## **NETZSCH**



## Vertical Bead Mill Colorado

For Fine Products

# Vertical Bead Mill Colorado for more efficient wet fine grinding of soft to

Get an advanced and energy efficient fine and ultrafine grinding solution. The vertical design allows a flexible operating conditions for low to high throughput and the available mill body liners make the mill suitable for all kinds of product.

### From soft Limestone to hardest basalt, all type of rocks can be treated.

Due to the unique patented screenless separation system at the mill outlet, smallest grinding media sizes can be used, still at highest throughput rates. This guarantees lowest specific energy consumptions and low media wear rates.

The Colorado comprise a support frame with gearbox and main drive motor, a milling chamber, shaft with grinding discs, equally spaced. The milling chamber is filled up to 85 % with grinding beads. Rotating discs agitate the media charge and grinding takes place between beads by attrition.

Product feed is via bottom inlet connection. When the flow passes upwards towards the outlet, the product particles are stressed at every disc volume. Before finally going towards the product outlet, the slurry must pass the patented separation system, where the grinding media is retained and sent back to the milling zone.

The final product then discharges by gravity to the outlet port at the top of the grinding chamber.

#### **Energy efficiency**

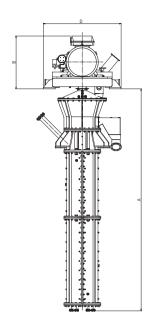
G-forces keep the media compact during operation and ensure high intensity stress as well as efficient comminution of the product particles.

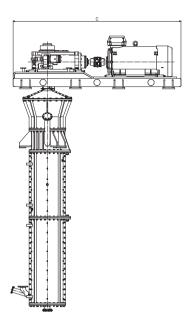
The Colorado comes in several mill sizes and can handle both, high and low flowrates.





## hard materials



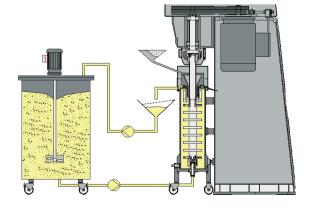


#### Technical Data

| Sizes        |         | 50        | 200       | 500       | 1000      | 2000      | 3000     | 4000     | 6000     |
|--------------|---------|-----------|-----------|-----------|-----------|-----------|----------|----------|----------|
| Batch sizes  | [1]     | 50        | 200       | 500       | 1000      | 2000      | 3000     | 4000     | 6000     |
| Tip speed    | [Upm] 3 | 00 - 1100 | 200 - 700 | 150 - 500 | 130 - 430 | 100 - 330 | 75 - 250 | 75 - 250 | 70 - 220 |
| Driven power | [kW]    | 37        | 115       | 250       | 355       | 550       | 800      | 1000     | 1500     |
| А            | [mm]    | 1530      | 2500      | 3000      | 4800      | 5600      | 5800     | 6700     | 7500     |
| В            | [mm]    | 1300      | 1480      | 2300      | 1200      | 1400      | 1600     | 1600     | 1800     |
| С            | [mm]    | 1755      | 1700      | 2700      | 3200      | 4000      | 5000     | 5000     | 5700     |
| D            | [mm]    | 800       | 1000      | 1500      | 1200      | 1500      | 1800     | 1800     | 2050     |

#### Benefits

- 1. Robust Design
- 2. Bearing System Integrated into Mill Base
- 3. Use of standard motor
- 4. Reduced Delivery Time and Competitive Pricing
- 5. Lower Civil and Installation Costs
- 6. Compact Plant Configuration
- Sharp and very fine Top Cut (down to d<sub>98</sub> < 2 μm</li>
   Low Specific Energy Consumption
- 9. Low Wear Rates and easy Maintenance
- 10. Simple Operation



## Business Unit Grinding & Dispersing – The World's Leading Grinding Technology

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