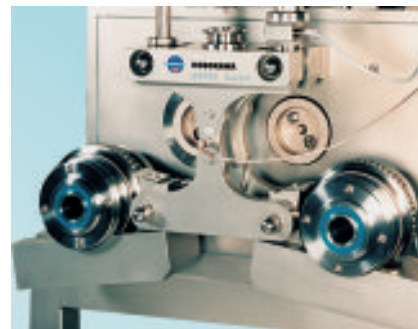
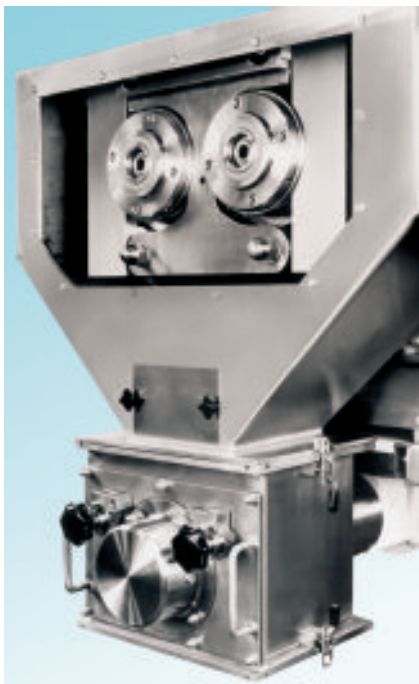


PHARMAPAKTOR®

Technology for Pharmaceutical Production



Model "L"

This design enables easy cleaning and inspection of the machine.

The compaction head is designed for easy removal of the rolls.

←
The Pharmapaktor and the Flake Crusher are designed for dust free processing. A gas tight design is also available upon request. A clear window enables visual confirmation of the process.

The feed screw and feed hopper assembly can easily be lifted and rotated without special lifts or tools.

Black & White Design

In the ideal pharma production environment, the process area and the mechanical area are separated. All motors, electrical instruments and mechanical drive components are located in a separate room.

System in Isolator

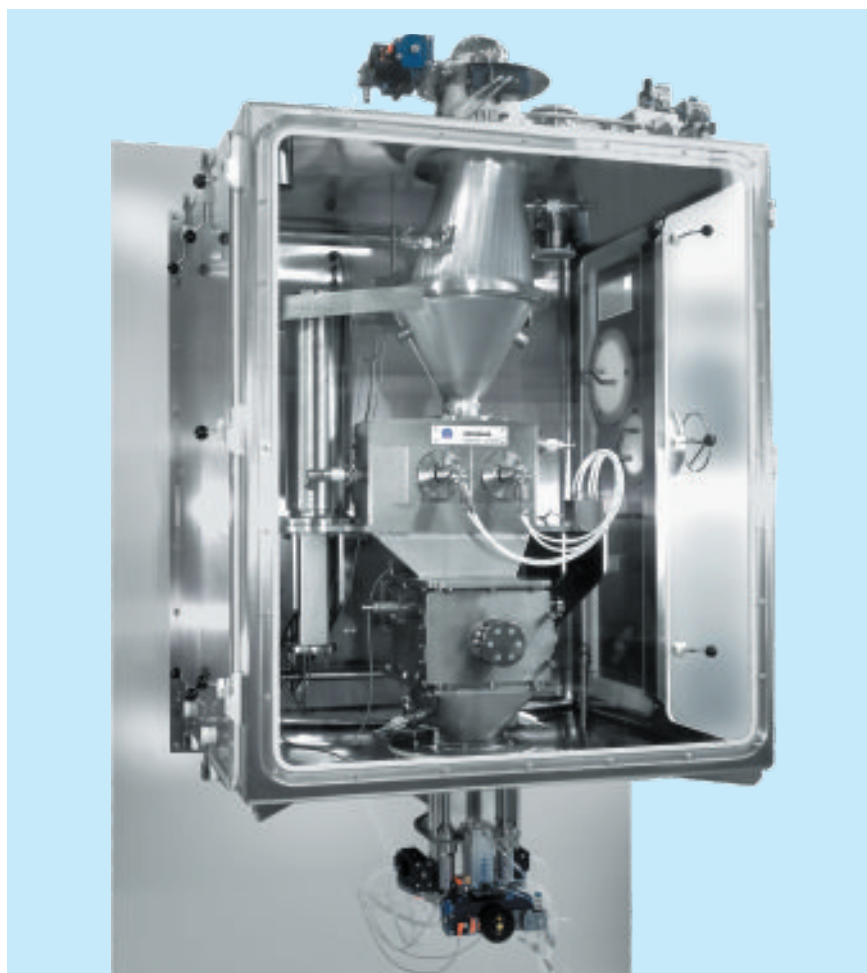
By integrating its proven and versatile compaction system into an isolator, Alpine has succeeded in meeting the stringent demands of the pharmaceutical industry with respect to product and personal protection when processing high potential chemicals.

