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## TURBO AIR CLASSIFIER FOR CLASSIFICATION DOWN TO 1 MICRON

The Turbo Classifiers are based on the fact that particle trajectory in a centrifugal field differs by particle size, and therefore allows for particle classification down to 0.5 micron. Some of the advantages of the Turbo Classifier are: It offers a very high degree of accuracy and can handle large volumes of material. Simple to operate, with microprocessor controlled operation.

The photo at right is a standard Turbo air classifier. Below the air classifier, is a schematic of an operating Turbo Air Classifier, illustrating the path a powder feed takes through the machine. Coarse particles are acted upon by centrifugal force, pulling them outward, while finer particles are acted upon by the drag force (or resistance of air), allowing them to migrate towards the center of the machine. The unique design of the rotor and classification chamber take maximum advantage of these effects, making cuts in the appropriate place to effect fine classification. Coarse particles discharge on the periphery of the machine, while fine particles are directed towards the bottom casing for fines discharge.

The classification particle size cut may be changed by adjusting the rotor speed and adjusting the air flow, all accomplished by simple command entering on the microprocessor keypad on the machine (or remote control panel for large machines). Since coarse particles are rapidly discharged, fine particles and mid size particles are reclassified by auxiliary blades, achieving a high efficiency in classification.

Below the schematic, is a photo of the Lab Size Turbo Classifier, Model 15MS, with the dimensions beneath the photo.

The Model 15 is capable of classification down to 0.5 microns with coarse classification up to 100 microns. The feed rate is up to 22 pounds per hour. Motor HP ranges from 3-5 HP. The lab unit weighs only 400 lbs. Compressed air of 20 CFM @ 70 psi is required for operation of the lab unit.

Other size Turbo Classifiers are available, with capacities up to 16.5 tons per hour.

