# Lean Wash Center® D2 Base

**User Manual** 

serial # D2B-01 00001



Art. no EN31055

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# EC DECLARATION OF CONFORMITY FOR MACHINERY

#### Original

Directive 2006/42/EC, Annex II 1A

#### Manufacturer (and where appropriate his authorised representative):

Representative: Granuldisk

Address: Jägershillsgatan 13, 213 75 Malmö

Hereby declares that

Type of machinery: Ware washing machine for com-

mercial kitchens

No. of machinery: Lean Wash Center® D2 Base

# Complies with the requirements of Machinery Directive 2006/42/EC. Complies with the applicable requirements of the following EC directives:

2014/35/EU, LVD 2014/30/EU, EMC

#### The following harmonized standards have been applied:

EN 60335-2-58:2017

EN 60335-2-58:2005/A12:2016

EN 55014-1:2017/A11:2020

EN 55014-2:2015

EN 61000-3-2:2019

EN 61000-3-3:2013/A1:2019

EN 61000-6-2:2019

EN 61000-6-3:2007/A1:2011/AC:2012

#### The following other standards and specifications have been applied:

SS-EN 1717:2000

#### Authorized to compile the technical file:

Name: Staffan Stegmark

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Signature:

Place and date: Malmö, 01.03.2023

Signature:

Name: Mikael Samuelsson

Position: CEO

## 1 General description and safety

### 1.1 Notes and warnings



#### **NOTE**

Lean Wash Center® D2 Base is a washing solution for commercial kitchens that is designed for washing crockery, cutlery and glasses.

This manual is your guide for the correct use of Lean Wash Center® D2 Base.

Granuldisk recommends that you study the manual thoroughly to be sure that Lean Wash Center® D2 Base is installed and used correctly and safely.

Ensure that the manual is always available during the whole lifetime of the unit.

Granuldisk accepts no responsibility for damage to the equipment or other damage or injury caused by not following the directions in this manual.

The user must not carry out any repairs or maintenance works on the dishwasher. Service and maintenance must be carried out by qualified and authorised personnel.

Any assistance required on this dishwasher must be carried out by authorised personnel.

Use exclusively original spare parts, otherwise the product warranty issued and the manufacturer's responsibility will become void.

The machine is designed for commercial kitchens with a room temperature between minimum 5°C and maximum 35°C.

Regarding the handling and use of detergent and rinse aid with the product, please see the chemical manufacturer's instructions. Use high quality products for best wash result. Also refer to information about detergent and rinse aid in the Service manual.

Use protective gloves and eye protection when handling the chemicals.

User manual in original.



#### WARNING

The following fundamental rules must be observed when using this appliance:

- Never use the appliance with bare feet.
- Do not put your bare hands into water containing detergent. Wash the hands thoroughly under running water straightaway if by accident this happens.



#### WARNING

Lean Wash Center® D2 Base is a professional machine. It must be used by adults and authorised personnel only. It must be installed and repaired exclusively by a qualified technician. The manufacturer declines all forms of responsibility for improper use, maintenance and repairs.

Lean Wash Center® D2 Base must not be used by children or anybody who has restricted physical, sensorial or mental capacity or by anybody who has not been appropriately trained or properly supervised.



#### WARNING

Lean Wash Center® D2 Base is designed only and exclusively to wash glasses, dishware and cookware soiled with residues of human food.

Do not use it to wash objects soiled with petrol or paint. Do not wash pieces of steel or metal, fragile objects or objects made of material that will not withstand the washing process. Do not use acid or alkaline corrosive chemical products, solvents or chlorine based detergent.



#### WARNING

The machine uses hot water. Risk of scalding.

Do not open the hood when machine is running. The dishwasher is equipped with a safety device that will immediately stop the machine to avoid leakage of water if the hood is opened accidentally.



#### WARNING

Do not place any items on top of the hood.

Do not stand on the machine, it is not designed to hold the weight of people.



#### **ELECTRICAL**

Do not use water to extinguish fire on electrical parts.