All product-contact parts are made of stainless steel AISI 316L with a surface quality of at least Ra < 0.8 µm.

The isolator is operated under negative pressure and permits an "Operator Exposure Level", OEL of < 1 µg/m³.

The system has an integrated CIP / WIP cleaning system.

Operation is done with userfriendly panels based on the documentation practices according to current FDA 21CFR part 11 regulations.



Details

What Makes It Work

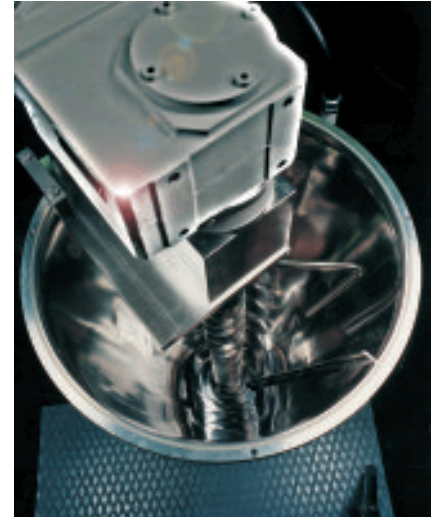


Vacuum de-aeration

Highly aerated products can be de-aerated with a vacuum system. This process enables the predensification feeder to operate more efficiently and dramatically increases the overall throughput of the machine.

Either the central house vacuum system or a dedicated vacuum pump can be used.

The air, which is removed, should be filtered. Filtering eliminates dusting concerns and ensures a safe working environment for the operators when toxic formulations are processed.



Perfect Finishes:

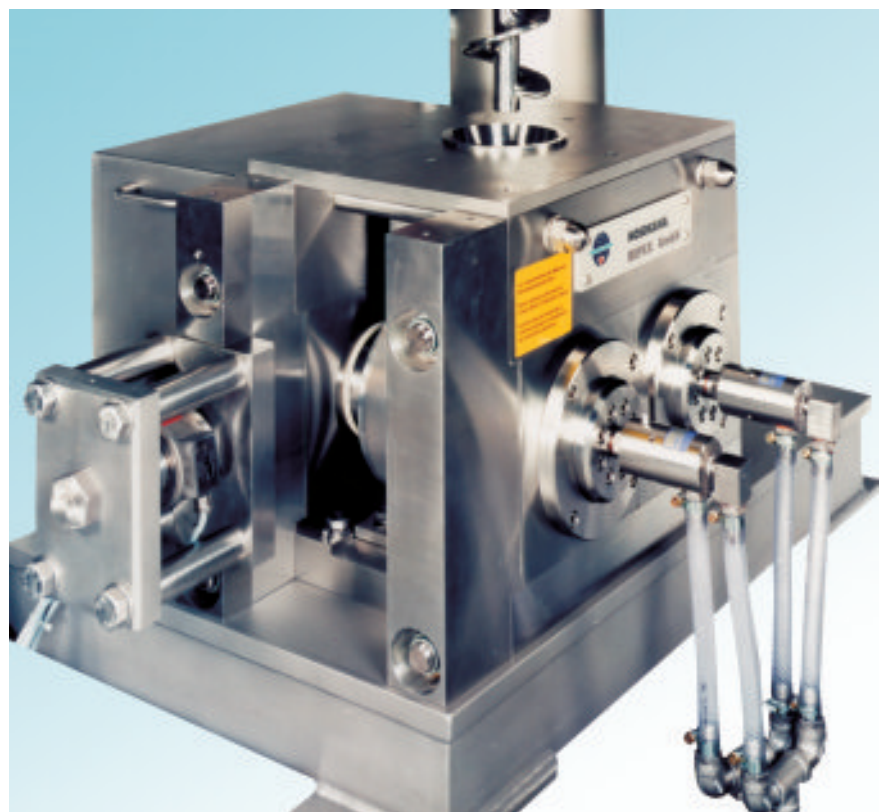
For the feed hopper, higher grade polishes are used to minimize bridging and material binding. These polish levels also offer ease in cleaning and helps prevent crosscontamination of products.

