# Lean Wash Center®



<u>GRANULDISK</u>

Easy, Sustainable & Efficient ware washing solutions for professionals



# Lean Wash Center®

An innovative range designed to be easy to use and deliver efficient wash result, while consuming a minimum of natural resources.

Great for you, and better choice for our planet.







Easy

+ Buy

+ Place

+ Install

+ Clean + Maintain

+ Use

Sustainable

- + From 1.3 L per cycle
- + From 0.09 kWh per cycle
- + Silent from 56 dB(A)
- + Energy saving mode
- + Long lifespan construction
- + Zero brass components



# Efficient

- + Minimum scrubbing
- + DIN 10534 compliance
- + Start-up from 8 min
- + Programs from 1 min
- + AutoClean 3 min 30 sec
- + App for HACCP reporting

# Base

High-level construction and benchmark performance for a reliable, easy, and efficient ware washing solution.

# Master

Built-in sustainable technologies cuts water use by 50%\* and reduces operating cost to the minimum. Easy to use, maximum efficiency.



	D1 Base	D2 Base	D1 Master	D2 Master
	Dishwasher	Dishwasher	Dishwasher	Dishwasher
Meals per service	30 - 100	70 - 210	30 - 100	70 - 210
Water - Electricity per cycle <sup>0</sup>	2.6 L - 0.09 kWh	2.6 L - 0.11 kWh	1.3 L - 0.07 kWh	1.3 L - 0.09 kWh
Start-up time 1 - Water-change 1	11 min. – N/A	18 min. – N/A	11 min 8 min.	18 min 16 min.
Automatic energy save mode	Standard	Standard	Standard	Standard
Water change program	N/A	N/A	Standard	Standard
AutoClean wash tank program	N/A	N/A	Standard	Standard
Wash programs	4	4	4	4
Glassware - 25 Glasses Ø 90 mm	P1 - 1 min. 30	P1 - 1 min.	<b>1</b> min. 30	1 min.
Dishware - 18 Dinner plates Ø 240 mm	P2 - 2 min.	P2 - 2 min.	2 min.	(a) 2 min.
Flatware - Various cutlery	P3 - 3 min.	P3 - 3 min.	3 min.	3 min.
Utensils - Whisks, ladles, bowls	P4 - 8 min.	P4 - 8 min.	8 min.	8 min.
Cookware <sup>2</sup> - Pots and GN pans	N/A	N/A	N/A	N/A
Heavily burnt cookware <sup>2</sup>	N/A	N/A	N/A	N/A

<sup>o</sup> Theoretical calculation.<sup>1</sup> 55 °C water supply. <sup>2</sup>Ø 450 H 380 mm - 2 GN 1/1 or 4 GN 1/2 65 mm - 1 GN 1/1 200 mm. \* Compared to Base line.

X2 Master Universal washer

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70 - 250 2 L - 0.17 kWh 8 min. - 5 min.

> Standard Standard

Standard

4



# Easy, Sustainable, Efficient



Silent working environment Enjoy the sound of silence and reduce the stress level for your staff. Ranging from 56 dB(A).



Low ventilation needs - High electricity savings EcoExchanger® condenses the steam created during the wash cycles and recovers the heat energy. Equals lower ventilation need, noise, and electricity consumption.



## Lower consumption - Lower cost

The Sequential Rinse Technology decreases water and chemical consumption by 50%, which in turn helps save energy



#### Fast and high-end dishwashing result

The dishware wash mode uses 500x500 wash racks. The low pressure pump paired with rotating wash arms deliver shiny plates in only 2 minutes.

PATENTED HCAN

Automatic wash mode selection The Dual Wash Technology automatically detects the

basket and selects the low pressure wash mode for dishware, or the high pressure wash mode for cookware.

The high-pressure pump paired with two motorized oscillating wash arms with specially designed nozzles, spray water and detergent inside the dirty cookware. Reduces scrubbing to a minimum and saves water, energy, and time.



Low amps - Less installation costs Easily replace your old dishwasher without wasting money on expensive electrical works.

No long waiting times X2 Master is ready to wash in less than 8 minutes, and change water in just 5.



On-site customizations Adjustable wash and rinse temperatures, chemical dosing - all fully customizable in a few seconds.



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#### Kick'n Wash

No more pressing buttons - keep your hands free! A simple kick on the pedal automatically lowers the hood and starts the wash cycle. When finished, the hood rises automatically. Eliminates repetitive motions and avoids staff developing work-related injuries (MSDs).



