

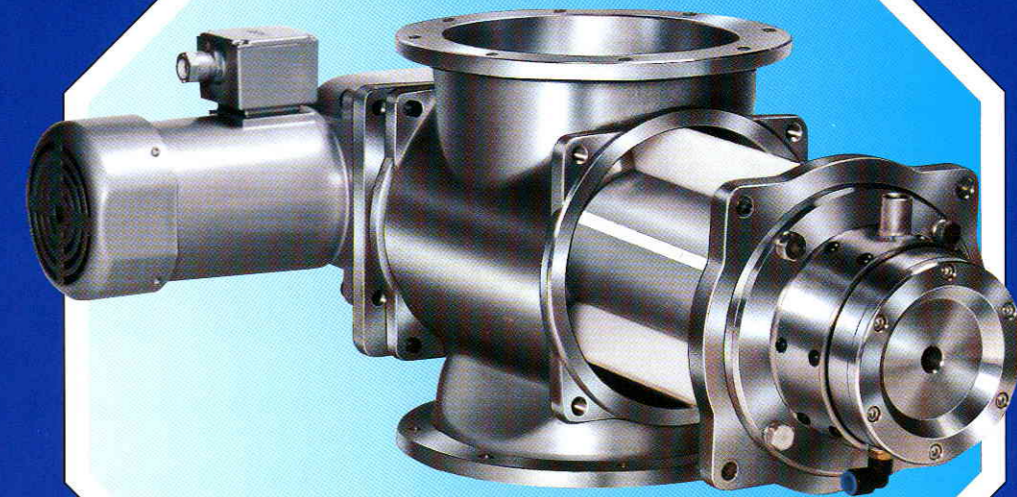
MICRON COMPACTOR
Rotary Feed Vacuum Densifier

Micron Compactor
 (MCOM-20/MCOM-30)

Notice to Change!

is now called

"DENSPACK"!
 (DEN-20/DEN-30)



HOSOKAWA MICRON CORPORATION

Hosokawa Micron Corporation is a member of the Hosokawa Micron Group, responding to global needs through emphasis on materials science and engineering. The Group is an international provider of equipment and systems for powder processing, thermal processing, environmental protection, and plastics processing. The group maintains facilities for research, engineering, manufacturing, and service in each of the world's major industrial markets.

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Making it easy to save space and process costs



HOSOKAWA MICRON CORPORATION

Process Technologies for Tomorrow

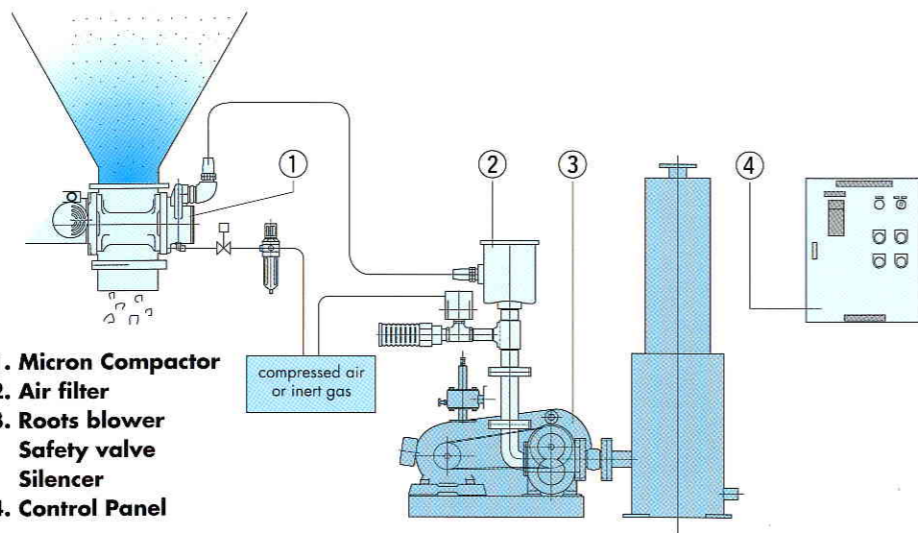
ALPINE • BEPEX • MICRON • MIKROPUL • VRIECO-NAUTA®

The densifier 'Micron Compactor' is designed specially to de-aerate powders. By de-aerating powders, an increase of the bulk density prior to filling in bags, containers is obtained. With the Micron Compactor, densification of powders can be achieved without damaging the particles. The unit easily fits any situation. The configuration of the system is simple and compact. Moreover it is to be installed easily in line in any process.

Main features of the Micron Compactor

- Space savings, due to the simple and compact construction
- Improvement of powder characteristics, to avoid flushing and reduce dust emissions
- Capable of dealing with very difficult materials with adhesive nature
- Saving of storage and transportation costs, due to reduction of the powder volume
- Increase of the filling efficiency, when applied as prime feeder in filling systems
- Increase of granulator efficiency, when applied as pre-compactor
- Ease of installation
- Ease of operation
- Ease of (dis)assembling and cleaning

MORE EFFICIENCY LESS COSTS BETTER POWDERS THE MICRON COMPACTOR



Successful combination with Stott systems

The Micron Compactor is also applied as prime feeder to the Hosokawa/Stott hygienic filling and weighing systems. This combination has proven to be successful at various leading manufacturers of powders.

