



## **BRS ENGINEERING BVS AIR CLASSIFIER**



## BVS Air Classifier

BVS air classifier technology is a widely used separation method, especially in applications where extracting very fine particles from a bulk material.

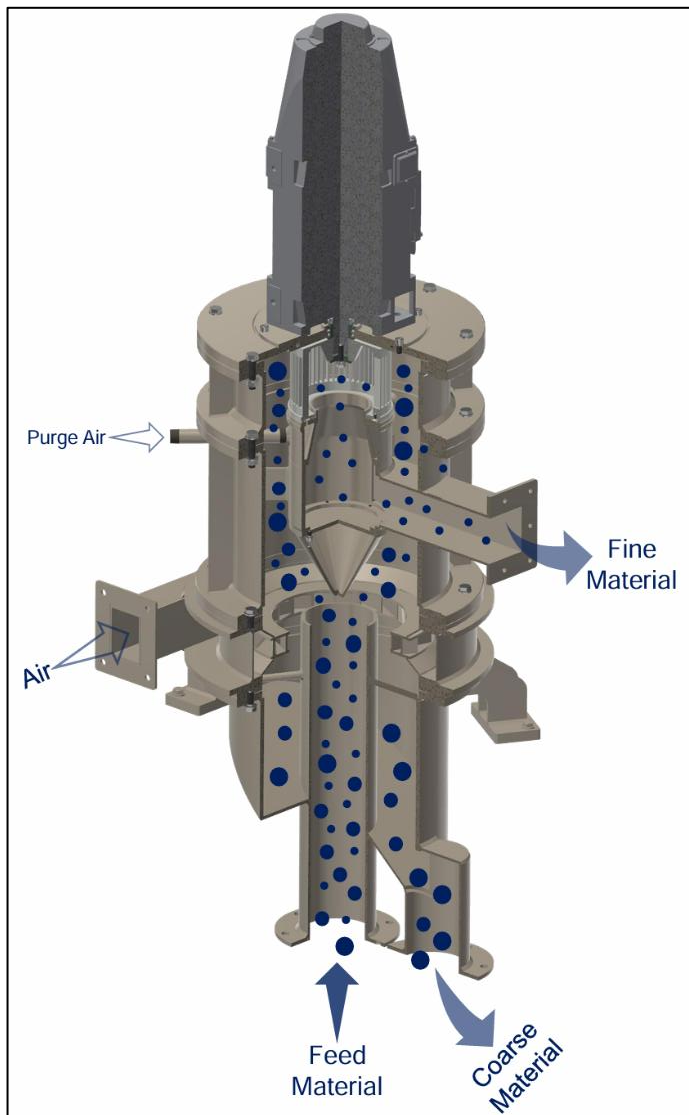
The BVS air classifier is a high-efficiency air-swept, centrifugal force classifier for separate dry materials between 10 to 100 mic. The design is customized to suit the process.

The BVS classifiers are designed to operate either as an independent, stand-alone system with feeder, fan and filter equipment or in closed circuit with in a conventional milling system.

The BVS classifier can be mounted in existing air systems with a minimum of modification and obtained accurate fineness over a wide range of feed variations.

### Features

- Controlled grain size obtaining d97 10-100 mic.
- High efficiency due to vertical arrangement of rotor, high top cut sharpness
- Occupy less area. Environmentally friendly with its closed system, dust-free and low noise level
- Ease of commissioning and operation
- Industrial, pilot and laboratory sizes are available
- Protection against wear with steel, stainless, PU or ceramic materials ( $\text{Al}_2\text{O}_3$ )
- Pressure less or pressure-shock proof to 8 bar.



### Working Principle

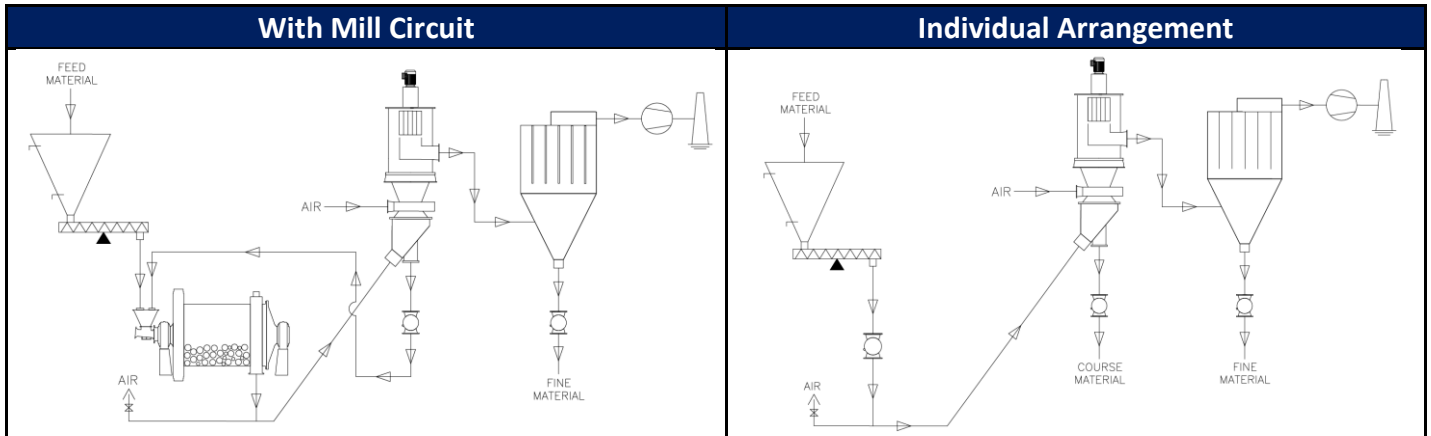
The feed material enters the classifier with the main airflow. This means that integrating the classifier into a system with direct pneumatic feed offers economic benefits. The classifying rotor is driven by either a belt or a direct drive with an electric motor. Its speed can be adjusted using a frequency converter, allowing the particle size to be easily controlled even during operation by altering the rotor speed. Fine particles, whose size is below the set cut point, are transported through the rotor blades along with the classifying air. They are then discharged via the fines outlet, entrained in the main airflow, and finally collected in a suitable bag filter. Coarse particles are rejected by the classifying rotor and discharged via the coarse material outlet. Before discharge, the coarse material is intensively rinsed in a spiral flow generated by secondary air. This removes any remaining fine particles, enhancing the precision of the cut and increasing the fine material yield.



