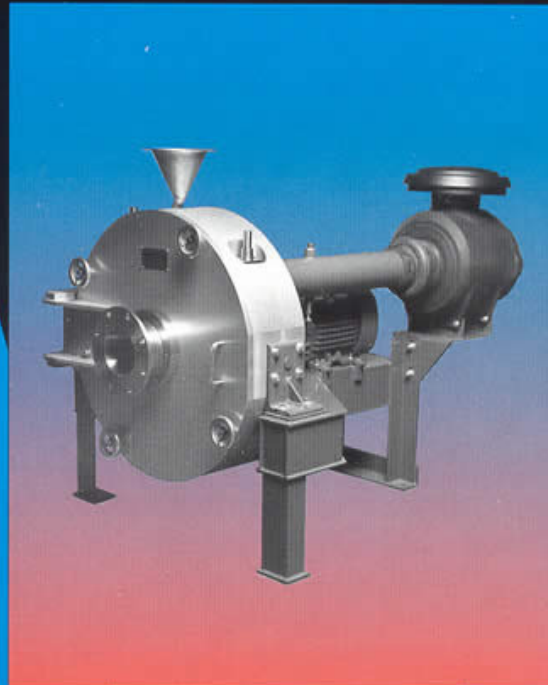


# HIGH EFFICIENCY CENTRIFUGAL AIR CLASSIFIERS



**PARTICLE SEPARATION  
AT ITS FINEST**

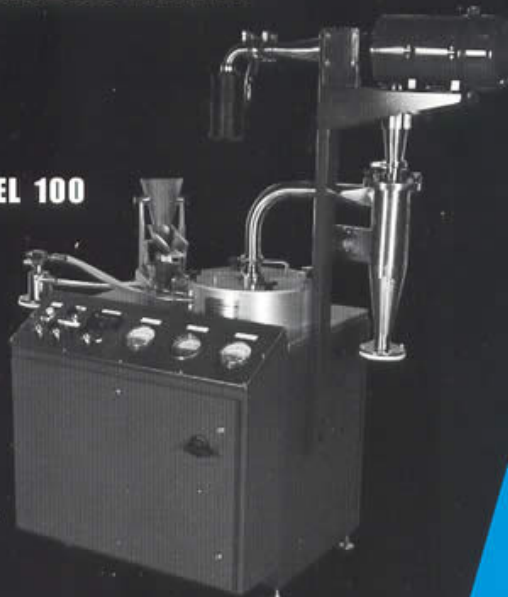
**MODEL 500**

**GCE Technologies, Inc.**

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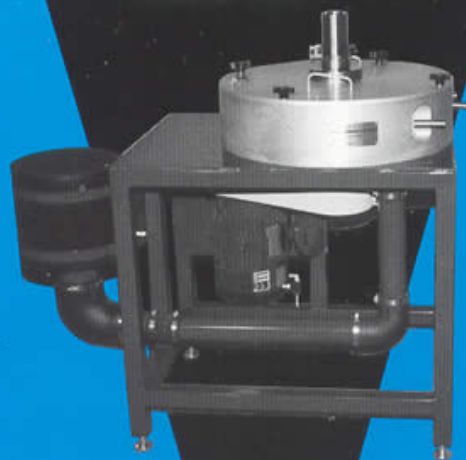
## FROM LAB TO PRODUCTION...

### MODEL 100



the OCE Centrifugal Air Classifier is designed to separate fine particles in the less than 75 $\mu$ m range utilizing the opposed forces of centrifugal and drag in close proximity to a high intensity dispersion mechanism. The classifier incorporates an optimized feed introduction which maximizes the effectiveness of the dispersion forces and minimizes distortion of the particle trajectories within the vortex field. This allows the classifier to achieve a precise, predictable, and extremely sharp separation at a high solids loading. The Model 100 Classifier system is the ideal tool for the production of lab size samples, product development and/or small quantity production. Both the Model 250 and 500 offer the same laboratory precision at production rates.

