



Operation Manual

DH-100 Waste Dehydrator



165 Independence Ct, Lancaster Pa 17601 (Ph:800-237-6628) ervice@somatcompany.com)



To better serve your needs in the future, please record your equipment's information below.

Model Number:	Serial number:
Service Company:	Service Phone Number:
Rep/ Dealer:	Rep/Dealer Phone number:
Somat Service Dept:	800-237-6628 x176
Somat Parts: Visit SomatCompany.com for an authorized parts distributor	

To expedite service or parts, please have the above information available before you call. The serial number of our machine is located inside of the main electrical control panel of your Somat equipment.

SOMAT COMPANY MANUFACTURES WARRANTY

SOMAT COMPANY warrants each new product manufactured by it to be free from defects in material and workmanship under normal use and service for a period of one (1) year from the date of initial startup or 18 months from date of shipment, whichever occurs first. "Normal use and service", with respect to Pulpers, Food Grinders, Dehydrators, Hydra-Extractors, Waste Handling and Processing Systems, shall mean the handling only of waste items of the types approved by SOMAT® therefore and within the **LIMITATIONS THEREIN** set forth, its obligation under this warranty being limited to repairing or replacing any part or parts thereof, free of charge **INCLUSIVE** of labor to remove and replace, f.o.b. factory from which shipped. This warranty shall not apply to any product or part which shall have been repaired or altered by any person not employed or retained by SOMAT®, so as in the judgment of SOMAT® to affect its operation and reliability, nor which has been installed, operated, or maintained contrary to SOMAT® OPERATION or PREVENTIVE MAINTENANCE INSTRUCTION MANUALS or to other written instructions or drawings approved by SOMAT®, nor which has been subject to misuse, negligence, or accident. This warranty shall not apply should the SOMAT® System be initially started up without a duly authorized SOMAT® representative present.

Except as herein expressly stated, no warranty, expressed, implied or by law, (including but not limited to any implied warranty of merchantability or fitness for a particular purpose), is made by SOMAT; and in any event SOMAT'S liability, whether in contract, tort, strict liability, or under any warranty, or otherwise, shall not exceed the purchase price received by it and shall in no event include any consequential, incidental, punitive or other special damages. No change in this warranty and limitation of liability and substitute therefore (whether incorporated in a purchase order or otherwise) shall be effective unless specifically set forth in a written instrument signed by an officer of SOMAT®.

STANDARD EQUIPMENT WARRANTY EXCEPTIONS

Warranty work is for defective parts or workmanship on Somat original equipment and does not cover wear items, cleaning, or problems resulting from improper use by the end user. Any cutting blade, rotating blade, impact bar, sizing ring, or any other cutting mechanism part damaged due to improper waste materials or any cutting mechanism part that has been worn due to misuse may not be covered under Somat warranty. Any motor, solenoid valve, electrical panel, junction box, or any electrical device in Somat equipment that has been damaged by water, improper installation, electrical short from surges or storm related strikes may not be covered under Somat warranty. Extractor screws and screens will not be warranted for wear. Defective or workmanship related extractor parts must be submitted to Somat for verification before credit will be issued. Line clogs that are resultant of improper feeding, clogs due to improper line installation, leaks in areas that Somat did not fabricate (i.e. table connection), leaks due to improper pipe bracing, tampering with system settings, jams due to non-waste stream items or jams due to dull/missing cutting mechanism parts, alterations to equipment without prior Somat approval or any other action that could cause harm to the equipment's performance may not be covered by Somat warranty.

ATTENTION

CUSTOMER ACTION REQUIRED

The DH-100 **REQUIRES** regular bearing maintenance. Failure to properly lubricate the bearings may result in premature failure and costly downtime.

FREEZING PREVENTION REQUIRED

The DH-100 **CAN NOT** be exposed to freezing temperatures. Failure to protect equipment from freezing will cause failure and costly downtime. Failure to prevent freezing will also void factory warranty.

Table of Contents:

DH-100

Introduction..... 2

- Safety Precautions and Warnings 6-8
- Equipment Description..... 9

Installation..... 10

- Unpacking..... 11
- Electrical Installation..... 12
 - Supplying the Som-A-Trol with Power*
 - Suggested NEMA Plugs*
- Quick Guide..... 13

Start-up..... 14

- Warranty Registration form..... 16

Operation..... 17

- Operating Instructions..... 18

Maintenance..... 19

- Periodic Maintenance & Inspection..... 20
- Greasing Bearings..... 21
- Cleaning Air Filter..... 22

Safety Precautions and Warnings



READ THE MANUAL COMPLETELY BEFORE ATTEMPTING TO OPERATE THE UNIT.

