

ATLAS

A Company of NETZSCH Group

Finest in Processing

VERTICAL ROLLER MILL FOR FINE PRODUCTS



Vertical Roller Mills have been developed for more efficient fine grinding of soft to medium-hard materials





SCIROCCO Classifier with ATLAS Roller Mill

The ATLAS is a roller air-swept mill designed for continuous operation with minimum maintenance. The fundamental difference between the ATLAS and other table-roller mills is the bearing arrangement for the grinding table which is incorporated into the base of the mill. This enables an operation with a standard design gearbox instead of the typical gearboxes with integrated bearing section with long delivery times. The milling force is no longer transmitted to any foundation, but directly transferred to the roller arms making sure that civil work, erection and operation are easier to be handled and therefore much more inexpensive.

Fresh feed is introduced to the mill at a controlled rate through the upper feed chute. Milling takes place between the rollers and the table as the material moves outwards. The depth of the material bed on the grinding table is adjustable in order to control the retention time in the grinding zone. The ground material is entrained in the air stream which enters through tangential air ports in the base of the mill and is carried upwards to the classifier for the separation by particle size.

Product of the required particle size is carried through the classifier for collection in the downstream cyclone and/or filter whilst oversize material returns to the grinding zone for further size reduction with the incoming feed material.

A fan generates the airflow through the milling system and ensures dust free operation by keeping the plant under negative pressure.

Where appropriate, the incoming air stream can be heated for drying and grinding of the material at once.

In addition, a "coarse discharge screw" can be incorporated into the upper section of the mill in order to extract a proportion of the partially ground material and produce a secondary product of intermediate fineness.

The ATLAS roller mill by ECUTEC is the solution for the fine grinding and classification of a wide variety of materials including: Calcium Carbonate, Dolomite, Talc, Bentonite, Barites, Petroleum Coke, Calcium Oxide (Burnt Lime), Gypsum, etc.

Fine Classifier TC

The newly developed TC classifier and the **ATLAS** roller mill combines perfectly for the production of fine and medium fine powders. The innovative rotor design reduces energy consumption without losing its ability to produce sharp cut points. The TC is an air stream classifier which provides an excellent precision of cut at a very low pressure drop and is ideal for economical production of fine materials in the $\,{\rm d}_{98}\!<30\text{-}250\,\mu{\rm m}$ range.

Turbo Classifier SCIROCCO

Where ultra-fine products are required the **ATLAS** is combined with ECUTEC's well established **SCIROCCO** classifier and in this arrangement $d_{98} < 6 \,\mu m$ products are achievable.

OPERATING PRINCIPLE Air Inlet Feed Fines

BENEFITS

- 1. Robust Design
- 2. Bearing System Integrated into Mill Base
- 3. Closed Milling Force Circuit
- 4. Reduced Delivery Time and Competitive Pricing
- 5. Lower Civil and Installation Costs
- 6. Compact Plant Configuration
- 7. Sharp and very Fine Top Cut (down to $d_{98} < 6 \,\mu m$)
- 8. Low Specific Energy Consumption
- 9. Low Wear Rates and easy Maintenance
- 10. Simple Operation



ATLAS Roller Mill with Blower



ATLAS Roller Mill

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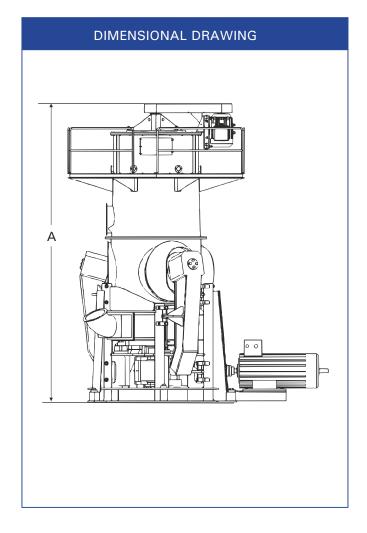
Technical Data ATLAS		600	1.000	1.200	1.400	1.600	1.800	2.000
Installed Power	[kW]	45	75 - 90	110 - 132	132 - 200	250 - 315	250 - 355	355 - 500
Diameter	[mm]	600	1.000	1.200	1.400	1.600	1.800	2.000
Heigth A	[mm]	2.100	3.000	5.650	4.750	6.725	7.300	9.500
Number of Rollers		3	3	3	3	3	3	3

Classifier SCIROCCO Type		100	300	500	700	900	1.300	1.500
Installed Power	[kW]	11	18,5	22	37	45	110	160
Rotor Speed	[rpm]	4.600	2.000	1.500	1.200	1.150	1.000	950
Nominal Airflow	[m³/h]	3.750	10.000	18.000	26.000	40.000	60.000	80.000

Sizes not related with mill sizes

Classifier BARAT Type		950	1.300	1.900	2.700	3.800	5.400	7.600
Installed Power	[kW]	11	18	30	55	90	132	200
Rotor Speed	[rpm]	670	480	340	238	170	120	85
Nominal Airflow	[m³/h]	25.000	40.000	60.000	80.000	120.000	180.000	260.000

All technical data are subject to changes





BARAT Classifier



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