



BATCH FREEZER

USER GUIDE

(OPERATING MANUAL)

for

MODEL: **SUDE 100**

Manual Number: V **000 - 17.04.2012**



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2.CONTACT DETAILS & HELP DESK

Smach Gıda Makine San.Tic.A.Ş **ADDRESS AND CONTACT DETAILS**

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E-Mail: info@smach.com.tr

When calling Smach have the following information ready:

1. Freezer Serial Number: Found on body panel

Write down the serial number in this box

2. This Model Number: MODEL **SUDE 100/500**

3. A brief description of the problem

3. CONGRATULATIONS AND THANK YOU!

Congratulations — and thank you for acquiring a Ice Cream Machine manufactured especially in Turkey by Smach Gıda Makine A.Ş.

If you encounter a problem with the Smach Ice Cream Machine please contact your local Service Technician

Please familiarize yourself with the machine by taking some time to study this User Guide. If you get to know this little ice-cream factory, it has the potential of making good profit.

Notice and no warrantee: These pages are provided as a service and informational purpose only, and on the assumption that the recipient of the machine and the operator of the machine is competent to perform the required tasks, including, but not limited to operation and/or repair of power equipment, for which the information is provided, and that person is knowledgeable and mindful of proper safety precautions. Neither Smach, nor any of their respective employees make any claims about the suitability or fitness of the information contained herein which is provided strictly on an "as-is" basis, without any express or implied warranty, guarantee, assurance of quality, conformity of specifications, reliability, functionality, or suitability. In no event shall Smach and/or its employees be held liable, whether in contract or tort, to any party for any direct, indirect, punitive, or consequential damages, including, but not limited to lost profits and business interruption, arising out of any errors, typographical or otherwise, inaccuracies, omissions, or delays arising out of or pertaining to the use, reliance on, or inability to use any type of information, part, or good, even if notified in advance about the possibility of such action. Information in this manual is subject to change without notice. All rights reserved.

4.ELECTRICAL CONNECTION NOTICE

1. Please make sure that the power supply conforms to the electrical data label (Rating Plate).
2. Check the data label (Rating Plate) for the required circuit breaker amperage. Only plug into an electrical wall socket that complies with the required amperage of the machine
3. Machine should be installed according to the local authority electrical code/regulations it is used in, as well as to other work health and safety requirements. If you are not sure, please contact your local authority for details.
4.  — this symbol indicates the presence of electric shock hazards. Inside the enclosures of the machine there are electrical shock hazards, therefore, **do not** remove any panels if you are not a qualified technician of an authorized service provider.
5. **WARNING:** To avoid risk of injury from electric shock, if you are not a qualified and duly authorised service technician, do not open the enclosure panels on the sides and back of the machine
6. The power supply must be properly grounded to prevent electrical shock. Check with a qualified installer for compliance.

5. WARNINGS & PRECAUTIONS

Keep your Freezer clean and tidy! When it needs repairing, work with an authorized Smach service agent.

The service technician or installer must be a suitably qualified and authorized person and must amongst other things ensure the following:

1. That the Freezer is properly grounded (earthed).
2. The fuse must be 220-240V, 50 Hz 16 Amp.
3. Never open the panels to reach inside the Freezer body. (Only by authorized technicians).
4. Do not clean the machine with high-pressure water.
5. Technical maintenance must be done by authorized technicians.
6. Only use food-grade lubricant when changing or replacing the O-rings on the pistons.

NOTICE: Smach Gıda Makine A.Ş will not take any responsibility if the users do not follow all the instructions as described in this User Guide.

6. PROPER USE OF THE BATCH FREEZER

When properly used and cared for the Machine will provide a consistent quality Ice Cream. Like all equipment used to manufacture food products it will require daily cleaning and regular maintenance. A specified amount of care and attention is required including but not limited to everything prescribed in this manual.

