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## SEMI-FREE VORTEX TYPE CLASSIFIER - AC Series

# AERO FINE CLASSIFIER



Type AC-10



AC-20 Laboratory Unit

By introducing powder into vortex that gives centrifugal force, powder with light specific gravity can be precisely classified, which is usually difficult to be classified.

Strong dispersion mechanism enables sub-micron classification in high accuracy.

Only using compressed and suction air with no moving parts enables high level contamination free operation.

High regulating performance can effectively classify non-spherical particles and scaly shape particles.

Ceramic lining specifications enable high level anti-abrasion performance and contamination free operation.

Simple structure without powder stagnation enables easy disassembly and cleaning and is suited for manufacturing of many varieties and small amount products.

High disassembly and cleaning performance and accurate reproducibility is suited for the process of medicine, etc.

**Strong centrifugal force produced by high speed vortex promotes highly accurate classification from sub-micron to single micron particles.**

• **The twin air system achieves highly accurate classification.**

We adapted the twin air system which is the “Secondary air” added at the upper and lower of the classifying zone in addition to the “Main air” which is introduced from the guide vanes.

Regulating and accelerating vortex generated by the “Main air” using “Secondary air” achieves high precision classification even in the submicron range.

• **Effective results by the secondary air introduction**

**1) Adjustment of the cut point**

The cut point is adjusted by changing the ratio of the main air and secondary air. By maintaining the total air volume of the main air and secondary air, it is possible to change the cut point maintaining high precision classification.

**2) Dispersion of material powder**

The secondary air at the upper zone stimulates dispersion of the material powder sending them to the classification field in a nearly primary particle state.

**3) Reclassification**

The secondary air at the lower zone stimulates reclassification. Especially fine particles yield smaller than 3μm is remarkably improved.

■ Specifications

Models	Cut point (μm)	Feed rate (kg/h)	Suction air flow rate (m <sup>3</sup> /min)	Compressed air flow rate at 0.6MPa (m <sup>3</sup> /min)	Dimensions(D×H) (mm)	Weight (kg)
AC-10	0.3~10	0.1~1.0	0.5~1.0	~0.1	φ150×H200	10
AC-20	0.5~20	1~20	1.5~3.0	~0.5	φ300×H400	50
AC-40	1.0~30	4~80	8~12	~1.5	φ500×H800	200
AC-80	1.5~30	16~320	32~48	~8	φ1,000×H1,200	500

NOTE: The classifiers (Eddy classifier) that covers coarse cut points (20~200μm) are also available.

■ Structural cross section

