



AIR CLASSIFICATION

- Excellent alternative to sieving in the fine size range, with much higher throughput
- Effective at removing precise amounts from either end of the particle size distribution
- Capable of sharp particle size cuts as fine as 1 micron
- Ideal for fine powders of ceramics, abrasives, glass, minerals, polymers
- Low maintenance and easy to clean
- 3 sizes ranging from lab to production scale
- Feasibility testing offered
- Operates under negative pressure, allowing for good containment of fine powders and a cleaner processing area

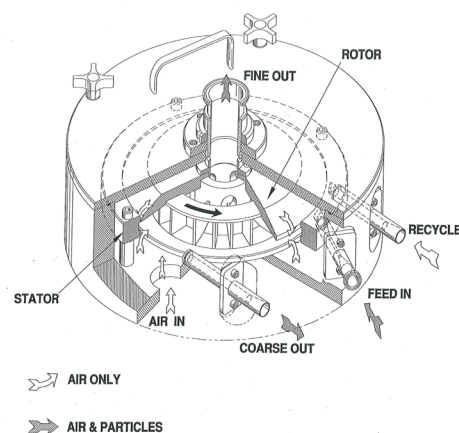
TOLL MANUFACTURING & EQUIPMENT SALES

The AVEKA Cottage Grove Centrifugal Air Classifier is designed to separate fine particles in the less than 75 μm range. This is achieved by utilizing the opposed forces of centrifugal force and aerodynamic drag to sort the particles by mass. This results in a coarse particle fraction and a fine particle fraction. The Classifier is able to achieve a precise, predictable, and extremely sharp separation at a high solids loading. The Model 100 Classifier system is ideal for the production of lab samples, product development and/ or small quantity production. The larger Model 250 and Model 500 offer precise classification at higher production rates.

OPERATING PRINCIPLE

The AVEKA Cottage Grove Classifier operates as follows:

- The space between the outer edge of the blades and periphery of the rotor forms the classification zone.
- The coarse particle fraction, which is rejected outward by the centrifugal blades, is conveyed out of the classifier through the coarse outlet and captured in a cyclone.
- The cyclone overflow is returned to the Classifier through the recycle port.
- The fine particle fraction leaves the Classifier through the central fines outlet with the primary air flow.



AVEKA Cottage Grove specializes in toll processing and custom equipment in the area of jet milling and air classification.

TOLLING GUIDELINES

Model No.	100	250
Minimum run quantity*	200 g	50 kg
Preferred run quantity*	500-5000 g	225-450+ kg
Typical throughput**	100 - 400 g/hr	45 - 180 kg/h
*For test runs on equipment installed at AVEKA Cottage Grove		
**Rates are dependent on materials and conditions		
Dust combustibility suppression system available		

EQUIPMENT FOR SALE SPECS

Model No.	100	250	500
PERFORMANCE RANGE*			
Cut Size (D50), Microns**	1-50	1-50	2-50
Sharpness (D25/D75)	.6 - .8	.6 - .8	.6 - .8
Feed Rate, kg/hr	To 15	To 225	To 900
OPERATING RANGE			
Rotor Speed RPM	700-7000	400-4500	360-3600
Primary Air Flow, SCFM	To 70	To 250	To 800
Max. Operation Vac, In. Hg	12	12	12
Rotor Drive, HP	1.5	3	15
Primary Flow Source, HP	7.5	25	75

*Depending on feed material characteristics, desired cut size, and solids loading

** At particle density of 2.6 gms. /cc.