SAFETY NOTICES

Smach is concerned about the safety of the person/s using the machine. Therefore please take note and abide by amongst others, the following WARNINGS:

-  The weight of the Machine is no less than 105 kg. Moving it must only be done by persons who are trained and qualified to move a weight of at least 105 kg in the shape and size of the machine.
-  A potential risk exists if the User Guide instructions and other safety precautions are not strictly followed.
-  Do NOT allow untrained personnel to operate the Batch Freezer.
-  Do not use the Machine before studying this User Guide. Failure to follow this instruction may result in equipment damage, poor performance, health hazards or personal injury.
-  Do not allow anyone to attempt any repairs to the Machine unless the main power supply to it has been disconnected from the power supply point.
-  Do NOT insert or remove the beater from the freezing barrel while the Machine is connected to the power supply. First isolate the power supply.
-  Do NOT remove the hopper lid unless you are filling or re-filling the hopper with the mix
-  Do **NOT** switch ON the Machine at the wall socket switch when the following has not yet been done: (a) the beater is inserted properly (b) the barrel head is fitted correctly and the four nuts screwed on correctly and tightly, and (c) the barrel is flooded with Mix
-  When removing, replacing or cleaning the removable parts do so with caution because the beater blades have sharp edges that can easily cause injury.
-  Always follow local authority food safety and other health codes.
-  Always follow in-store operating and food hygiene safety and other health codes.

7. OPERATING PROCEDURE

1. Always wash your hands with soap and potable water before assembling the machine.
(Preferably use new paper towels to dry your hands)
2. Only use the removable parts after they have been washed sanitized and air-dried.
3. Fit the beater assembly only when the Machine is powered off.
4. Follow all the instructions of this manual and the operating procedures of the store owner, and at all times follow recognised in-store hygiene procedures, in particular those in respect of dairy products.
5. Repairs must be done by the persons who are authorized by Smach, if not, any product failure warrantee will become invalid and void.

8. CLEARANCE PARAMETERS

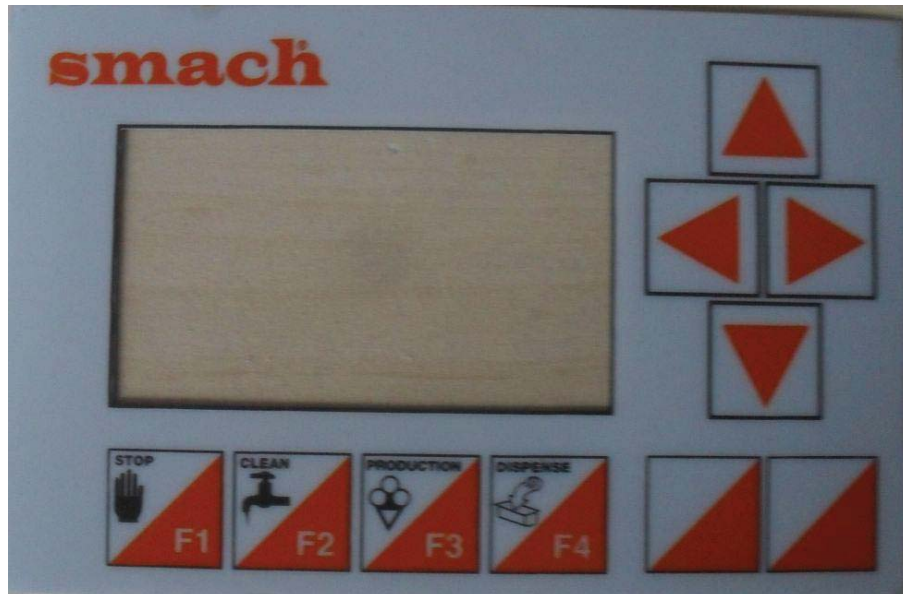
This Machine is air-cooled and must have a clearance of at least 50cm between the back side and any other object behind it. There must be a clearance of at least 50cm between the sides of the freezer and any adjacent object. If not, the freezer will not work properly.

Position the machine for easy accessibility for cleaning, servicing and maintenance. A clean environment is also essential for the proper performance of the freezer.