Classifier Rotor

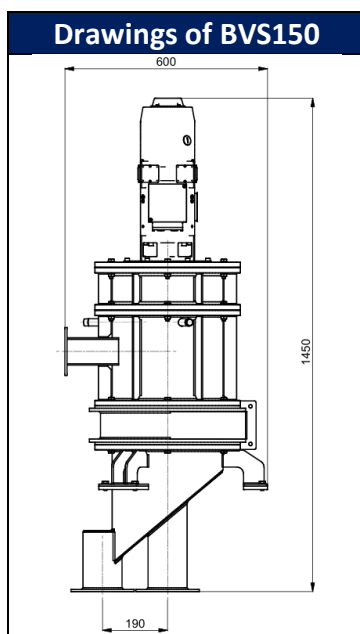


$\text{Al}_2\text{O}_3$  Coating

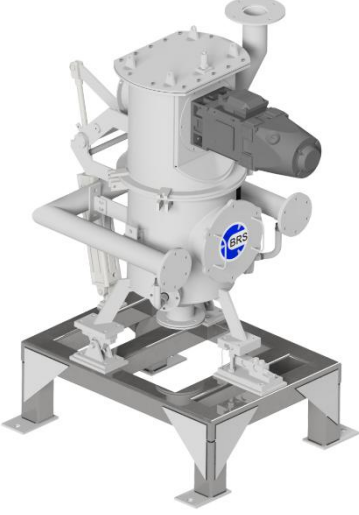


BVS	Type	BVS150	BVS200	BVS315	BVS500	BVS650
Scale-up factor	-	0,5	1	2.5	6.25	10
Drive	kW	4	5,5	11	22	30
Speed	rpm	8000	6000	3800	2400	1800
Air flow rate	m <sup>3</sup> /h	600	1200	3000	7500	12000
Fineness	d97 mic.	10-75	10-75	15-85	15-100	20-150
Capacity	d97 mic.					
10 mic.	t/h	0.06	0.12	0,3	0,75	1,2
20 mic.	t/h	0.12	0.25	0,62	1,5	2,5
45 mic.	t/h	0.2	0.4	1	2,5	4

\*Values are given for information. May vary depending on feeding products and materials.



The layout drawing is given for the BVS150 model.  
Customer's samples can be performed and tested in BVS150 classifier test unit.



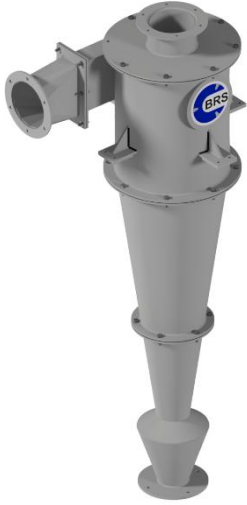
Fludized Bed Jet Mill



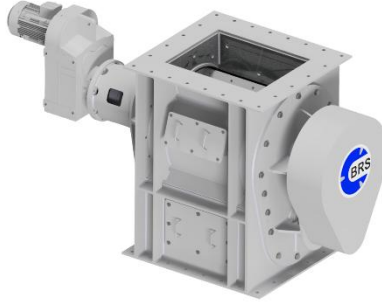
BVS Classifier



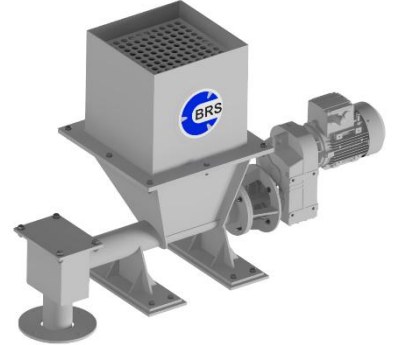
VRM Classifier



Cyclone



Self-Cleaning Rotary Valve



Feeding Unit

