the washed articles.
- All food residues are mechanically removed in the Granule technique process where PowerGranules® make sure all utensils are scoured visibly clean.
- An **optimised final rinse**; correct time, temperature and volume of water, gives you **hygienically clean pots and pans.**
- **Controlled volume.** A rinse pump secures that the rinse tank distributes the correct volume of water during each rinse cycle.
- **No less than 85 °C.** Computer-controlled rinse water temperature.
- **Easy cleaning** access to wash tank, jets and sieves; secures a clean machine, ready to use next morning.

e for ergonomomy

- Handling **does not expose staff** to hot water or dangerous chemicals.
- **Less sickleave and less allergic reactions!**
- Handling allows an **upright position** and the heaviest tasks are no longer a problem.

e for extra time

More than 9 000 GRANULDISK® users have taken charge of their time.

- Thanks to GRANULDISK®, kitchens around the world save **thousands of hours every day!**
- **Let the machine do the job nobody else wants to do!**
- An investment that allows your staff **more time for other, more rewarding tasks** in the kitchen.

e for economy

It pays to invest in a GRANULDISK® machine - faster than you might think!

- An investment that allows you to **reduce your consumption of resources and lower your running costs** - without sacrificing an impeccable wash result!

... let us show you some savings examples ...



e for economy

It pays to invest in a GRANULDISK® machine
- faster than you might think.

A ware washing machine from GRANULDISK® is a profitable investment that can improve your overall finances. An investment that allows you to lower your water, detergent and energy consumption. You can also save time, space and improve the staffs' wellbeing in the workplace.

Our customers often have a return on investment (ROI) that is well within 24 months. That is how fast you can reduce your running costs compared to manual pot and pan washing.

Reduction of running costs – fast return on investment

- Cut energy & water costs by up to 60%
- Cut detergent costs by up to 60%
- Cut labour costs by up to 60%
- Better working environment – less sickleave and happier staff

in comparison with manual pot washing

Examples of savings and benefits

| | | |
|---|---|--|
|  |  |  |
| School (Granule Flex®) | Hotel (Granule Maxi®, Compact system) | Hospital (Granule Maxi®, FreeFlow system) |
| ROI 19 - 25 months up to € 11 000 in savings/year | ROI 16 - 22 months up to € 19 000 in savings/year | ROI 10 - 13 months up to € 57 000 in savings/year |
| 220 days of operation/year 350 meals/day | 360 days of operation/year 800 meals/day | 365 days of operation/year 3 000 meals/day |

Daily
SAVINGS
€ 52*

Daily
COST
€ 18*

SAVE
up to € 19 000*
per year !

*Example is based on Granule Maxi®, Compact System in comparison to manual washing (100 meals/day, 360 working days/year)



e for engineering

Our team of engineers continuously work to improve our products and bring the Granule Washing Technique forward. Inspired by feedback from customers as well as co-workers, they strive to build stronger, better and more efficient machines for the needs of tomorrow.

We are proud of the work they have done during our more than 20 years in the business, combining intelligent technology with quality engineering. Let us tell you about what their present achievements can do for you.

Environmental Laboratory

Our products and their components are regularly tested by the Laboratory. Mechanical, environmental, hygiene and cleaning tests are performed according to international standards using Good Laboratory Practice (GLP). Everything in order to ensure that our customers get the best possible performance available.



Intelligent software

Let the machine keep tabs with GD Memo™

An integrated function which alerts you when;

- Wash water has to be changed
- PowerGranules® need to be changed
- Service is required

We recommend that you regularly check the Granule amount to the marks in the collectors in order to maintain a satisfying wash result.

GTDirect™

The fully automatic and integrated HACCP-control function GTDdirect™ allows you to be in total control of the HACCP in your ware washing process. Access data from the 100 most recent cycles directly from the display on the control panel or connect the machine to a computer to store complete data of all programmes and cycles from day one.

- Automatic storage of all operating parameters and critical hygiene control points.
- Easy access to operating data, 100 most recent wash cycles to be traced directly from the display.
- Possibility to continuously download operating data to computer.

Patented hardware

Secured Rinse

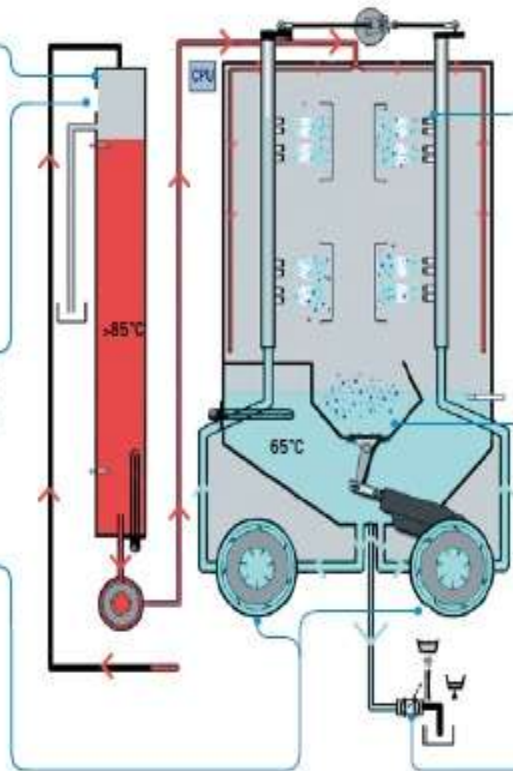
The rinse water is pumped from the rinse tank to the rinse nozzles. This secures that the right amount of rinse water at the correct temperature is sprayed over the dishware, regardless of the water pressure of incoming water.