#### **NOTE**

When cleaning the machine, please follow carefully the instructions in chapter 4 Daily cleaning.

#### 1.2 Technical data D2 Base

#### General

Design Hood type dishwashing machine

Polypropylene dishware washing basket - Polypropylene glassware

washing basket.

External dimensions External dimensions H x W x D (open

and table height 860 mm)

1950 mm x 655 mm (+ handle 100 mm) x 745 mm (+ handle 95 mm)

(Standard machine)

Weight (empty / filled) 120 / 160 kg (Standard machine)

Tank volume 30 litres
Clearance 430 mm
Rinse water volume 2,6 litres
Wash water temperature\*\*\* 60 °C
Rinse water temperature\*\*\*

Sound pressure level < 59 dB(A) ISO 11203

#### **PROGRAMS & CAPACITY**

Washing programs 1 min. (glassware)

2 min. (dishware)

3 min. (flatware)

8 min. (utensils)

Capacity per program 18 Dinner plates or 12 Soup plates Ø

240 mm - 25 Glasses/mugs Ø 90

mm

Start-up time (filling and heating) 18 min at 55°C inlet water

temperature

#### **ELECTRICAL CONNECTION**

Voltage\*\* 380 / 400 / 415 V / 3N~ / 50 Hz

230 V / 3N~ / 50 Hz

Fuse 16 A (400 V)

20 A (230 V)

Frequency 50 Hz
Maximum output 7,1 kW

Dishwashing pump	1,1 kW
Rinse pump	0,18 kW
Heater wash tank*	3 kW
Heater rinse tank*	6 kW
Enclosure rating	IPX5****

#### WATER CONNECTION

Hardness/Connection	Total hardness: < 4 °dH; 7 °f; 70 PPM	
	Inlet hose with ¾" female - 1,4 m	
	200 – 500 kPa / 2 - 5 bar	

#### **VENTILATION & DRAIN**

Ventilation requirements	$600  \text{m}^3/\text{h}$
--------------------------	----------------------------

Heat emitted to room (total/sensi- 4,8 kW / 1,6 kW / 3,2 kW

ble/latent)

Drainage Drain hose Ø 28 mm - 1,5 m

Drain capacity requirement 50 I / min.

Drain water temperature 65 °C

Drain pump (option) 40 W

Maximum lift height drain pump 800 mm

#### **DETERGENT & RINSE AID**

Liquid rinse aid dosing dispenser with a peristaltic pump is integrated into the machine.



#### **NOTE**

Lean Wash Center® D2 Base must be installed according to national regulations. Lean Wash Center® D2 Base is supplied with a 2 metres long electric cable to be connected to an approved supply disconnecting device on the wall. The supply disconnecting device is not included in the delivery.

<sup>\*</sup> Not in use simultaneously.

<sup>\*\*</sup> For specific data regarding delivered units, please see the machine rating plate.

<sup>\*\*\*</sup> Factory settings. The settings can be changed according to the local standards.

<sup>\*\*\*\*</sup> Do not clean the machine with high-pressure water.

# 1.3 SIMpel – easy access to information

To make it easier for the operator to find information and how to use the unit there is a QR-code on Lean Wash Center® D2 Base.

The sticker is placed in the lower right corner of the hood.



1 Scan the QR code on the sticker.

See Fig. 1 QR-code on the sticker



Fig. 1 QR-code on the sticker

2 When you scan the QR code, you enter the following menu.

(Note that the interface may vary depending on the device used).

