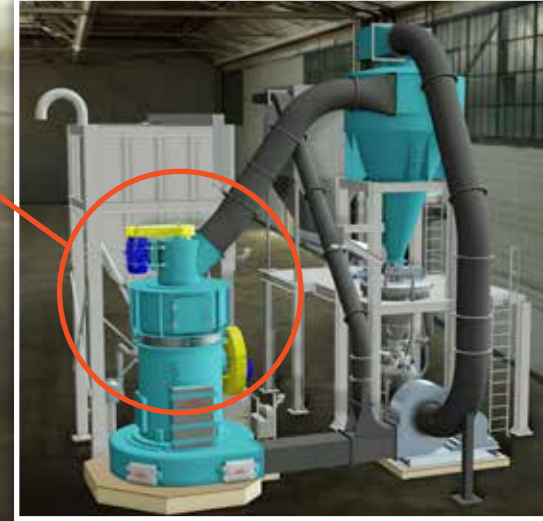


The Bradley Vertical Blade Classifier (VBC) is designed to separate extremely fine powders from any air-swept mill. Dynamic classifiers such as the VBC, provide wide flexibility of operation by allowing for instant adjustment of particle separation ranges.

While the VBC Classifier was developed for use in Bradley's own mill circuits, it is readily adaptable to any air-swept system. It has been successfully incorporated into many other pendulum mills, ball mills, table and roller mills, and air classifier systems.



## PRINCIPLE OF OPERATION

This dynamic classifying technology utilizes vertical oriented blades and a separator rotor to create a vortex, spinning the passing air and throwing coarse particles out to the sides of the mill, where they fall back into the grinding zone. Desired fine particles are carried out through the separator rotor, out of the separator and up to the cyclone or bag filter collector.

The product size is controlled by changing the rotor speed. This is done by an inverter drive and can be adjusted with the mill online. This type of separator allows maximum efficiency and stable product size.

## PERFORMANCE FEATURES

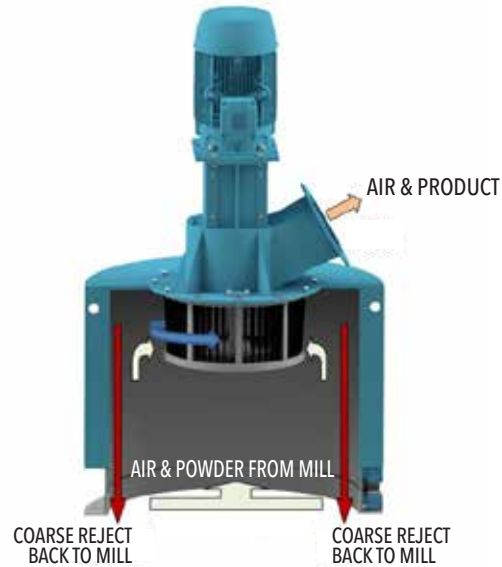
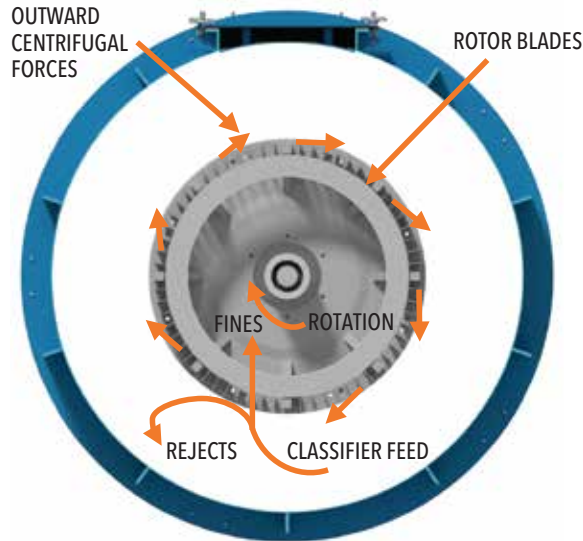
- PARTICLE TOP SIZE CUTS OF UP TO 250 MICRONS
- CLEAN CUTS WITH NO AIR PURGE OR COMPLEX LABYRINTHS
- SIZE CONTROL SIMPLY BY ADJUSTING ROTOR SPEED
- NO INTERNAL VANES OR DAMPERS
- SIMPLE MAINTENANCE – BLADE CHANGE ON-SITE WITH NO RE-BALANCING
- EFFICIENT STRIPPING OF FINES TO MAXIMIZE PERFORMANCE
- RELIABLE AND CONSISTENT OPERATION
- BELT DRIVE ALLOWS SELECTION OF MOTOR SPEED TO CLOSELY MATCH ACTUAL OPERATING CONDITIONS

# VBC SEPARATOR

BRADLEY SUPPORT ENSURES  
CONTINUOUS HIGH PERFORMANCE

- ✓ SERVICE BACK-UP
- ✓ FULL SPARES
- ✓ DIVORCED UNITS AVAILABLE

## PARTICLE FLOW IN A DYNAMIC CLASSIFIER



## DESIGN

### ROTOR

Replaceable vertical blades are made from laser cut wear-resistant alloy steel and can be replaced in-situ. Blades are supplied in matched sets to avoid re-balancing problems. The rotor can be easily removed for maintenance.

### BEARING CARTRIDGE

Lubrication lines drilled into the housing walls allow direct greasing of the bearings.



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# Bradley PULVERIZER

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