Connectivity to eliminate manual reporting The built-in wifi feature allows you to connect any device to collect, edit, and monitor information such as HACCP data, consumption of chemicals, and much more. Download the free Lean Wash Center® App.

## Intuitive use - No language barriers

The easy-to-read screen communicates with icons and symbols. This helps you manage frequent staff turnover and save time, by avoiding repetitive operator trainings.



Quick cycles - Top level hygiene

Lean Wash Center delivers top wash result which comply with the DIN 10534 Hygiene norm.

> Ergonomics - Corner or straight installation issue solved The reversible control panel can be installed on either side of the hood, always remaining oriented towards the user's gaze.

Placed to 1.4 m above floor level and within armslenght it ensures an ergonomically correct working position. The user's hand will never be above the shoulder.



Automatic energy save mode Every kWh costs. That's why Lean Wash Center<sup>®</sup> automatically goes into energy save mode if left idle for 20 minutes.



Instant access to information Scan the QR code for online access to servicing history, user and service manuals or troubleshooting guides. That's SIMpel™!



# Mix & Match

# Monday 100 meals, Saturday 400

Banqueting solution

By connecting X2 Master and D2 Master with the bridge table, you can adapt your capacity to fit the needs of the day, or the season.

Start up both for a high productivity pass-through solution matching that of a tunnel dishwasher, and wash up to 864 dinner plates, or 360 serving trays per hour. On slow days use only one and save electricity, water, chemicals, and money.



# Twice the productivity, half the time

-1-120-

Time-saving solution

A continous flow of cookware demands a quick wash solution. X2 Master cleans your pots and pans in just 3 minutes. No more waiting, no more frustration.

Add the DI Master to complete your setup. During preparation, use X2 Master to wash pots, pans, and utensils. During service, X2 Master acts as a dishwasher, running parallell with D1 Master which doubles your productivity.

Higher productivity, better flexibility, in less time.

## **Reversible tables**

Right or left side doesn't matter - decide on site

Designed for Lean Wash Center hood types, the width and working height are perfectly aligned for an ergonomically good work station. The guides secure easy sliding of 500x500 mm standard racks as well as the unique wash baskets.

The inlet tables are equipped with a 500x400x300 mm sink with removable waste collector and a 250 mm rear splashguard with integrated water-saving hand shower.

Inlet table, install right or left side W 760 x D 750 x H 860 (+65) mm W 1920 x D 750 x H 860 (+65) mm

Outlet table, install right, left or front W 760 x D 660 x H 860 (+65) mm W 1390 x D 660 x H 860 (+65) mm

Bridge table W 760 x D 660 mm



## Unique wash baskets

### High productivity wash basket <sup>a</sup>



Capacity: 9x GN 1/1 20 mm trays, lids, cutting boards, or 18x GN 1/2 20 mm, or 18x GN 1/1 grids, or 2x 600/400/20 mm baking trays.

W 500 x D 500 x H 200 mm

### Patented X2 Master cookware wash basket



Capacity: Pots up to Ø 450 H 380 mm or sub-sized, or 1x GN 1/1 200 mm or sub-sized, or 2x GN 1/1 or 4x GN 1/2 65 mm.

W 500 x D 500 x H 85 mm



# Non-electric water softener

Simply connect this compact water softener to hot or cold water and add 8 kg salt.

Avoid over-consumption of electricity, loss of performance, and extra maintenance costs due to heater scaling in your Lean Wash Center.

