

< spectra >

Specialty Equipment – Stone Melangers Models 65 and 100



Instruction Manual

Issue: v4 May 2014

GENERAL SAFETY PRECAUTIONS

1. As with any electrical product, do not allow the unit to be close to splashing water or wet work areas.
2. When necessary, always use a qualified electrician to make any electrical connections if need be. The machine must be earthed properly.
3. While under operation, the unit contains moving parts which can potentially injure your fingers or hands. Do not place your hand inside the drum while the unit is in operation. Always use the spatula provided along with the unit instead or stop them machine.
4. This is not a domestic appliance and always keep the unit away from Children at all times, and especially while under operation.
5. Keep the wrapping and packaging material away from children to avoid risk of suffocation and choking.
6. Dispose of the wrapping and packaging material in accordance with your local laws and keeping the safety of the environment in mind.
7. We never recommend leaving any machine running completely unattended at any time.
8. The Unit can tilt on the pivots, and always ensure that the LOCK is on to prevent tilting.
9. Always have two people lift the stone rollers to avoid injury to the heavy weights of the stone rollers.
10. Always ensure that while tilting the unit to drain out the contents of the melanger to use the LOCKS provided.
11. Always remove the stone rollers prior to tilting the machine.
12. Do not run the machine empty without any contents for more than a few minutes at a time in order to avoid wear and tear of the stone surfaces.

WHEN YOU UNPACK THE FIRST TIME

1. Position the unit on a sturdy surface and ensure that the machine is level and not subject to any shaking/movement due to differences in floor level.
2. If you notice any minor chips or imperfections at the edges of the two roller stones, that is normal and part of the manufacturing process. It will not affect the performance of the machine.
3. Run the machine with a few food material for about 10 minutes and throw away the contents. Rinse thoroughly with soap water, drain and rinse again, and the machine is ready to use.
4. Any damages or issues should be brought to the notice of the seller immediately and the delivering freight company notified. Please keep all packing materials intact for inspection.
5. Place the electrical speed controller at a level where the display on the controller is clearly seen and also place it in such a way that the switches are easily accessible to Turn-on or Turn-Off the machine.
6. Connect the Speed Controller and the Machine as per the Electrical Connections Setup described below in this manual.

TIPS ON USING THE STONE MELANGER

1. As far as possible, start the Melanger with only a little or no material, and progressively add more. This will avoid overloading the unit.
2. Do not make the contents too watery to avoid spilling and splashing
3. Do not add more material than the unit can handle. Use several smaller batches instead.

Important: Start machine with smaller quantities of materials and progressively add more.

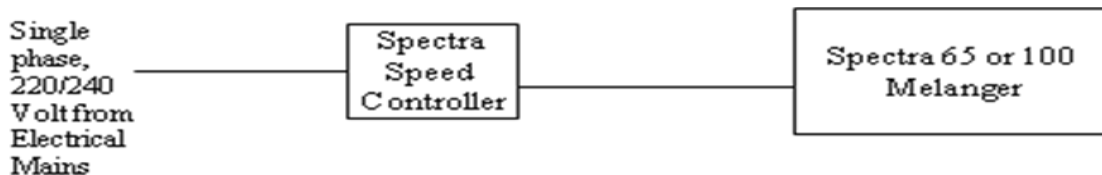
Important: Ensure that the direction of rotation of the machine is as per the sticker affixed on the machine.

MAINTENANCE

1. Maintaining your Stone MELANGER is easy and quick, when promptly cleaned after each use.
2. Simply pour about a few liters of warm water in the drum, close the lid and let the unit run for a few seconds. Remove the water and repeat steps until clean.
3. The drum and all other parts are NOT dish washer safe and NOT Oven safe, and should not be used with boiling hot water.
4. For the rollers, spring and the lid, remove and place under a tap and clean with a soft scrubber.
5. Clean the outer body with a soft sponge with water and mild detergent. Do not use any industrial cleaners or strong detergents.
6. When not in use, allow the drum to dry thoroughly before closing the lid and storing
7. Every 6 months, the Gear Box needs to have an oil change – just like you would do for an automobile. See the instructions provided separately on how to change the Gear Box lubricant.