HIGH VOLTAGE! DO NOT PERFORM ANY REPAIRS TO MOTORS OR CONTROL SYSTEMS WITHOUT TURNING OFF THE MAIN POWER.

ALWAYS **TURN THE MAIN POWER OFF** AND LET ALL MOTORS COME TO A STANDSTILL BEFORE DOING ANY MAINTENANCE ADJUSTMENTS OR CLEANING OF THE UNIT.

BEFORE STARTING, BE SURE **ALL PERSONNEL ARE CLEAR** OF MOVING PARTS. KNOW LOCATION AND FUNCTIONS OF ALL **START/STOP BUTTONS** AND SAFETY SWITCHES.

DURING PERIODIC MAINTENANCE, **CHECK ALL SAFETY SWITCHES** TO BE SURE THEY ARE OPERATING PROPERLY.

DO NOT REMOVE OR ALTER GUARDS.

DO NOT REMOVE SAFETY LABELS. IF LABELS ARE MISSING OR DESTROYED, CONTACT FACTORY FOR REPLACEMENT.

DO NOT OBSTRUCT ELECTRICAL PANELS OR PUSH BUTTONS.

GOOD HOUSEKEEPING IS THE MOST IMPORTANT SAFETY PROCEDURE.

Safety Precautions and Warnings

This equipment has locations which are hazardous and cause severe injury or death if warnings are not followed. Always turn off power before reaching into any unit!
Maintenance to be performed by trained and authorized personnel.



This equipment has moveable lids protecting you from moving parts. Do not alter safety devices or guards. Do not reach into any part of the unit with the power turned on.



This equipment uses High Voltage! Only trained and authorized personnel should perform maintenance on the electrical components of this machine.



This equipment has moving parts that can crush and cut. Do not alter safety devices or guards. Do not reach into any part of the unit with the power turned on.

Caution: Damage will occur to this equipment if unsafe objects are fed into the machine(s). Keep these items out of the machine(s) to avoid component failure and unwanted downtime. When in doubt, keep it out of the machine(s)!



Always turn the power off before servicing the pulper!

GENERAL DESCRIPTION

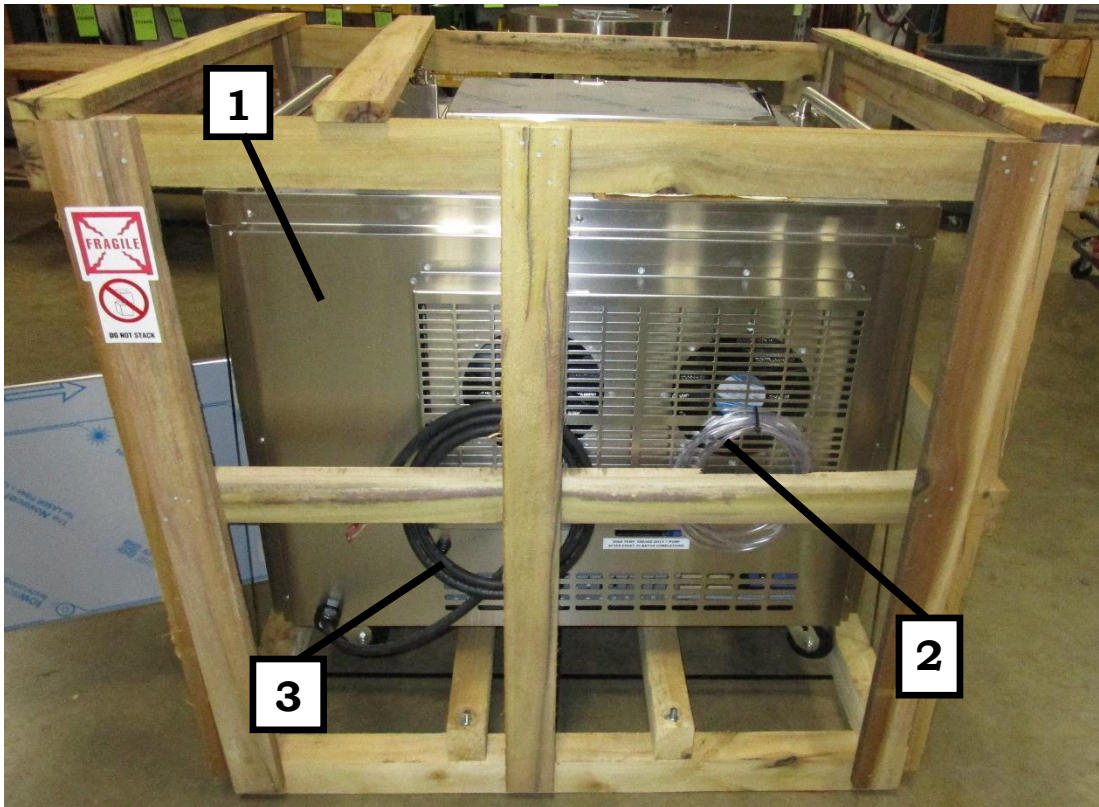
The DH-100 is an automated on-site compostable waste dehydration system that dehydrates compostable waste using an energy-efficient and automated control process. The system requires no enzyme, additives or fresh water during the entirety of the dehydration process. The system is equipped with water recycling technology that uses the condensate runoff to control the humidity in the processing chamber during the process. The system also recycles the heat energy reducing overall energy consumption. The dehydration processing time will vary depending on the waste input but will be no longer than 24 hours. The one-touch control is fully automatic, sensing the status and providing feedback and control of the operation without pre-setting the timer.