W 200 x D 450 x H 500 mm



# Specifications

D2 Master	X2 Master		
als/service	70 - 250 meals/service		
N/A			
Stan	dard		
Standard			
Stan	dard		
Option			
Ор	tion		
Standard			
Stan	dard		
A	Standard		
A	Standard		
Standard			
A	Standard		
Standard			
Stan	dard		
N/A			
Standard			
Stan	dard		
Standard			
N/A Standard			
IPX5 GS EN 1717 ROHS WEEE 20	14/30/EU EMC		
Standard			
mm	390 mm		
mm B(A)	390 mm 64 dB(A)		
B(A)	64 dB(A) 227 kg		
B(A) 210 kg 355 x D 745 x H 1500/1950 (+50) n	64 dB(A) 227 kg		
B(A) 210 kg 355 x D 745 x H 1500/1950 (+50) n W 655 x D 785 x H 19	64 dB(A) 227 kg		
B(A) 210 kg 355 x D 745 x H 1500/1950 (+50) n W 655 x D 785 x H 19	64 dB(A) 227 kg nm 500/1950 (+50) mm		
B(A) 210 kg 355 x D 745 x H 1500/1950 (+50) n W 655 x D 785 x H 1 W 655 x D 785 x H 1	64 dB(A) 227 kg nm 500/1950 (+50) mm 675/2125 (+50) mm		
B(A) 210 kg 355 x D 745 x H 1500/1950 (+50) n W 655 x D 785 x H 1 W 655 x D 785 x H 1 7.1 kW	64 dB(A) 227 kg nm 500/1950 (+50) mm 675/2125 (+50) mm		
B(A) 210 kg 355 x D 745 x H 1500/1950 (+50) n W 655 x D 785 x H 19 W 655 x D 785 x H 10 7.1 kW N/A	64 dB(A) 227 kg nm 500/1950 (+50) mm 675/2125 (+50) mm 16A / 10 kW 32A / 10 kW		
B(A) 210 kg 355 x D 745 x H 1500/1950 (+50) n W 655 x D 785 x H 19 W 655 x D 785 x H 19 7.1 kW N/A 7.1 kW	64 dB(A) 227 kg nm 500/1950 (+50) mm 675/2125 (+50) mm 16A / 10 kW 32A / 10 kW		
B(A) 210 kg 355 x D 745 x H 1500/1950 (+50) n W 655 x D 785 x H 19 W 655 x D 785 x H 19 X 655 x D 785 x H 10 N/A 7.1 kW N/A 0 °C - 2-5 bar - <4 °dH (7 °fH) - 3 N/A	64 dB(A) 227 kg nm 500/1950 (+50) mm 675/2125 (+50) mm 16A / 10 kW 32A / 10 kW		
B(A) 210 kg 355 x D 745 x H 1500/1950 (+50) n W 655 x D 785 x H 19 W 655 x D 785 x H 19 X 655 x D 785 x H 10 N/A 7.1 kW N/A 0 °C - 2-5 bar - <4 °dH (7 °fH) - 3 N/A	64 dB(A) 227 kg nm 500/1950 (+50) mm 675/2125 (+50) mm 16A / 10 kW 32A / 10 kW /4" fem.		
B(A) 210 kg 355 x D 745 x H 1500/1950 (+50) n W 655 x D 785 x H 19 W 655 x D 785 x H 19 X 655 x D 785 x H 19 N/A 7.1 kW N/A N/A N/A Max. 25 °C - 2-5	64 dB(A) 227 kg nm 500/1950 (+50) mm 675/2125 (+50) mm 16A / 10 kW 32A / 10 kW /4" fem.		
	als/service N/A N/A Stan Standard Op Op Standard Stan A A Standard A Standard A Standard A Standard A Standard A Standard Stan N/A Stan Stan Stan Stan Stan Stan Stan Stan		

	D1 Base	DI Master			
	30 - 100	meals/service			
& WORK STATION					
rack sliding guide	S	tandard			
tuitive wash icons	N/A	Standard			
l hood movement		N/A			
panel at eye level		N/A			
hood movement		N/A			
energy recovery <sup>1</sup>		N/A			
534 compliance <sup>2</sup>					
ops - Rinse pump	S	tandard			
inse Technology ª	N/A	Standard			
ash rack detector		N/A			
ash arms, 4 filters	N/A				
ash arms, 3 filters	Standard <sup>3</sup>				
sensor installation	N/A				
se aid dispenser <sup>4</sup>	Standard				
ergent dispenser <sup>4</sup>	Option	Standard			
r supply - 1 kg salt	 N/A	Option ⁵			
N - IPX5 & EN 1717					
e - Stamped tanks	S	tandard			
Drain pump	Option	Standard			
OUSTRY 4.0 READY					
with online portal	S	tandard			
: HACCP reporting	N/A	Standard			
RMS COMPLIANCE		1717 Rohs weee 2014/30/eu emc			
on <sup>6</sup> & Starter Kits <sup>7</sup>	Standard				
INSTALLATION					
ax. loading height					
el - ISO 11203 norm	56 dB(A)				
operating weight	92 kg	98 kg			
Dimension	W 604 x D 633/1072 x H 844 (+10) mm				
uilt-in Kick'n Wash	N/A				
t-in EcoExchanger	N/A				
AC 380-415V 50 Hz	10A / 5.05 kW				
0 IN AC 230V 50 Hz	10A / 5.05 kW				
3N AC 230V 50 Hz					
er inlet connection					
er inlet connection	N/A	Max. 30 °C - 2-5 bar - 3/4" fem.			
er inlet connection		N/A			
drain connection	Ø 28 mm -	• 65 °C - 50 L/min.			
al/Sensible/Latent	1.6 kW / 0.7 kW / 0.9 kW	1.8 kW / 0.6 kW / 1.2 kW			
al/Sensible/Latent	1.0 KVV / 0.7 KVV / 0.9 KVV	N/A			
ur sensible/latent		IN/A			