Attention: The freezer must not be exposed to direct sunlight. If it stands in direct sunlight the performance will decrease. As the air temperature increases the performance decreases. This is true for all refrigeration equipment.

Cool air is the best friend of the machine! It just hates HOT air !!!!

9. CONTROL BUTTONS



Buttons:



1. **STOP:** When pressed machine stops, nothing works



2. **CLEAN:** When pressed only beater works, it rotates the water and clean the cylinder

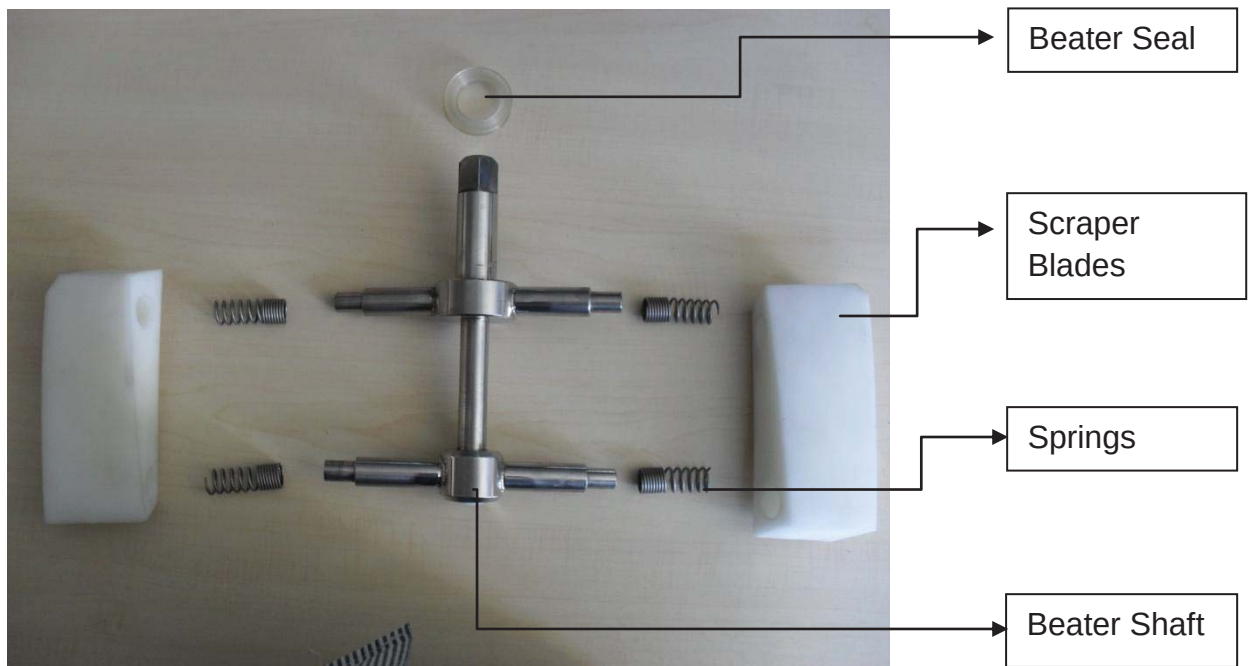


3. **PRODUCTION:** When pressed both beater and cooling start working, machine makes the ice cream according to desired consistency



4. **DISPENSE:** When pressed both beater and cooling are still working, beater speed increases to push the ice cream towards to cover. Use this button when the buzzer whistles (production is ready).

10. BEATER ASSEMBLY

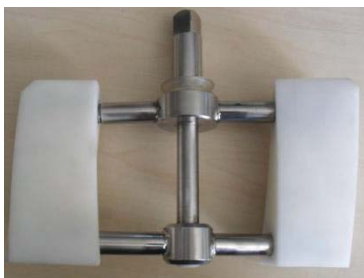


1.



Set the spring to the shaft and both push and rotate the spring to clockwise so it will go over the shaft easily

2.

