DuraTap

Frequently Asked Questions

1. **How much of a sample should I start with?**

   Sample size depends on the weight or density of the material. The general rule of thumb is to start with 10 grams of material and one minute on the timer. Do three tests for repeatability. Product that goes through the sieve is the minus material and the product that sits on top of the sieve is called plus material.

2. **Is there any way to control static electricity?**

   The friction of the particles moving back and forth causes static. Try reducing the time, which will reduce the charge of the materials

3. **How many taps and oscillations per minute?**

   There are 278 oscillations and 150 taps per minute. This means that the particles are being presented that many times per minute to the openings of the sieve.

4. **Is there much maintenance on the DuraTap?**

   There are two grease fittings on the unit; they should be greased after 5 hours of operation. There is one on the top and one on the bottom of the unit. It is important to keep the unit clean. Dust particles can cause wear on the unit.

5. **Two plugs come with the unit, which should I use?**

   The cork plug should be used to produce a harder tap and the rubber should be used to produce a lighter tap.

6. **The mesh in my sieve has a tear in it; can you replace it for me?**

   Sieves are a disposable item; the sieve should be replaced when the mesh is torn.

7. **Does the DuraTap have to be calibrated yearly?**

   The DuraTap is not calibrated. You can verify the taps and oscillations to make sure the machine is operating correctly. Sieves can be calibrated; please see information on Advantech's Centerline© Measurement tests.

8. The stationary block (BA105) seems to be wearing, is this a problem?

The stationary block is the wear point on the unit. If this part becomes worn the oscillations may change and a slapping noise will occur. Unplug the unit from power source, turn the unit over you may see wear on the stationary block. Replace the stationary block before causing damage to DA201, Lower Carriage Plate.

9. What is the horsepower of the motor on the DuraTap?

60HZ ¼ horsepower 50HZ 1/3 horsepower
1725 RPM 1425 RPM

10. Is it easy to convert the 8" to a 12" with the conversion kit?

Yes, it involves moving the uprights (vertical rods), the yoke and the lower sieve carriage plates. We have instructions that can be faxed or emailed.

11. What kind of grease is used to lubricate the unit?

You may use Moly EP multi purpose grease

12. What direction does the drive shaft go?

It goes clockwise viewed from the top.

13. What size screen should I use for my sieve?

The customer must specify a target size. (Example: the material must pass thru a 90 mesh and be stopped by a 75 mesh) Your target range would be between 90 and 75. The material on top of the 75 would be plus and the material that falls through would be minus material.

14. What kind of stainless steel is used for sieves?

The mesh is 316 stainless and the frame is 304 stainless.

15. How should I clean the sieves?

We offer two types of brushes. The nylon brush is for the finer mesh and the brass brush is for the coarse mesh. When brushing the sieves always brush on the bottom only using a circular motion. If the top of the mesh is brushed the integrity of the mesh could be affected. The sieves should be washed in warm water and mild detergent. Let the sieves air-dry. Hot water could cause

expansion on the sieve. The sieves are not autoclavable. No temperatures over 250°.

16. Can the DuraTap be used for wet sieving?

The unit is used for dry particle separation only. If wet sieving is done it can be done by hand.

17. What is the warranty on the DuraTap?

One year.

Terms

Stationary Block (BA105): The brass rectangle block that is under the unit. This is the wear point.

Lower Carriage Plate (DA201): The large steel oscillating part under the unit that supports the uprights. It has additional holes to convert the unit from 8" to 12". An allen wrench is needed for conversions.

Timing Belt (DA219): It is a cogged belt (grooves in it). This is a non-slip belt that keeps the timing.

Timing Pulley (DA203): This is a large grooved metal pulley on the bottom of the unit that the belt runs on.

Hammer Arm (BA103): The hinged arm on top of the unit. It does the tapping.

Cam Gear (DA202): The fiber gear that drives the lift rod.

Yolk (BA102, BA120): The C shaped metal cover retainer.

Uprights (DA206): The uprights are the vertical rods, which the sieve support plate mounts to. **NOTE**: The sieve support plate is adjustable to accommodate the desired number of sieves.

Eccentric (DA211): These are the main drive bearings. One is located on the top of the drive shaft and the other is on the lower drive shaft held in place by a ¼" square key.

Hammer lift rod (DA205): This is the drive rod located under the hammer arm.

Troubleshooting

Problem	**Possible Cause**
Carton damaged when delivered	Please note with shipper so that a claim can be made if necessary. All units are in operating condition when they leave the factory.
Unit is plugged in and timer display shows a time but the unit won't operate.	Call for technical support
Unit hums and timer shows indicated set time.	The unit might be out of alignment, call for technical support.
Unit is plugged in and the timer is set to desired time but nothing happens.	Make sure unit is unplugged. Flip unit on the side. Make sure the timing pulley is turning freely. If this is not the case, there could be a bearing problem. It could also be motor damage. Call for technical support.
Hammer arm does not lift properly.	Unplug unit, check lift rod for wear at each end. The lift rod can be removed by lifting the hammer to the open position, grasping the rod and lifting straight up. To reinstall the lift rod; make sure it passes through all guides. If the rod is not put in straight it will not go all the way down.