EASE OF USE - ERGONOMICS & WORK STATION
Soft opening balanced door with wash rack sliding guide
Intuitive wash icons
Manual hood movement
Reversible satellite panel at eye level
Kick'n Wash: fully automatic hood movement
EcoExchanger® condensing unit & energy recovery <sup>1</sup>
EFFICIENT WASH & RINSE TECHNOLOGY - DIN 10534 compliance <sup>2</sup>
85 °C rinse temp 60 °C wash temp Thermo-stops - Rinse pump
Patented Sequential Rinse Technology $^{\circ}$
Patented Dual Wash Technology ${}^{\scriptscriptstyle \mathrm{b}}$ with smart wash rack detector
High pressure pump, 2 motorized oscillating wash arms, 4 filters
Low pressure pump, 2 rotating wash arms, 3 filters
Wash tank prepared for detergent dosing sensor installation
Rinse aid dispenser <sup>4</sup>
Liquid detergent dispenser <sup>4</sup>
Built-in water softener - 2/30°C water supply - 1 kg salt
SUSTAINABLE CONSTRUCTION - IPX5 & EN 1717
Heat & noise insulation - Rear cover plate - Stamped tanks
Drain pump
INDUSTRY 4.0 READY
SIMpel™ QR code with online portal
Wifi module & Lean Wash Center® App: HACCP reporting
NORMS COMPLIANCE
Connection <sup>6</sup> & Starter Kits <sup>7</sup>
INSTALLATION
Max. loading height
Sound pressure level - ISO 11203 norm
Max. operating weight
Dimension
Dimension with optional built-in Kick'n Wash
Dimension with optional built-in EcoExchanger
Standard delivery voltage: 3N AC 380-415V 50 Hz
Standard delivery switchable voltage to 1N AC 230V 50 Hz
Optional voltage: 3N AC 230V 50 Hz
Water inlet connection
Built-in optional Water softener <sup>5</sup> - Water inlet connection
Built-in optional Eco Exchanger <sup>1</sup> - Water inlet connection
Water drain connection
Heat dissipation - Total/Sensible/Latent
Heat dissipation with optional EcoExchanger - Total/Sensible/Latent

<sup>3</sup> Soft start pump. <sup>4</sup> Settings from Master line panel. <sup>5</sup> Max. 30 °C water supply. Extends start-up, water change, wash cycles of D1 Master. ° IT201900010245A1. <sup>b</sup> SE Pat.Nr544887.

<sup>1</sup> Max. 25 °C water supply, extends start-up, water change, wash cycles of D2 Master. Extends wash cycle of X2 Master due to double water inlet connections.<sup>2</sup> Factory settings. <sup>6</sup> 3/4" female water supply pipe, Ø 28 mm water discharge pipe, 2.5 m cable. <sup>7</sup> X2 Master. Cookware basket, dishware & glassware racks - others: dishware & glassware racks, flatware holder.



## Free business case

How profitable would Lean Wash Center be for you?

Sign up for your free evaluation on www.granuldisk.com

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# Own or subscribe

Own your setup, or enjoy a care-free and economical solution with a **Save per Use** subscription in partnership with your local Granuldisk® partner.

Monthly fee includes installation, service, and maintenance.

# 2 years warranty

Lean Wash Center® range comes with a contractual 24-month warranty.

Annual service must be performed by your local authorized service partner.

#### Authorized partner

#### Granuldisk - Sustainability in focus

Granuldisk was founded in 1987 in Malmö, Sweden, and has since been revolutionizing commercial ware washing by combining premium engineering with high passion for sustainability, to ensure perfect wash results in just a few minutes with minimal scrubbing.



Granuldisk complies with environmental and quality ISO standards, and is actively working with the UN Sustainable Development Goals.





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