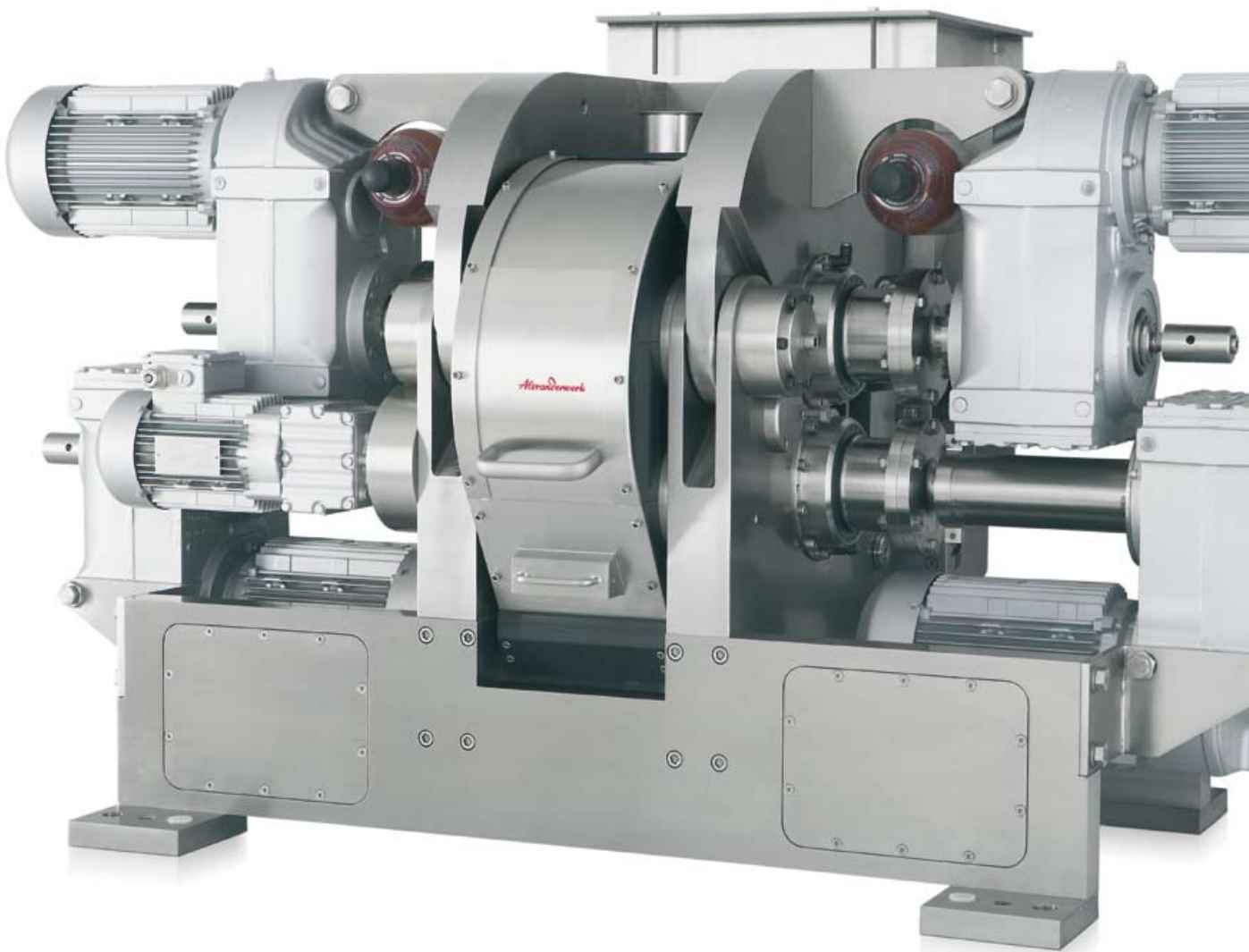


# Roller Compactors **PP 175**



## PP 175 Roller Compactor

The PP 175 from Alexanderwerk is the perfect roller compactor available for the economic compaction of raw materials, with a throughput of up to 600 kg/hr and more.

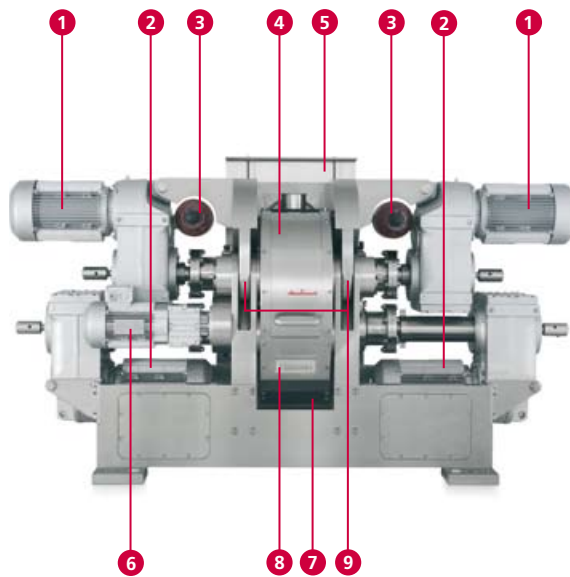
Alexanderwerk has been developing and producing roller compactors for the chemical and natural resources industries since the 1950s. The PP 175 from Alexanderwerk is a member of a completely new generation of high-performance roller compactors. The PP 175 from Alexanderwerk complements the series below the 250.