We know what the pharma industry needs:

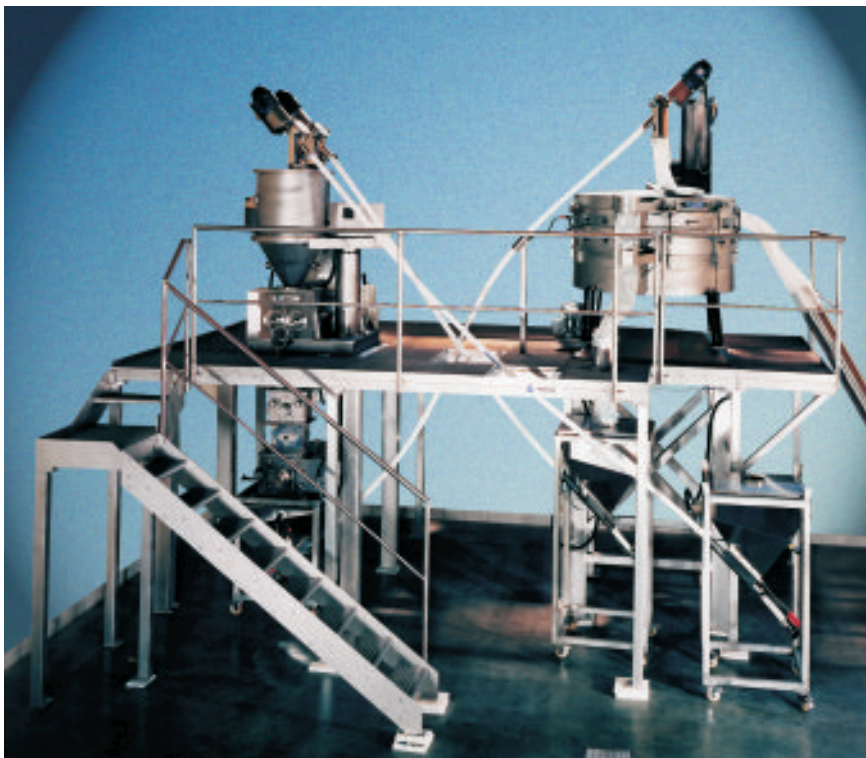
- Materials of construction: 304/304L, 316/316L/316Ti or Hastelloy
- Glass bead finish
- Polishes from 1.2 Ra to 0.3 Ra
- Electropolishing
- Material certifications
- Calibration services
- GMP and FDA approved materials
- IQ, OQ & FAT service available
- Automation
- Direct measurements
- Visualization

Design Details:

- Electronic & direct press force measurement
- Automatic press force control
- Roll cooling systems available
- Adjustable roll gap
- Temperature measurements in nip region



Machines For All Capacities and System Requirements



System Design and Automation

Our scope of supply is not limited to machines. We also offer complete systems and system accessories such as controls, FAT's, calibration, system commissioning and operator training.

Process guarantees are available.

Our engineering staff can custom design cGMP and OSHA compliant systems for existing rooms.

The Complete Product Line:

The throughput of a compaction system is dependent on the bulk density of the feed material. The roll speed is variable to match capacity requirements and allows fine tuning without affects to the quality of the products.

The Accessories:

To ensure high yields of the compacted flakes, we offer both conical and horizontal compression mills. Further information about our line of mills is available in our "Size Reduction Technology" brochure.



Technical Data:					
Type	APC L200/30 P	APC L200/50 P	APC K 200/50	APC K 200/100	APC K 300/200
Press force	100 kN	150 kN	150 kN	200 kN	300 kN
Roll diameter	200 mm	200 mm	200 mm	200 mm	300 mm
Roll width	30 mm	50 mm	50 - 150 mm	50 - 150 mm	150 - 300 mm
Drive power	1,5 kW	4 kW	4 kW	15 kW	30 kW
Roll cooling	no	no	yes	yes	yes
Direct press force measurement	yes	yes	yes	yes	yes
Automatic press force control	yes	yes	yes	yes	yes
Adjustable roll gap	no	no	yes	yes	yes
Dust free construction	yes	yes	yes	yes	yes
Gas tight construction	yes	yes	yes	yes	yes
WIP/CIP design	yes	yes	yes	yes	yes