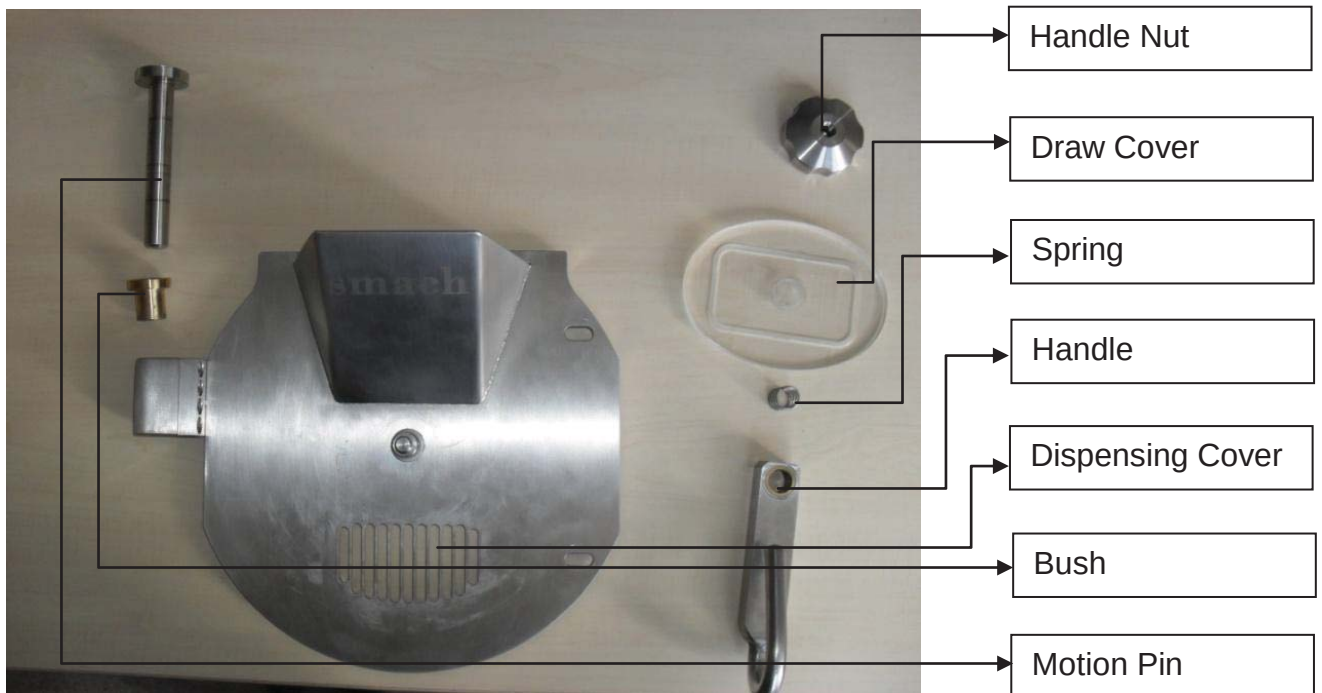


Fit the seal seals (lubricated of front and bach surfaces with food grade gress) and blades

Scraper blades have chamfers They MUST be at the seal side of shaft



11. DISPENSING COVER ASSEMBLY



Assemble the handle, draw cover (with its lubricated (food grade gress)o-ring) and spring as seen in the picture



Fit the assembled parts to the dispensing cover

3.



Tighten the handle with the nut

4.



Place the bush and motion pin as seen in the picture

12. BEATER-MACHINE ASSEMBLY

1.



Make the blades springy by two hands and press them the to place inside of the cylinder



13. DISPENSING COVER-MACHINE ASSEMBLY



Fit the cover o ring and place the dispensing cover to the machine by aligning motion pin to the machine bush

machine bush

cover o-ring

14. MAKING ICE CREAM

1.



Close the dispensing cover and tight it with the handle nuts

Also tight the handle nut

handle nut

hopper cover

2.



Remove the hopper cover and charge the ice cream mix the the hopper (**the bottom line of the hopper is the maximum mix capacity of cooling cylinder, so do not charge any mix above this line**)

hopper

3.