Air Gap

Our machines are manufactured in accordance with EN1717 and fitted with a return flow protection of type AB, with an air gap in accordance to EN13077.

Wash System

The specially developed wash system ensures that the Granules are accurately mixed with the wash water before distributing the Granules to the wash arms and nozzles. The pump housing is optimised for GRANULDISK® original PowerGranules®, which gives the best washing results.



Wash Nozzles

The wash pumps distributes the water and Granules through the wash arms and wash nozzles. The design and configuration of the wash nozzles is the result of more than 20 years of research, in order to provide the best removal rate and wash result - regardless of what type of dishware you load in the machine.

Wash Tank and Granule Valve

The design and shape of the wash tank provides optimised Granule distribution as well as efficient heating of the water.

In the wash tank the Granule valve releases the Granules in to the water of the wash tank when a Granule programme is chosen.

Drain Valve

The built-in security sensor in the drain valve alerts the user via the display if the drain is open - thus avoiding unnecessary waste.

e for easy

GRANULDISK® machines are very user-friendly and easy to operate, thanks to the simple design of the control panel. Enjoy all green savings without reducing the excellent wash result. We've done a lot of the thinking for you, and only left a few, necessary choices for you to consider before washing.

The display

The large display window functions as a communication center, where the machine alerts the user of current activities, needs or actions to be taken. Messages are displayed in clear text and plain language - easy for anyone to understand.

ensured hygiene

Current temperatures of the wash and rinse tanks are displayed in the top corners at all times. Flashing digits mean tanks are heating and will return to steady when the correct temperature is reached.

GDTdirect™ and GD Memo™

GD Memo™ will use the display window to remind the user of Granule and water change, as well as regular service needs.

The display also offers easy access to data concerning the 100 most recent wash cycles through GDTdirect™.

GRANULDISK®



1 - Three pre-set programmes

efficient, powerful, green wash result

Whenever green button you press, you benefit from the fantastic savings of water, energy and detergent offered in GRANULDISK® products. Three eco-friendly programmes, using no more resources than is absolutely necessary.

* The "eco"-button provides a high hygienical result at lowest possible use of resources.

* The two other green buttons give a secured hygienical result.

The surface of the washed pots and pans will have a temperature of more than 72 °C after a finished cycle.

GRANULDISK® products offer an efficient, powerful, green pot washing solution - without sacrificing a secured hygienical wash result!



2 - Granules or not?

ever ready - with or without PowerGranules®

Flexibility. Either choice gives an outstanding wash result.

* Normal and heavily soiled pots and pans - choose a powerful Granule optimised programme to blast the utensils clean.

* Lightly soiled pans or sensitive dishware - choose an efficient water-only programme.

Granule Maxi®

Meet the GRANULDISK® e family



Granule Flexi®

Most of our Granule Flexi® customers prepare between 50 up to 500 meals a day. They are pleasantly surprised when it comes to capacity. The machine can clean up to 4 GN 1/1 containers, 200 mm deep, directly in one cycle. Large pots up to 700 mm deep, metal and ceramic bowls, baking and plastic trays are also very easily washed.

You'll find many of our Granule Flexi® machines among restaurants, retirement homes and other institutional kitchens, supermarkets and caterers.

| | |
|--------------------------------------|--|
| Normal max. capacity/h* | 84 GN 1/1 or equivalent in other utensils |
| Max. capacity/h* | 96 GN 1/1 or equivalent in other utensils |
| Capacity/cycle* | 4 GN 1/1 or equivalent in other utensils |
| External dimensions (H x W x D) (mm) | 1 745 x 845 x 965 |
| Max. power | 1,7,3 kW (cold water option 1,7,3 kW) |
| Wash/rinse tank element | 9 kW x 2 (cold water option 14 kW x 2) |
| Standard electrical connection | 3 AC 400 V - 50Hz, fuse 25 A (cold water option - fuse 32 A) |
| Hot water connection | 1/2" (DN15), 55-65°C, 3/2" ØI |
| Water pressure (h.w.) | 1.6 bar /15 litres per minute |
| Cold water connection | 1/2" (DN15), 3/2" ØI |
| Water pressure (c.w.) | 3.6 bar /15 litres per minute |

* pressure and temperature of incoming water may affect capacity



Granule Maxi®

Most of our Granule Maxi® customers are larger kitchens, producing up to 4 000 meals a day. The limit is not fixed and depend more on how the food is prepared and distributed rather than the actual number of portions.

