Groundnut Grading Table User Manual

The grading table is designed to grade shelled groundnuts based on size, shape and wholeness of the kernels. The table is slanted for proper grading action and can hold up to two grading screens at a time. This machine is wired for 208-230 volt 50-60hz 1 phase. You will need to attach a plug to match the receptacle used in your area.

Choosing the correct screens

1. Choose the correct screen sizes based on the type of nuts you wish to grade. Screens are sized in 64ths of an inch and can be either slotted or round holes. The following sizes are those recommended for use in the USA, but you may need to adjust these depending on the specific varieties you are testing.

Variety Type	Screen 1	Screen 2	Screen 3	Screen 4
Spanish or Valencia	19/64 slot	15/64 slot	16/64 round	None
Runner	21/64 slot	18/64 slot	16/64 slot	17/64 round
Virginia	20/64 slot	18/64 slot	15/64 slot	20/64 round

2. Once you have selected your screens, place the second largest (Screen 2 in above table) on the shaker table and tighten the clamp. The clamps have been pre-adjusted for the provided screens but can be adjusted if necessary by loosening the nut and screwing the bolt forward or backward. The clamp should be tight enough so that the screen does not move easily, but not so tight that it deforms the frame.

NOTE: The screens should be placed so that the center bar and slots are PERPENDICULAR to the machine (running the same direction as the motor shaft).





- 3. Place the largest screen size (Screen 1 in above table) on top of the screen already installed on the table and tighten the other clamp.
- 4. Place a container under the table to catch the smaller nuts that will fall through both screens.
- 5. Plug in the machine to the appropriate outlet.
- 6. Turn on the switch to start the screens shaking. Unless the unit has been well bolted down, it will be necessary to hold the unit from moving. Be careful to avoid the moving shaft and shaking platform.
- 7. Pour the nuts onto the table at the edge closest to the motor/shaft side.







- 8. Allow the shaker to run for approximately 15 seconds.
- 9. Turn off the machine.
- 10. Unfasten the clamps and remove the screens. Be careful not to spill any nuts that are on the screens.
- 11. Collect the container of nuts from below the table.
- 12. If you need to use additional screens, place the round screen on the shaker and clamp in place (Screen 3 in the table if you are using a total of three screens, or Screen 4 if you using a total of four). If you are using a total of four screens, place Screen 3 on the shaker and clamp in place.
- 13. Repeat Steps 4-11.



The grade is determined by the amount of nuts contained on each screen for the particular type of groundnut variety. The following are the grades used in the USA.

Spanish and Valencia

Nuts on the 19/64 slot screen are Jumbo size.

Nuts on the 15/64 slot screen as #1 size.

Nuts on the 16/64 round screen are considered splits

Nuts that fall through the 16 round screen are considered oil stock.

Runner

Nuts on the 21/64 slot screen are Jumbo size.

Nuts on the 18/64 slot screen are Medium size.

Nuts on the 16/64 slot screen are #1 size

Nuts on the 17/64 round screen are considered splits

Nuts that fall through the 16 round screen are considered oil stock.

Virginia

Nuts on the 20/64 slot screen are Extra Large size.

Nuts on the 18/64 slot screen are Medium size.

Nuts on the 15/64 slot screen are #1 size

Nuts on the 20/64 round screen are considered splits

Nuts that fall through the 16 round screen are considered oil stock.