Important: Remember to change Gear Box Oil about every 6 months

ELECTRICAL CONNECTIONS



1. Connect the power cord from the Speed controller to a socket providing 220-240 Volts single phase at 50-60 Hz. The Speed controller converts the single phase power to a 3-phase power to the machine. Connect the power plug of special design from the machine cord to the matching socket on the controller (marked as 3 phase).

<p>This plug connects to a single phase, 220 Volts supply. Please change this plug to one which suits your countries style.</p>	<p>Connect this socket to the matching plug from the machine.</p>

2. After making the connections as above, turn on the power to the Spectra Speed Controller by turning on the on/off MCB switch. The display shows "rd 0".
3. Press the green start button to start the machine. The display will show "SP xxx" where xxx is the motor rpm.

4. Turn the knob to adjust the speed of the motor as indicated by the speed display in RPM. The speed can be adjusted to any speed from zero to maximum.
5. To stop the melanger, turn down the knob to zero speed, or simply turn-off the green button.
6. Disconnect power by turning OFF the MCB switch.

OPERATING THE STONE SPECTRA MELANGER

1. Ensure that the drum unit is seated fully and correctly on the pedestal. If not, slightly twist and check if the drum unit settles properly into the base. (The drum can be removed from the machine if necessary but is not necessary unless the drum itself is being replaced. We do not suggest removing the drum often for cleaning or such other purposes.)
2. Two persons may place the roller stone assembly and close the arm, ensuring that the top portion properly seats into the arm and ensuring that the Roller lock and the Top lock is properly engaged.
3. Make the Electrical Connections as per the instructions in the Electrical Connections Section.
4. Switch on the machine and slowly add the material to be ground. Adjust the controller speed to the desired speed. We suggest running at between 800 and 1200 RPM as shown on the display panel for best efficiency, though you can go below or more than the range suggested.
5. After the material has been ground, switch off the machine, and then tilt the drum slowly and carefully to collect the ground material in a vessel. Before and after tilting ensure that the Tilt lock and Top lock are in proper position, both while in upright or tilted position, to prevent accidental tilting of the unit.



Roller lock



Top Lock



Tilt Lock



Melanger in tilted position with Tilt
Lock engaged

CHANGING THE GEAR BOX OIL

1. The gear box oil needs to be changed every 6 months of daily use.
2. After following the general safety precautions, disconnect the machine from all electrical connections.
3. Remove the heavy roller stones and set aside.
4. Remove the drum and set aside
5. Remove the two washers under the drum and on the spindle and set aside.



6. Unscrew the bolts holding the top red plastic cover.



7. Loosen the bolts on the bottom plastic tray as well, but need not remove completely.



8. Unscrew the bolts holding the Stainless steel drum coverings on all sides.



9. Remove the covers to expose the gear box as shown below.



10. Unscrew the four bolts on the gear box as shown below, and lift up the gear box spindle to access the gear oil tank. Note carefully the position of the top plate as it has to match back exactly. You may mark using a marker on both the gear box body and lid a marking to enable you to put it back together exactly in the same position.



11. Empty out the old oil in the gear box well, and replace with a fresh supply of 1 litre to 1.5 litres of Gear Oil. (You have to ask for WORK GEAR OIL of grade SAE 140 grade , ISO Viscosity grade 460, Viscosity of SUS 1935 to 2365). We suggest that you can use food industry preferred Nevastane EP 460 oil.
(http://www.lubadmin.com/upload/produit/MultiPDF/lang_1/374.pdf)
12. You can also buy similar grade oils from other brands. To give you an idea, the webpage below has a list of WORM GEAR OILS from different manufacturers.

http://www.perkinsproducts.com/PDFs/Guide_to_Interchangeable_Lubricants.pdf

13. Replace the Gear box lid/spindle attachment taking care to note the exact position of the markers as shown below. To be sure, you can use a permanent marker pen to note the positions before opening the gear box lid.



14. Reassemble the machine in the same order it was disassembled.