See Fig. 2 Menu

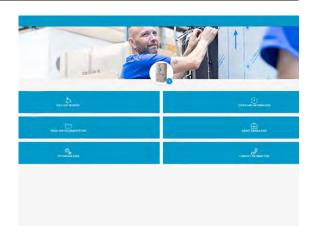
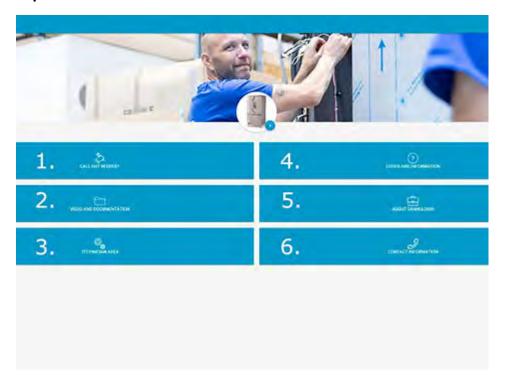


Fig. 2 Menu

3 Select the language in the upper right corner. English is default.

#### Explanation of the different boxes:



1. CALL OUT REQUEST	Make a service call on the machine
2. VIDEO AND DOCUMENTATION	User manuals and videos of accessories/daily cleaning
3. TECHNICIAN AREA	Only for technicians/service partners
4. CODES AND INFORMATION	List of error codes

5. ABOUT GRANULDISK	Link to Granuldisk.com
6. CONTACT INFORMATION	Contact information to service partner

# 2 Operating

# 2.1 Control panel



- 1. ON/OFF
- 2. P choose program
- 3. CONFIRM start the machine

### 2.2 Start and operation

- Insert the overflow pipe, if removed from the tank. Make sure it is positioned correctly.
- 2 Switch on the main electrical switch. The display lights up and goes in OFF mode.
- 3 Start Lean Wash Center® D2
  Base by pressing the ON/OFF
  button.

The display lights up and the Lean Wash Center® D2 Base starts to fill with water and heat up to the correct temperature in the wash and rinse tank.

The filling and heating time is approx. 18 min at 55 °C water inlet temperature.

The CONFIRM button is yellow during the filling and heating phase.

See Fig. 3 Filling with water

4 Lean Wash Center® D2 Base is ready to operate when the CONFIRM button has turned green.

See Fig. 4 Ready to use

- 5 Choose wash program by pressing P until the right program appears in the display.
  - P1 Glassware 1 min
  - P2 Dishware 2 min
  - P3 Flatware 3 min
  - P4 Utensils 8 min

See Fig. 5 Wash programs



Fig. 3 Filling with water



Fig. 4 Ready to use

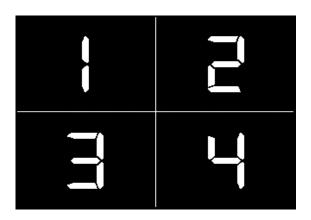


Fig. 5 Wash programs

6 Start Lean Wash Center® D2 Base by lowering the hood.

7 When the machine is running a countdown of the program length appears in the display. During this phase the CONFIRM button is blue.

The wash program is ready when END flashes in the display for a couple of seconds and the CONFIRM button turns green again.



#### **NOTE**

As long as correct temperature in the wash tank is not achieved, thermostop for wash tank will be activated.

The machine will not be able to start. The CONFIRM button and chosen program will be blinking waiting for correct temperature.



#### **NOTE**

If correct temperature is not achieved during the rinse cycle, thermostop for rinse tank will be activated.

The countdown of time will stop and the rinse temperature will start blinking. The icon thermostop will be shown in the display.

When correct temperature is reached the program and countdown continues.



Fig. 6 Thermostop rinse tank



#### **NOTE**

When the unit is not used for 20 minutes (this time can be programmed from the technicians menu) it will enter Economy mode, keeping the temperatures lower to save energy. To exit the function, press any button on the display.



Fig. 7 Economy mode

# 2.3 Loading washware

# Dishware basket for dinner or soup plates (28148)

Capacity: 18 dinner or 12 soup plates ø 240 mm.

See Fig. 8 Dishware basket



Fig. 8 Dishware basket

# Glassware basket for glasses and mugs (28149)

Capacity: 25 glasses/mugs ø 90 mm.

See Fig. 9 Glassware basket



Fig. 9 Glassware basket

# 3 Daily cleaning

- 1 Push the ON/OFF button to empty the Lean Wash Center® D2 Base
- 2 Take out the tank grid (A) and remove the filter (B).

