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L3P Sonic Sifter
Frequently Asked Questions

For specific sieving procedures, please refer to Test Sieving: Principles and Procedures located in the User's Manual.

1. Can I use one sieve and fill the rest of the stack with spacers?

Yes, a single sieve can be used at a time. Be sure to add spacers at the top of the stack and place the sieve at the bottom. Please note when using precision mesh sieves, only one sieve may be used at a time while performing separations of 30 microns and finer.

2. When would I need a Horizontal Pulse Accessory (L3-N8)

While sifting media 45 microns and finer, it may be beneficial to incorporate the L3-N8 Horizontal Pulse Accessory. This accessory replaces one of the standard spacers and adds a horizontal tap from alternate sides of the sieve stack, aiding in elimination of particle agglomeration. It may also help with the effects of electrostatic charge.

3. How do I determine the best amplitude setting for my test?

Always start the test at zero amplitude. Slowly increase the amplitude until the heaviest particles are rolling on the sieve surface. Media particles should arc no higher than half the height of a standard sieve therefore never touching the sieve above it. When using precision mesh sieves, media particles should arc a maximum of ¼" above the wire mesh surface. Final test results may be adversely affected by not complying with this rule.

4. How long should I run my test?

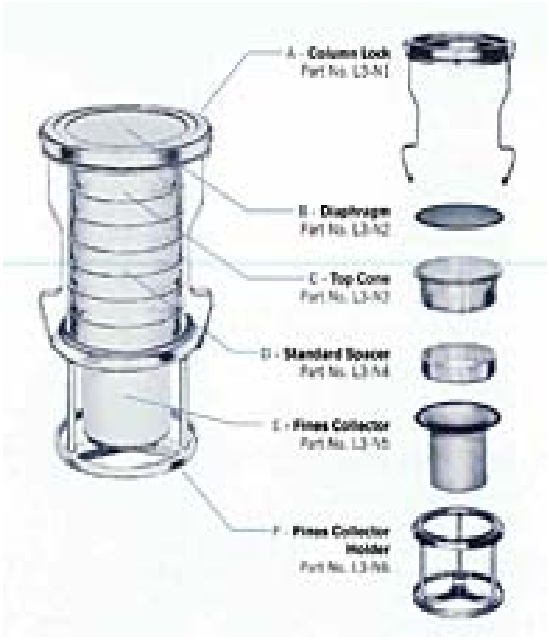
Generally, there are industry or "in-house" standards for sieving durations. For instructions on determining the optimum test time, please refer to the *Recommended Time Intervals* section in *Chapter 6: Performing the Sieve Analysis* in the Test Sieving: Principles and Procedures manual. Generally, with the L3P Sonic Sifter, the test is complete when media is no longer filtering into the next sieve. It is recommended to perform three tests for repeatability, noting the amplitude setting and test time for the running of future tests.

5. The media samples are not staying within the stack assembly. What is happening?

There are a few possible reasons for the sample escaping the stack assembly:
1. The stack may have been improperly assembled and inserted.
2. There may be holes or tears in the fines collector or diaphragm or cracks in the sieve frames.
3. The amplitude may be improperly set.

Start by examining the sieve stack assembly. Be sure the following steps have been executed:

- Hook Fines Collector to bottom of Fines Collector Holder.
- Assemble your sieve stack with up to six standard sieves or up to three precision mesh sieves. If fewer sieves are used, replace with Spacers.
- Add the Top Cone.
- Add the sample.
- Add the Diaphragm.
- Add the Column Lock and snap the arms down under the rim of the Fines Collector Holder.
- Insert the stack assembly into the test chamber until it hits the stop at the rear and the table switch is fully engaged.
- Release both arms on the column lock. A firm snapping sound will be heard.
- Your sieve stack should fit **very** securely in the test chamber.



If this has not solved the problem, visually inspect the Diaphragm and Fines Collector for holes or tears and each sieve frame for cracks. Examine the Column Lock springs. There should be six springs, all oriented vertically.

Lastly, setting the amplitude too high may also contribute to loss of the sample. Refer to **question three** for instructions on setting the amplitude.