Installation

UNPACKING

The crate containing your SOMAT® DH-100 will contain the following items:

1. DH-100
2. Condensate Hose
3. 10' of 10/4 SO Power Cord





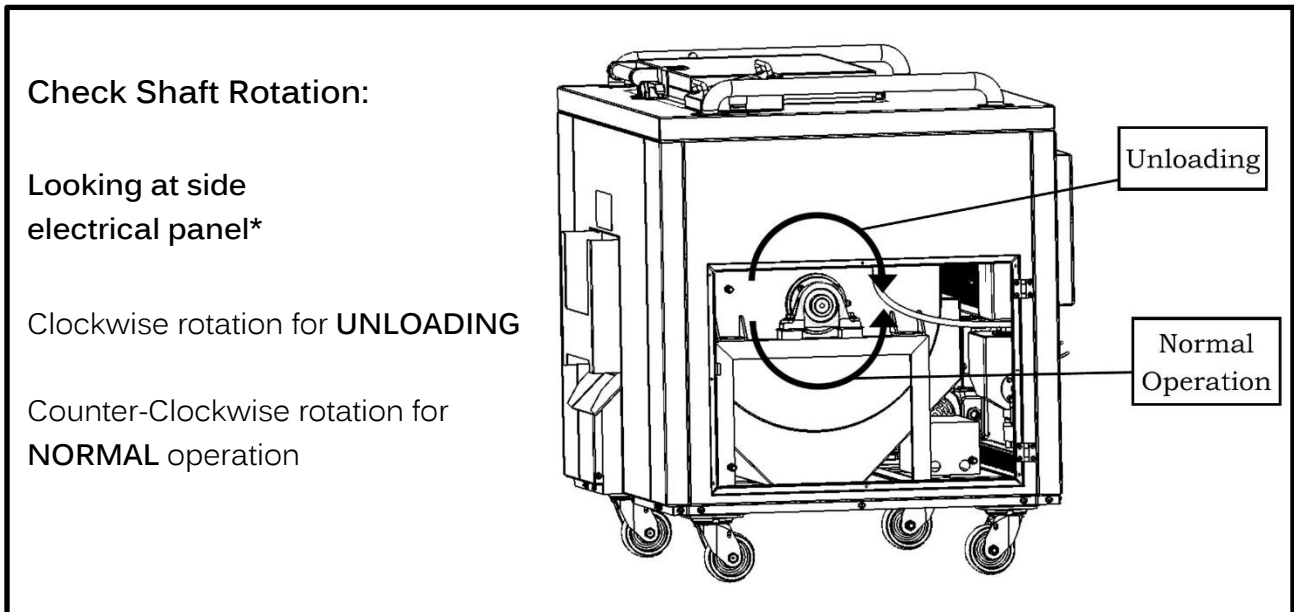
ELECTRICAL INSTALLATION

Supplying The Som-A-Trol® with Power:

The Som-A-Trol is the electrical control panel for this unit. Use the supplied power cord to attach your own 3 phase plug or hardware to a disconnect within sight of the unit. The plug and receptacle should be NEMA rated for the amp draw listed on the data plate. Improper connection of the equipment grounding conductor can result in a risk of electrical shock. An equipment grounding conductor must be run with the circuit conductors and connected to the dehydrator grounding terminal.

