INSTRUCTIONS

MODEL L3P

ATM CORPORATION
SONIC SIFTER

1. To prepare the sieve stack for a test, insert a fines collector into the holder. Fasten the round plate into the holder at the bottom by slipping the key hole over the fastener head.

2. Nest up any combination of sieves and spacers to produce a total height equal to six (6) standard sieves or three (3) deep sieves.

NOTE: For accurate analysis, it is recommended that particles from eight hundred forty (840) microns through one hundred eighty (180) microns be separated first, and from one hundred eighty (180) microns through thirty-eight (38) microns and smaller sizes be done separately. This is to reduce unnecessary dusting.

It is advisable to assemble all spacers at the top of the stack leaving the sieves at the bottom closest to the fines collector holder.

3. Set the cone upon the top sieve.

4. Place the powder sample on the top sieve. When sieving material larger than 37 microns, do not exceed 20 grams by weight or 7 cubic centimeters by volume. When sieving material smaller than 37 microns, do not exceed 10 grams by weight or 4 cubic centimeters by volume. In fact, a one gram sample may be the best "starting point" for some material.

5. Place the diaphragm (with ring protrusion down) on the cone.

6. Slip the column lock over the stack and press downward on the top ring to latch the bars in place.

7. Open the air column, and close the air valve.

8. Position the sieve stack assembly on the instrument table. Make sure that the stack is nestled snugly within the centering pins.

9. Close the air column: insert the thumb and forefinger into the openings between the lowest sieve or spacer and the column lock bars and push outward on both bars. The bars will release, producing a spring loaded ring seal to the air column drive chamber.

10. Close the door. Loosen the stop pin lock screw and set the timer indicator to the number of minutes required. Lock adjustable stop pin adjacent to the clockwise side of the indicator pointer. The timer is now set for a repeatable time cycle. Push the Timer Start button on the timer dial to start sieving interval.

11. While observing the sample material on the top sieve, turn the amplitude control clockwise until the largest particle of the sample appears to roll about the surface of the sieve.

12. The mechanical pulse action is used only in those cases where the analyzer notices that either "blinding" or particle agglomeration is occurring.

13. After the sieving interval is completed, open the door, lock the stack and remove it from the test chamber.

14. Open the sifter sieve stack. The diaphragm is the first surface to be cleaned for analysis, the cone next, followed by each sieve in turn, and the fines collector last.

NOTE: Fines collector and diaphragm should be kept at room temperature in a dark place out of direct sunlight until cleaned.