BRS ENGINEERING
BRM-H CLASSIFIER MILL

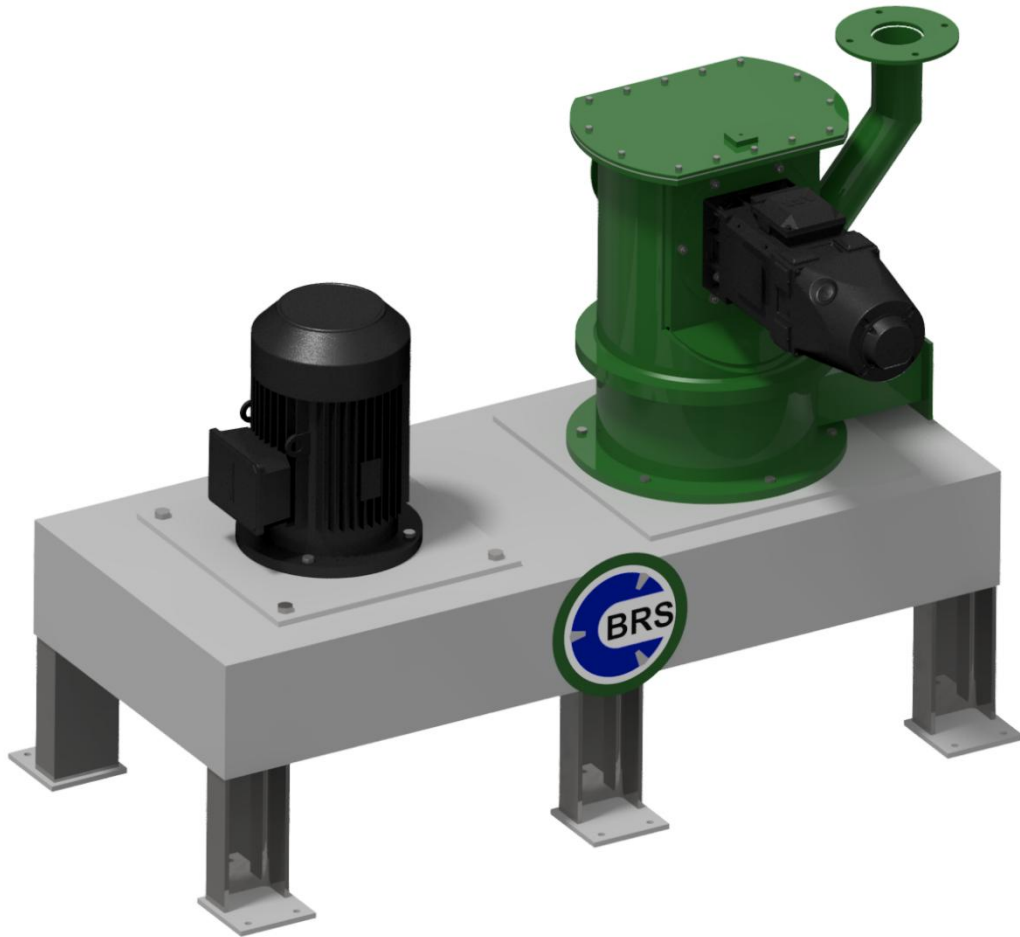**BRS ENGINEERING**
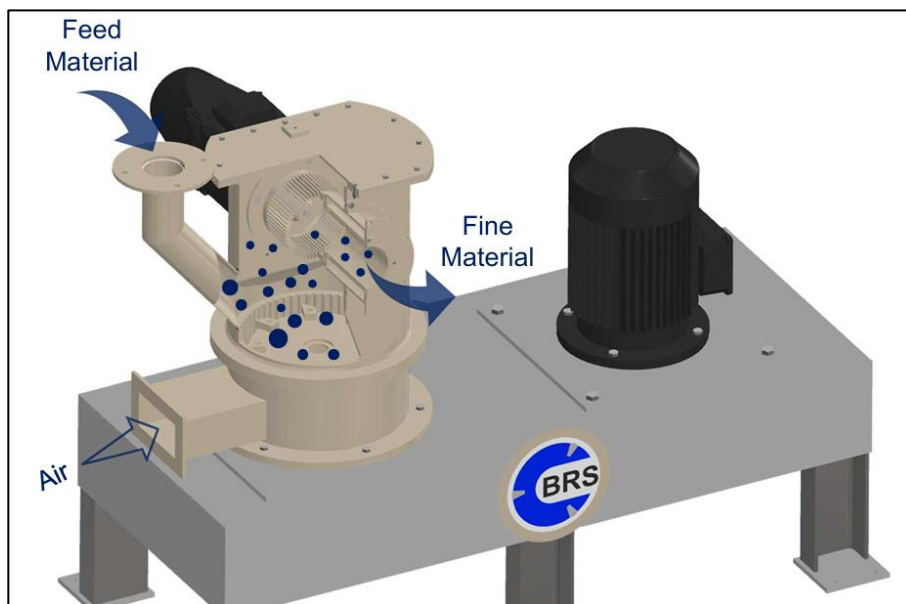
BRM-H Classifier Mill

The BRM-H Classifier mill is an innovative, compact system that integrates a horizontal grinding unit and horizontal classifier in a one single machine.