Suggested NEMA Plugs:

 NEMA L18-30	3ØY 120/208V AC	30 amps	4 Wires	4 Poles	NEMA
 NEMA L19-20	3ØY 277/480V AC	20 amps	4 Wires	4 Poles	NEMA



Check Drain Line

Make sure drain line is route to a floor drain and not kinked, damaged, or obstructed In any way.

Condensate is pumped out of the system, if line is blocked backups will occur.

Check Electrics

Use the touch screen for all controls. All set-points are preset at the factory. Call Somat® if these set-points need to be adjusted.

Check Clearance

Make sure unit is placed NO CLOSER than 12" from a wall. Proper air circulation is required.

Clean Air Filter and Gasket Area After Every Cycle

Start Up

After installation is complete, call Somat Service (800-237-6628 x176) to schedule your machines start up. Your equipment will be started up by a qualified Somat service representative. This startup will get your unit running in accordance with Somat guidelines. The equipment may be demonstrated to you by the service company or a Somat Representative.

**SOMAT REQUIRES 2 WEEKS ADVANCE NOTICE OF
START-UP FOR SCHEDULING PURPOSES.
THANK YOU IN ADVANCE FOR YOUR UNDERSTANDING.**

Equipment Startup: Authorization from Somat is required before responding to startup requests. Third party initiations will not be accepted. Authorization will be in the form of a "Pre-Startup Checklist" which is sent from Somat.

Startup Packages: Startup packages contain pertinent information for the technician to perform a proper startup. These packages contain electrical and mechanical prints as well as the Operator/Install manual. This information must stay with the equipment.

Installation Errors: If the equipment is not ready for startup due to installation errors or incomplete installation, the technician may have to schedule an additional startup visit at the owner's expense.

Somat equipment carries a 1-year warranty from date of startup. To accurately track this information, we ask that you fill out the Warranty Registration Sheet on the next page and email back to us. This will ensure your equipment is registered with Somat's Service Department and will allow Somat's Service Department to efficiently process any warranty claims



WARRANTY REGISTRATION FORM

Serial #:	Model #:
-----------	----------

Date of Start Up: ____ / ____ / ____

Customer Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Contact Name: _____

Contact Number: _____ Email: _____

Service Company: _____

City: _____ State: _____ Zip: _____

Please email to:

Somat Company Service Department

service@somatcompany.com

OR send with startup paperwork

Operation

OPERATING INSTRUCTIONS

After the unit has been connected to the proper power source, the proper rotation of the paddles have been verified and the drain line has been routed its desired drain location, you are ready to process.

1. Please use the touch screen for all operation commands described below.
2. Open the top lid, clean the screen filter and make sure the front discharge door is closed. Load the product to be processed into the dehydrator. The maximum fill level would be to the top of the paddles attached to the auger.
3. Close the top lid.
4. On the touch screen you will have access to the Home screen. Simply press the Start Batch button, confirm that you have cleaned the filter and the unit will run until the cycle is complete. The system status will be displayed on the bottom the screen.
5. Other miscellaneous monitoring information is displayed on this and the more information screen and is not necessary for daily operation. Information on these screens maybe helpful for trouble shooting in the event of a failure.
6. When the unit has completed the batch it will automatically enter a 60 minute cooling mode. The timer on the touch screen will begin to count down the time left for the cooling cycle.
7. When the cooling cycle is complete a suitable container should be placed under the discharge door on the front of the unit and the discharge door opened. Press the Start Discharge button to begin the discharge process. This process will shut off automatically. After discharge is complete, turn the power **OFF** and clean door area. Close the discharge door.
8. You are now ready to start a new batch. If any troubles occur during the processing of a batch, the unit will shut down and an alarm banner will be displayed on the touch screen indicating the issue and the probable cause. Please call the Somat Service Department at 800-237-6628 x 176 for assistance.