Close the hopper cover and set the desired time and pres "production" button

15. DISPENSING THE ICE CREAM



When the ice cream is ready, buzzer sounds. after buzzer sounds you can dispense the ice cream. press dispense button on the screen and then rotate the draw cover to counterclockwise to get out the ice cream

16. CLEANING and SANITIZING THE MACHINE



When you want to wash the machine, be sure everything is closed. then charge the water from the hopper and then pres clean button. after seconds open the draw cover and remove waste water . after that open the dispensing cover and clean and sanitize all the parts.

1. Firstly, set the Freezer to the “CLEAN” mode and wait 3 minutes.
2. Fill the hopper with cold water and allow the machine to run for 2-3 minutes before draining the water into the bucket.
3. Refill the hopper with warm water and Sanitizer as per the sanitizer manufacturer’s instructions.
4. Allow the machine to run for approximately 5 minutes before draining the liquid into the bucket.
5. Repeat step 4 until the water runs clear.
6. Set the control button to STOP mode and then switch off the power at the wall socket and unplug the power cable.
7. Undo and remove the screws of the Dispense cover.
8. Remove and disassemble the parts.
9. Wash and sanitize all parts as per your local requirements and allow the parts to air-dry. Do not use any chemicals other than the approved Sanitizer during the cleaning process.
10. Assemble all the parts, ensuring the O-rings and their grooves are properly lubricated.
11. Start by lubricating the harmonica-shaped Beater Shaft seal and slip it onto the beater shaft:
 - a. Place the beater into the barrel and turn it slowly until it locks into position.
 - b. Lubricate the smaller O-rings, slip them onto the piston and place the piston into the dispense head.
 - c. Lubricate the large O-ring and place into the back of the dispense head.
12. Place the Dispense cover back onto the machine and tighten the screws

For optimal machine-performance, the condenser must be cleaned from dust and dirt regularly by an authorized technician.

Notice: During cleaning and maintenance, follow all instructions given in this User Guide, otherwise, Smach Gıda Makine A.Ş. will not take any responsibility of unwanted results.

17. BACTERIA GROWTH TABLE:

<i>E. coli</i> multiplication under varying temperature conditions			
Time	Number of organisms at 5°C generation time = 3 hours	Number of organisms at 20°C generation time = 1 hours	Number of organisms at 37°C generation time = 20 min
0 time	1	1	1
1 hour	1	2	8
2 hours	1	4	64
3 hours	2	8	512
4 hours	2	16	4,096
5 hours	2	32	32,768
6 hours	4	64	262,144
7 hours	4	128	2,097,152
8 hours	4	256	17,000,000
9 hours	8	512	130,000,000
10 hours	8	1,024	1,100,000,000

18. POSSIBLE FAILURES AND SOLUTIONS

Attention: DO NOT ALLOW ANY TECHNICAL MAINTENANCE OR REPAIRS BEFORE DISCONNECTING THE FREEZER FROM THE POWER SUPPLY.

If the solutions listed below in the Trouble Shooting guide do not resolve your operational problems, call an authorized service agent for further assistance.

TROUBLESHOOTING GUIDE

	PROBLEM	CAUSE	SOLUTION
1	Machine does not run	No electricity//power	Check if plugged in and switch on at wall socket
		Control button mode is wrong	Set the control button "Production"
2	Compressor starts, then stops after a few seconds.	No air circulation	Check the clearances around the machine and ensure that it is at least 50cm.
3	Machine works, but no product comes from the Dispense Cover.	Over refrigeration	Use less time to run the production
		The beater is rotating counterclockwise	Call Smach
4	Machine runs, but Product is too soft	Low refrigeration	Use more time to run the production
5	Mix leaks from the Dispense Cover	Dispense Cover O-ring is missing	Drain the machine and add O-rings
		Dispense cover bolts are not tightened sufficiently or are tightened unevenly	Tighten Dispense cover screws evenly and properly
6	Buzzer does not sound	Buzzer is defective	Call Smach