The machine's design and construction meets all the requirements of the chemical and natural resources industries:

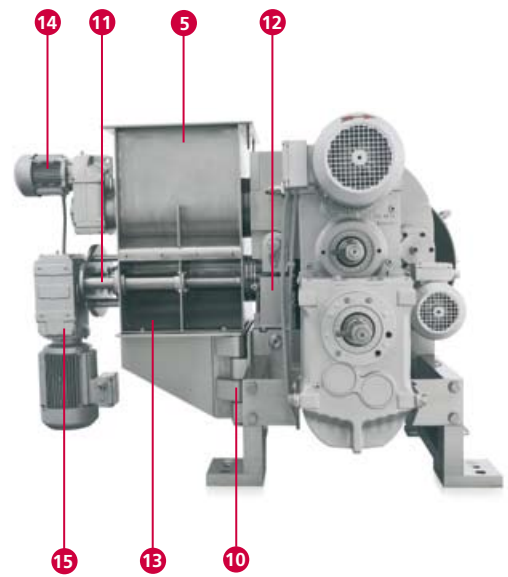
- Clamshell design, improved accessibility
- Extensive use of standard components for high machine availability
- Compact design
- Patented Combi-Vent-Feeder® System as standard



You do not buy a PP 175 from Alexanderwerk just for its beauty... but you could!



- 1 Drives for upper roller
- 2 Drives for lower roller
- 3 Accumulator for hydraulics
- 4 Inspection opening for compaction area
- 5 Feed hopper
- 6 Drive for flake crusher
- 7 Product outlet
- 8 Sampling



- 9 Knuckle for upper clamshell (e.g. roller exchange)
- 10 Hinge for feed hopper
- 11 Guide bars to pull off feeder screw
- 12 Hydraulic cylinder to control upper clamshell
- 13 Combi-Vent-Feeder®
- 14 Drive for stirring raw products
- 15 Drive for feed screw system

- Feed unit in vacuum design as standard
- Each roller is driven by two gear motors
- Various roller widths with adjusted number of screws (1 to 4 screws available)
- optional: Wash in Place (WIP)
- optional: all stainless steel construction
- optional: explosion-proof acc. to ATEX

## Granulating with roller compactors made by Alexanderwerk

### Compaction

The PP 175 adheres to its heritage of roller presses from Alexanderwerk: decades of experience, the latest control equipment refined with the patented Combi-Vent-Feeder® System.



Control equipment and two hydraulic cylinders ensure the roller gap remains constant and with this the quality of the flake.



Alexanderwerk has decades of experience in the design of roller presses, which can be seen in the PP-Types: all modules of the PP 175 can be accessed easily. The picture shows the retraction of the feeding screw (without special tools).



The compacting unit (left) and feeding unit (right) are connected to each other by hinges and are pivotable. They are screwed tightly together while the process runs.

**Constant roller gap:** the control equipment evens out physical fluctuations in the raw product.

**Vertical roller arrangement:** the product is fed independently of gravitational forces, so uncompacted side-seal-leakage is avoided.

**Combi-Vent-Feeder (I):** this kind of feeder design – patented by Alexanderwerk – enables air that is displaced from the material during compacting to escape freely. The process becomes smoother and the feed quantity of raw material is higher with no change in power.

**Combi-Vent-Feeder (II):** Undersize, oversize, fines (e.g. from slot losses) or additives can be continuously and uniformly re-circulated and blended into the process via the additional feed hopper chamber.

You want to know more about the technology of compacting with roller presses and feeding with the patented Combi-Vent-Feeder® System? Please ask for our brochure "Roller presses for the chemical industry".

### Control Equipment

The main units like hydraulics, vacuum, cooling, compressed air can be located in a separate housing.

### Granulating

Granules are characterised by defined particle sizes, i.e. the size of the particles varies between fixed lower and upper limits (undersize, oversize). After compression in the compaction unit, the compressed flakes are clearly larger than the upper tolerance of the finished product. It requires the defined size reduction in the granulation unit to produce the final material.

Owing to its modular design, the PP 175 can be combined with a fine rotor granulator from the RFG series made by Alexanderwerk, e.g. the RFG 250 D. Granulation can be designed as a single-stage or a multi-stage process as required. The fine rotor granulators of the RFG series can be configured accordingly.