MAINTENANCE

PERIODIC MAINTENANCE AND INSPECTION

These procedures consist primarily of regularly scheduled cleaning and inspections. The time intervals cited are based on normal use of the SOMAT® unit; approximately **one cycle per day**, five days per week. Equipment operating more than this or in severe service will require more frequent inspection/maintenance.

Continued adherence to these inspections will provide adequate lead time when ordering spare parts, thereby minimizing unnecessary and costly equipment downtime.

PREVENTIVE MAINTENANCE INSPECTION SCHEDULE

DH-100	DAILY	WEEKLY	MONTHLY	QUARTERLY
1. GENERAL				
a. Check shell and chamber for wear.			X	
b. Check exterior finish for corrosion.			X	
2. Drive				
a. Check seals for leakage			X	
b. Check bearings for noise & wear.			X	
c. Check chain tension.			X	
d. Check auto-greaser capacity **Optional Accessory**				X
e. Check all door seals			X	X

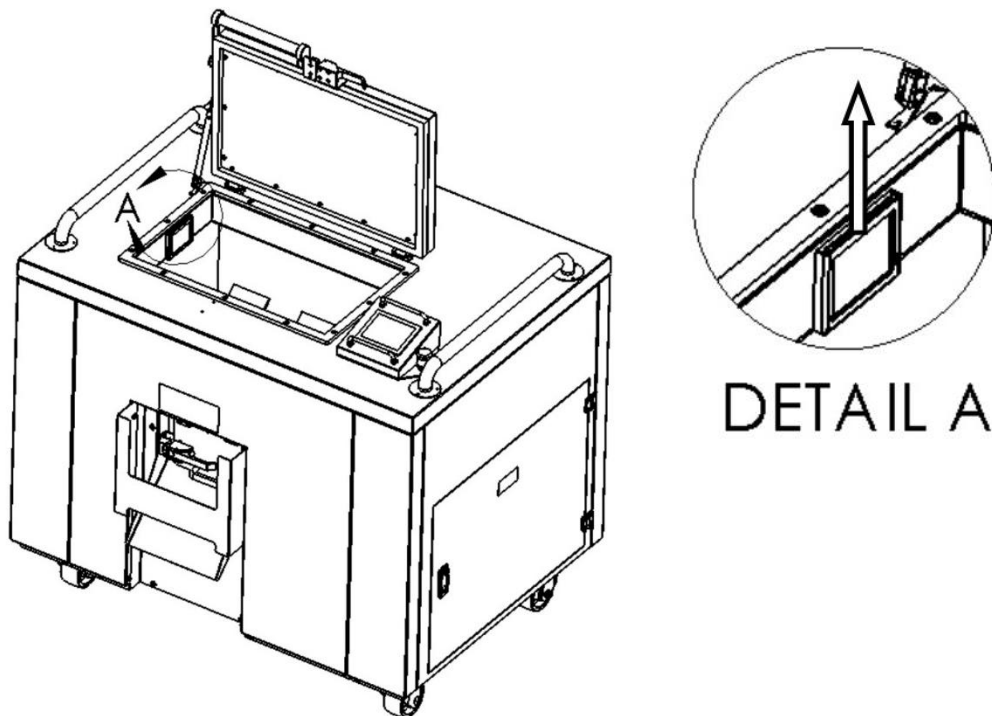
Greasing the Bearings



There are 4 manual grease fittings that must be maintained after every 10 cycles.

Models with the optional Automatic Greasing Option will have a cartridge system that maintains the proper grease levels. That cartridge should be replaced as needed.

CLEAN FILTER AFTER EVERY BATCH



STEPS TO CLEAN AIR FILTER BEFORE A NEW BATCH:

Wait until DH-100 has cooled down before attempting any service.

1. Open input door on DH-100 (Gas Spring will hold door open).
2. Locate the air filter (shown in "Detail A") on the left side of the machine under the input door.
3. Pull Air Filter straight up out of the housing where it is located under normal operation (shown in "Detail A").
4. Wash the filter with soap and water, being sure to remove all debris. Dry the filter before placing it back into the machine.
5. Place the filter back in the housing.
6. Start a normal batch operation and repeat cleaning process before each new batch to ensure proper filter operation.

TROUBLESHOOTING