Capable of processing materials with an input particle size of up to 15 mm, it delivers a fine and consistent output ranging from 10 to 75 µm. The system is ideally suited for a wide range of products with soft materials. When equipped with appropriately wear-resistant components, it can also handle materials with hard and abrasive material.

Designed for convenience and efficiency, the machine features a pneumatic mechanism that allows the grinding and classification chamber to be opened easily, ensuring quick access for inspection, cleaning, and maintenance.
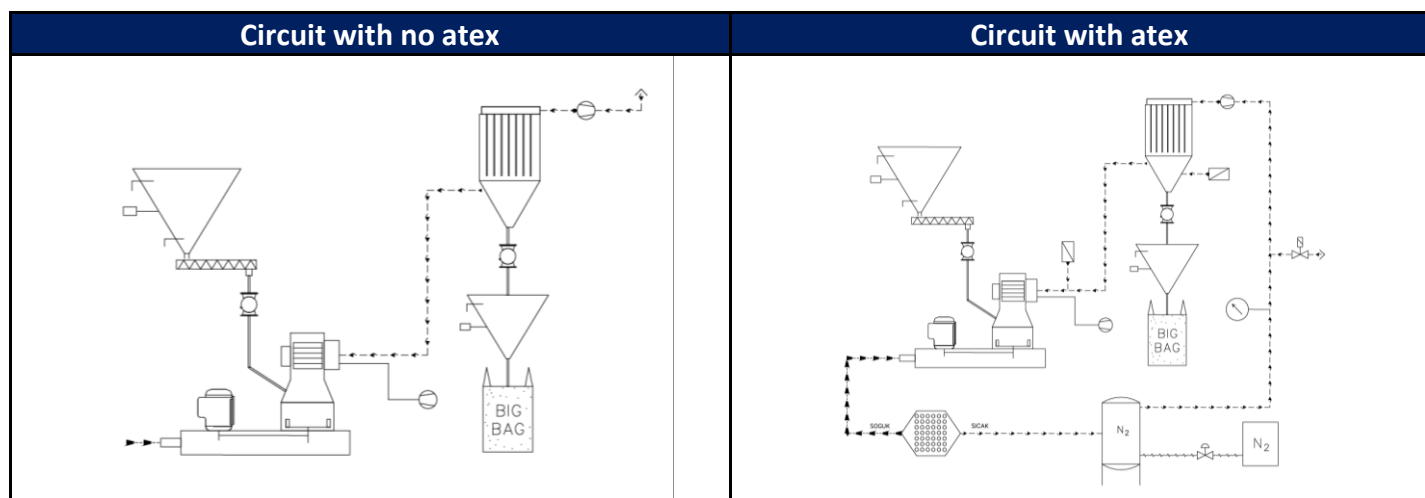
Features

- Energy efficiency
- Compact system, occupy less area
- Easy maintenance
- Easey accessible and cleaning
- Industrial, pilot and laboratory sizes are available
- Protection against wear with steel, stainless, PU or ceramic materials (Al_2O_3)

Working Principle

The feed material is introduced into the machine via a side-mounted feeding system or, alternatively, through an air suction, depending on the configuration. It enters the grinding chamber through feeding inlet, where it is immediately impacted by high-speed rotating grinding disc mounted on different type grinder (pins, half bar etc.). These grinders, working in conjunction with a toothed grinding track, reduce the material through a combination of impact, friction, and shearing forces. The ground particles are then transported by airflow into the integrated classifier. Here, a frequency-controlled classifier wheel separates fine particles from coarse ones based on the desired fineness. Only the particles that meet the required size—determined by the classifier wheel speed—are discharged via the fine's outlet. Oversized particles are rejected by the classifier and returned to the grinding chamber for further milling until the target fineness is achieved. Air is introduced through a lateral inlet, playing a triple role: cooling the system, transporting the particles, and aiding in classification.

Circuit with no atex	Circuit with atex

BRM-H Application Area			
Minerals	**Food**	**Chemicals**	**Others**
- Calcium carbonate - Diatomite - Graphite - Kaolin - Silica - Gypsum - Perlite - Talc - Wollastonite - Mica	- Colour malt - Gelatine - Oat hulls - Lactose - Lupines - Corn - Palm fibre - Rice - Soy - Wheat germs	- Aluminium hydroxide - Lead oxide - Calcium phosphate - Iron oxide - Sodium polyphosphate - Novolak - PE wax - Zinc oxide - Cobalt oxide	- Toners - Coating mat. - Paints - Dentals - Pharma - Cosmetics

BRM-H	Type	BRM-H 150	BRM-H 315	BRM-H 400	BRM-H 500	BRM-H 650
Rotor Drive	kW	11	37	55	90	132
Speed	rpm	8350	3300	2750	2200	1750
Air flow rate	m^3/h	650	1250	4750	7250	12500
Grinding disc	mm	275	625	750	1000	1250
Classifier Power	kW	4	11	15	22	30
Fineness	d97 mic.	10-75	10-75	10-75	10-75	10-100
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.

Fluidized Bed Jet Mill

BRM-H Classifier Mill

BRM-V Classifier Mill

BVS Classifier

Cyclones

Feeding Unit

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