You'll find many of our Granule Maxi® machines among hotels and restaurants, hospitals, staff canteens, schools/universities or catering companies and in food processing industries.

Granule Maxi® is available either with one, fixed cassette or as a system with one or more loose cassettes and trolleys.

| | |
|--------------------------------------|---|
| Normal max. capacity/h* | 180 GN 1/1 or equivalent in other utensils |
| Max. capacity/h* | 192 GN 1/1 or equivalent in other utensils |
| Capacity/cycle* | 6 GN 1/1 or equivalent in other utensils |
| External dimensions (H x W x D) (mm) | 2 020 x 1 452 x 1 080 |
| Max. power | 21 kW (cold water option 29 kW) |
| Wash/rinse tank element | 16 kW x 2 (cold water option 24 kW x 2) |
| Standard electrical connection | 3 AC 400 V - 50Hz, fuse 40 A (cold water option, fuse 50 A) |
| Hot water connection | 1/2" (DN15), 55-65°C, 3/2" ØI |
| Water pressure (h.w.) | 1.6 bar /25 litres per minute |
| Cold water connection | 1/2" (DN15), 3/2" ØI |
| Water pressure (c.w.) | 3.6 bar /15 litres per minute |

* pressure and temperature of incoming water may affect capacity



the right machine to suit your needs



Granule Gastro®

Most of our Granule Gastro® customers prepare up to 800 meals a day. The majority of their cooking is done in GN 1/1. They are pleasantly surprised when it comes to handling. The Granule Gastro® is a pass-through machine and is designed to be fitted with entry and exit tables.

You'll find many of our Granule Gastro® machines among schools, retirement homes, staff canteens, small cook-chill kitchens.

| | |
|--------------------------------------|---|
| Normal max capacity/h* | 120 GN 1/1 or equivalent in other standards |
| Max capacity/h* | 156 GN 1/1 or equivalent in other standards |
| Capacity/cycle* | 6 GN 1/1 or equivalent in other standards |
| External dimensions (H x W x D) (mm) | 2 400 x 850 x 1 000 |
| Max power | 11,0 kW (cold water option 16,0 kW) |
| Wash/heat tank element | 9 kW x 2 (cold water option 14 kW x 2) |
| Standard electrical connection | 3 AC 400 V - 50Hz, fuse 25 A (cold water option, fuse 32 A) |
| Hot water connection | 1/2" (DN15), 55 - 65°C, 3-7" ØI |
| Water pressure (h/w) | 1-6 bar /15 litres per minute |
| Cold water connection | 1/2" (DN15), 3-7" ØI |
| Cold water pressure | 1-6 bar (3-6 bar with optional steam reduction) |

* pressure and temperature of incoming water may affect capacity



Granule Combi®

Granule Combi® is a unique combi dishwasher, which combines the award winning Granule washing technique with the traditional washing-up technique for plates, cutlery and most types of crockery.

Granule Combi® replaces manual and machine pot and pan washing, as well as a conventional dishwasher. Granule Combi® automatically detects which type of wash basket is loaded in to the machine and selects the appropriate wash program.

You'll find many of our Granule Combi® machines among restaurants, small to medium hotels, retirement homes and kindergartens/pre-schools.

| | |
|--------------------------------------|---|
| Normal max capacity/h* | 126 GN 1/1 or equivalent in other standards or 31 baskets |
| Max capacity/h* | 161 GN 1/1 or equivalent in other standards or 33 baskets |
| Capacity/cycle* | 6-1 GN 1/1 or equivalent in other standards |
| External dimensions (H x W x D) (mm) | 2 400 x 850 x 1 000 |
| Max power | 12,6 kW (cold water option 17,6 kW) |
| Wash/heat tank element | 9 kW x 2 (cold water option 14 kW x 2) |
| Standard electrical connection | 3 AC 400 V - 50Hz, fuse 25 A (cold water option, fuse 32 A) |
| Hot water connection | 1/2" (DN15), 55 - 65°C, 3-7" ØI |
| Water pressure (h/w) | 1-6 bar /15 litres per minute |
| Cold water connection | 1/2" (DN15), 3-7" ØI |
| Cold water pressure | 1-6 bar (3-6 bar with optional steam reduction) |

* pressure and temperature of incoming water may affect capacity



... learn more about the machines from the separate product sheets - available as downloads from www.alkhawaja.net

spotless warewashing



Get the GRANULDISK® experience!

Live Wash

Your 100% satisfaction is our priority.

Lend us 15 minutes of your time, and we will show you how you could save years of heavy work in your kitchen.

Experience the Granule action first hand.

Contact your local GRANULDISK® office or distributor and book a Live wash today!

WWW.ALKHAWAJA.NET

EN20050903-01 GRANULDISK reserves the right to make technical changes to the product. No responsibility will be accepted for anyomitted errors.