6. My L3P Sonic Sifter does not turn on or will run for a short time, then stop? What is happening?

The stack assembly must be fully inserted into the test chamber and locked in place by releasing the Column Lock arms. Please refer to **question five** for instructions on properly assembling and inserting the sieve stack assembly. If the column lock is not released, the stack is able to vibrate out of position, releasing the table switch and turning the unit off. The table switch must remain fully engaged in order for the unit to function.

7. Can the L3P Sonic Sifter be operated with the door open?

Yes. However, it is not recommended the door be wide open as it may alter your test results. When using the L3-N8 Horizontal Pulse Accessory, however, it is necessary to leave the door open just enough to allow the cord to pass under the door.

8. Why does the L3P Sonic Sifter have a light inside?

The light allows the user the ability to set the proper amplitude. The sieves were designed with clear acrylic frames so sample media can be viewed while the test is running. The appropriate amplitude has been achieved when the largest particles of the sample are observed rolling on the sieve surface and none arc higher than half the height of the sieve frame. Particles that are arcing too high will be forced back into the sieve above, thereby altering the test results.

9. Does the L3P Sonic Sifter have to be calibrated?

No. The L3P Sonic Sifter does not come calibrated. If the user wishes to establish defined testing levels, it is recommended a decibel meter be purchased to aid in determining precise unit settings. The sonic wave pulse rate is basically controlled by the line voltage hertz. Amplitude merely controls the volume of the sound wave rather than the timing.

Test sieves, however, can be certified using Advantech's Centerline© Premium Sieve Certification. Utilizing our sophisticated image analyzer traceable to NIST, your sieve may be tested to any of the following:

- **ASTM E 11-04 Sieve Certification** can be provided for sieves being tested to the older ASTM E 11-04 Standard. Sieves measured to this standard will have 50 openings and 30 wires measured along the x and y axes.

- **ASTM E 11-09 Inspection Certification** can be provided for sieves being tested to the new 09 inspection standard. Sieves measured to this standard will have a percentage of openings and 10 wire dimension measured. This certificate provides a confidence level of 99% that the sieve is within the specifications.

- **ASTM E 11-09 Calibration Certification** can be provided for sieves being tested to the new 09 Calibration standard. Sieves measured to this standard will have at least twice as many apertures measured than inspection sieves, thereby providing an increased confidence level of 99.73%

- Please contact our Customer Service Team at 800.511.2097 or sales@advantechmfg.com for instructions on how to send sieves in for service.

10. What regular maintenance does the L3P Sonic Sifter require?

There is no routine maintenance required for the L3P Sonic Sifter. It is recommended the unit be kept clean by regularly wiping it down with a soft, damp cloth.

11. Does Advantech calibrate/certify test sieves for the L3P Sonic Sifter?

Yes. Test sieves can be certified using Advantech's Centerline© Premium Sieve Certification. Please see the answer to question nine for specifics on the varied levels of certification service Advantech offers. For a suggested re-certification schedule, please contact our Customer Service Team at 800.511.2097 or sales@advantechmfg.com.

12. What is the warranty on the L3P Sonic Sifter?

The L3P Sonic Sifter carries a one year limited warranty against defective material and workmanship.

13. Can I use 3" brass sieves in my L3P Sonic Sifter?

No. The L3P Sonic Sifter is designed only for use with 3" acrylic sieves and the diaphragm and fines collector. Metal 3" sieves are not compatible.

14. Does the L3-N8 Horizontal Pulse Accessory come in a 220 volt model?

No. However, a P6835 Step-Down Transformer may be purchased.
This will convert 220 volt input to a 110 volt output which will then be compatible with the L3-N8 Horizontal Pulse Accessory.

15. Does Advantech have a repair facility nearby?

Advantech is pleased to offer telephone repair support for the L3P Sonic Sifter. Contact a member of our Tech Support Team at 800.511.2097. Alternatively, machines may be sent in to our location in New Berlin, WI for extensive repair or refurbishing. Contact us for information on how to prepare your machine for receipt and service by our Repair Department.

15. My questions have still not been answered.

For further technical support, please contact our Tech Support Team at 800.511.2097 or at sales@advantechmfg.com. We'd be glad to assist.