See Fig. 10 Remove the tank grid and filter

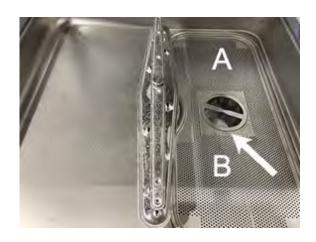


Fig. 10 Remove the tank grid and filter

3 **If option without drain pump:** remove the overflow pipe.

See Fig. 11 Remove the overflow pipe



#### **CAUTION**

Be careful when removing the overflow pipe.
The water in the tank could be hot.

**If option drain pump** there is no overflow pipe.



Fig. 11 Remove the overflow pipe

4 When the tank is empty, take out the filter at the bottom of the tank

See Fig. 12 Remove filter

If option drain pump, the filter looks differently.

See Fig. 13 Filter when option drain pump



Fig. 12 Remove filter



Fig. 13 Filter when option drain pump

- 5 Clean and flush the filters carefully.
- 6 Put the filters back again.
- 7 Undo the nut and remove the lower wash and rinse arms.

See Fig. 14 Lower wash and rinse arms

Clean and flush carefully.

Put the arms back again.



Fig. 14 Lower wash and rinse arms

8 Undo the nut and remove the upper wash and rinse arms.

See Fig. 15 Upper wash and rinse arms

Clean and flush carefully.

Put the arms back again.



Fig. 15 Upper wash and rinse arms

- 9 Lean Wash Center® D2 Base is now ready for next day.
- 10 Leave the hood open to let air circulate.



#### **NOTE**

Do not leave Lean Wash Center® D2 Base switched on if it is not used for some time or if the operator is not able to monitor it directly.



#### **NOTE**

If Lean Wash Center® D2 Base is not going to be used for quite some time you have to empty the detergent and rinse aid dispensing device to avoid crystallizations and damages to the pump. Remove the priming pipes from the detergent and rinse aid containers and soak them in a container of clean water. Run some wash cycles and empty the machine completely. To finish switch off the main off/on switch and shut off the water inlet tap.

# 4 Error icons and troubleshooting

# 4.1 Error icons in the display

ERROR ICONS	MEANING	SOLUTION
	Failed filling wash/ rinse tank charging time exceeded.	Pressing start resets the time hence re- peating the load.
		Check the mains water inlet.
		Check that the over- flow pipe is in place (for machines without drain pump).
		If the problem persists after switching off and on again, call for technical assistance.
<u> </u>	Anomaly or breakage of the temperature sensor in the wash- or rinse tank.	Switch off and on again. If the problem persists, call for technical assistance.

# 4.2 Troubleshooting

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
The mains light fails to switch on.	Mains are not connected.	Check the electric mains connection.
The wash cycle fails to start.	The machine has not yet been filled.  The machine has not reached the appropriate temperature yet.	Wait until the CONFIRM button has turned green.
Poor washing result.	The spray arms are clogged, or scale is obstructing them.  Not enough or unsuitable detergent or rinse aid.  Plates/glasses not positioned correctly.  Too low wash temperature.  The set cycle is unsuitable.	Dismantle and clean the spray arms.  Check the type and concentration of detergent/rinse aid.  Arrange the plates/glasses correctly.  Check the temperature — if too low, call for technical assistance.  Choose a longer program.
Insufficient rinsing.	The spray nozzles are clogged, or scale is obstructing them.	Dismantle and clean the spray nozzles.

The glasses and cut- lery are stained.	The rinse aid is unsuitable or is not dispensed correctly.  Water hardness above 4 °dH or high dissolved salt content.	Check the rinse aid container and if it is suitable for the type of mains water. If the problem persists, contact chemical supplier.
Water in the tank after draining.	The drain pipe is not positioned correctly or is partially obstructed.	Check if the pipe and the dishwasher drain are obstructed and if the drain is positioned too high up; maximum 800 mm.  Check the sieves in the machine.

# 5 Notes