### MODEL 250



## EQUIPMENT SPECIFICATIONS

Model No.	100	250	500
<b>PERFORMANCE RANGE*</b>			
Cut Size ( $D_{50}$ ), Microns**	1.30	1.50	2.50
Sharpness ( $D_{25}/D_{75}$ )	.6-8	.6-8	.6-8
Feed Rate, lbs./hr.	to 30	to 500	to 2000

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

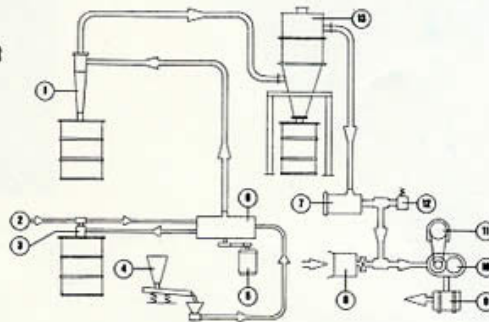
\*\* At particle density of 2.6 gms./cc.

### OPERATING RANGE

Rotor Speed rpm	700 - 7000	400 - 4000	360 - 3600
Primary Air Flow, scfm	to 70	to 200	to 650
Max. Operating Vac, In. Hg	10	10	12
Rotor Drive, HP	1.5	2.0	10
Primary Flow Source, HP	7.5	20	60
Compressed Air scfm @ 100 psig	6	8	40

Our Classifiers come complete with all the major components necessary for classification of dry powders in the less than 75 micron size range. A typical system includes the classifier assembly, flow source, coarse and fine fraction collectors, feed system, and controls. Component selection and design are application specific to meet your requirements.

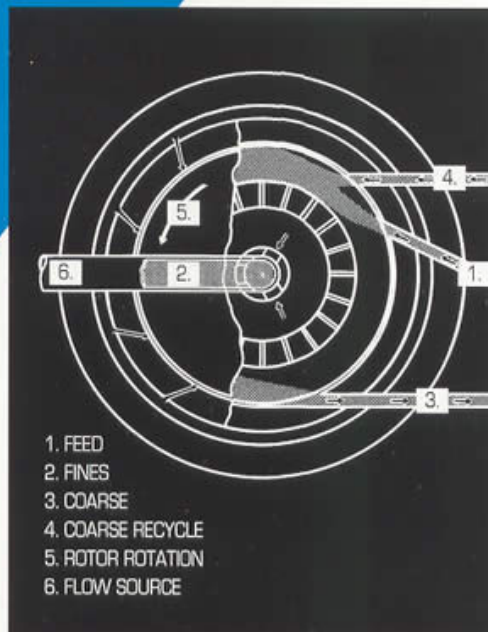
1. FINES CYCLONE COLLECTOR
2. COMPRESSED AIR
3. COARSE FRACTION COLLECTOR
4. FEEDER
5. DRIVE MOTOR
6. CLASSIFIER
7. SAFETY FILTER
8. INTAKE SILENCER
9. EXHAUST SILENCER
10. BLOWER
11. A/C MOTOR
12. VACUUM RELIEF
13. FINES COLLECTOR



## OPERATING PRINCIPLE

The flow pattern through the CCE Classifier is described as follows: Feed enters the system through the central tube, which is slightly angled to the radial to minimize the distance of coarse particle injection due to inertia. The space between the tip of the rotor and the stator, through which 95% of the air enters the classifier, forms a highly turbulent dispersion zone. Coarse product is conveyed out of the classifier through the coarse outlet using a jet pump mounted on a cyclone. The cyclone overflow is returned to the classifier through the recycle port. Fines leave the classifier through the central outlet with the primary air flow.

CCE Technologies maintains laboratories for customer testing, equipment evaluation and custom processing. Call us to discuss your specific application.



## CCE Technologies, Inc.

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Pulverization • Classification • Custom Processing • Particle Size Analysis • Complete Systems Engineering • Consulting • Field Service  
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