Please ask for our fine rotor granulators brochure.



The final granulating step uses a fine rotor granulator from the RFG series (Picture shows the RFG 250 D).



The fine rotor granulators can be designed as single-stage or multi-stage units as required.

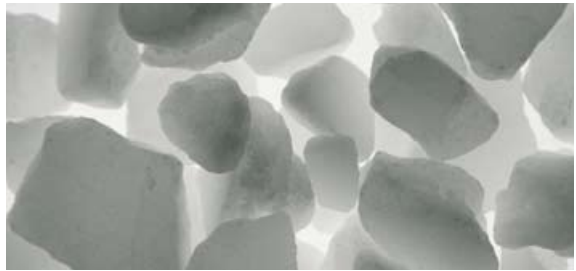
## Applications

Roller compactors manufactured by Alexanderwerk have been successfully used for years in the chemical and natural resources industries in the production of organic and anorganic raw materials such as:

- Textile dyes
- Battery substance
- Salt
- Silicid acid
- Animal feeds
- Cat litter
- Toner



Cat litter



Salt



Battery substance



Animal feeds



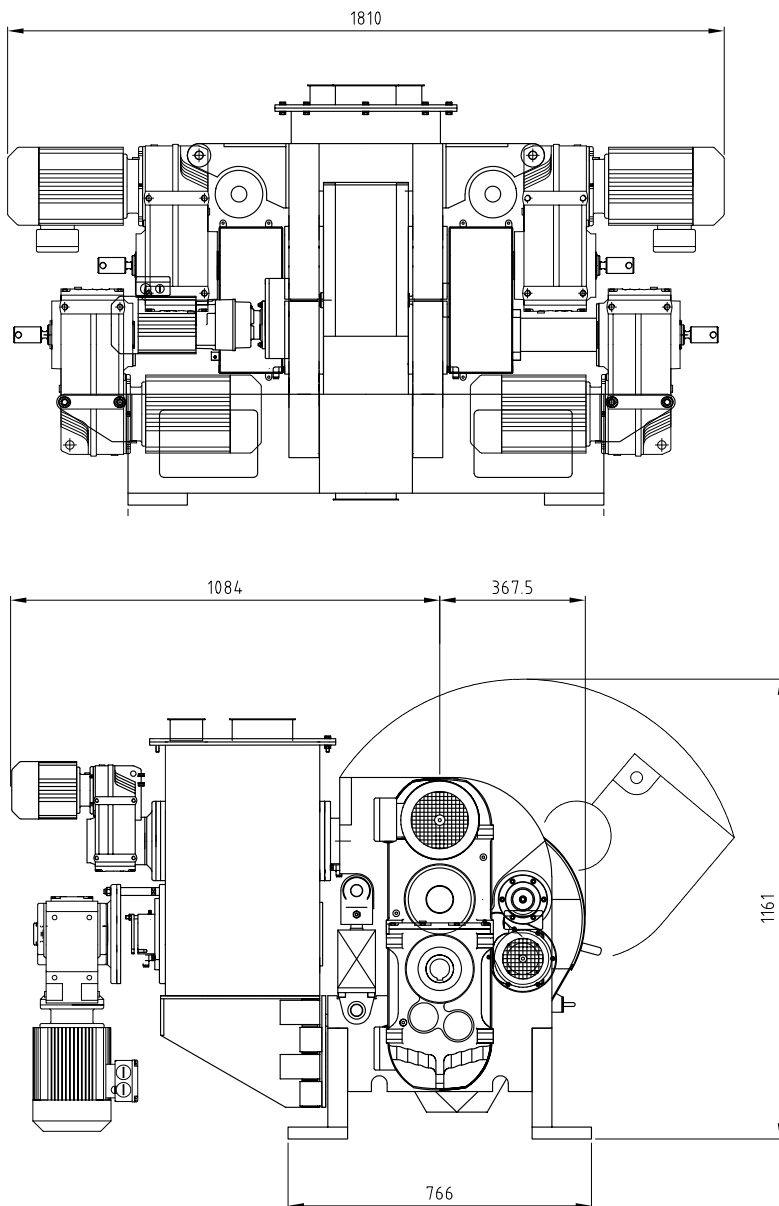
Silicid acid



Toner

## Technical Data

<b>Throughput continuous operation</b>	up to 600 kg/h (up to 2,400 kg/h with four screws)
<b>Granulate size</b>	variable
<b>Maximum compacting force</b>	25 kN/cm roller length
<b>Installed power</b>	approx. 49 kVA
<b>Weight</b>	approx. 1,500 kg (complete, without control unit)
<b>Metallic materials</b>	1.4571 (come into contact with product)
<b>Compacting rollers</b>	1.4122



CAD data show the PP175.