Insight in the working principle

In this view the rotor turns counter-clockwise, The following activities can be distinguished:

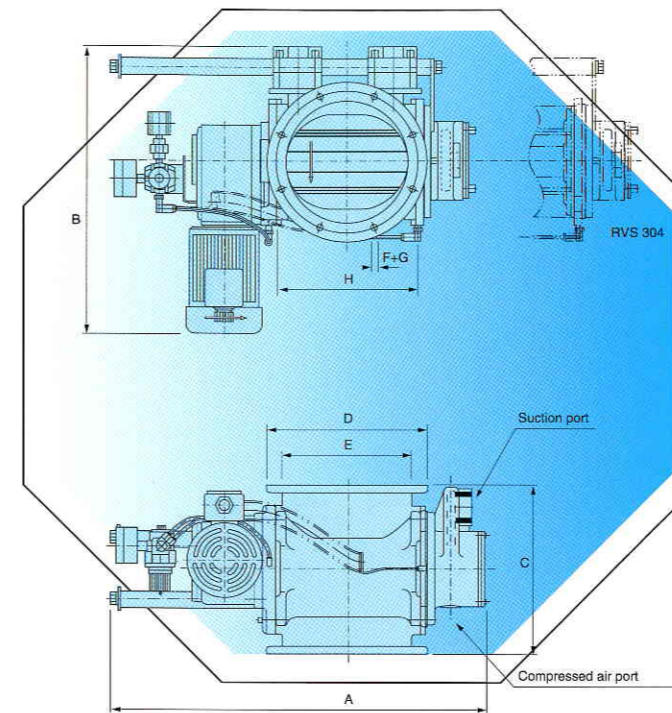
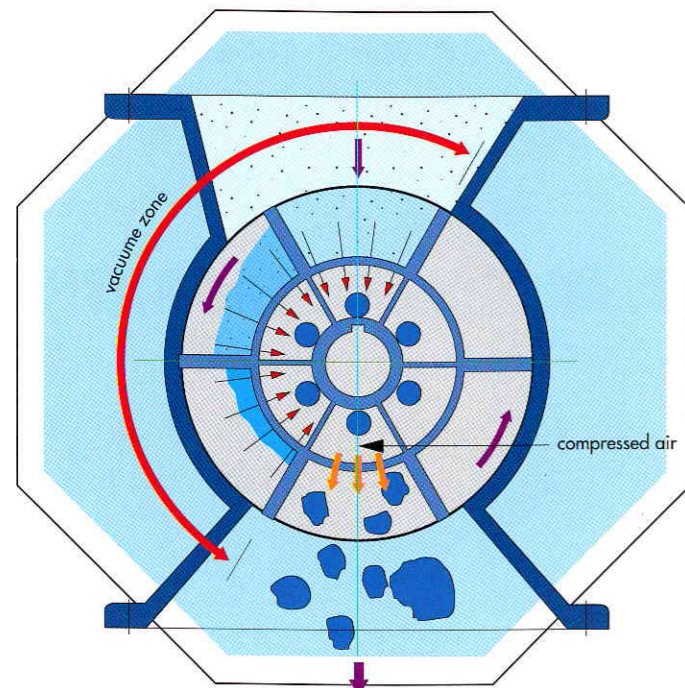
- When the pocket is in the twelve o'clock position, powder flows into the pocket by both gravity and the vacuum that is created by a vacuum pump. The under pressure in the center of the rotor creates an air flow through the sintered metal plate.

-While rotating from the position above to the lower position, vacuum remains in the centre. This causes the escaping of the air which is entrapped in the powder.

-At the lowest position, vacuum is no longer applied. From the center, a small blast of compressed air is given. This air pressure serves the following two purposes:

- 1) easy discharge of the material
- 2) cleaning of the sintered metal plate

-Under atmospheric pressure the pocket rotates from bottom to top. Now the cycle can start again.



Two models

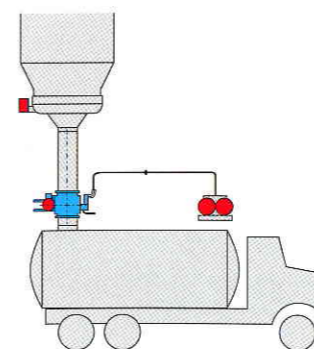
Type	MCOM-20	MCOM-30
Rotor diameter (mm)	203	304
Rotor volume (ℓ)	4.6	18.5
RPM	max.36	max. 22.5
m3/h	max.10	max. 25
Motor power	0.4 kW	0.75 kW
A	667	1263
B	502	686
C	305	450
D	286	470
E	220	390
F-G	8-M 10	12-M12
H	260	440
Blower capacity for air suction motor power	2 m ³ /min x -4000 dapa 3.7 kW	5 m ³ /min x -4000 dapa 7.5 kW
Purge air pressure consumption	2 bar G(0.2MPa) 250 ℓ /min	2 bar G(0.2MPa) 1000 ℓ /min

Typical examples

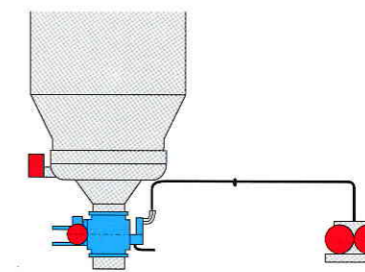
Product	Bulk density (kg/dm ³) without Micron Compactor	Bulk density (kg/dm ³) with Micron Compactor	Increase (%)	Capacity (kg/hr)
Titanium dioxide	0.30	0.46	53	450
Toner	0.40	0.63	57	1900
Gypsum	0.53	0.82	55	9800
Manganese dioxide	1.40	1.80	29	21600
Acrylic polymer	0.31	0.47	52	4200
Pigment (needle shape)	0.14	0.31	121	1850
Pigment	0.08	0.22	175	670
Talc	0.15	0.38	153	550

Technical features

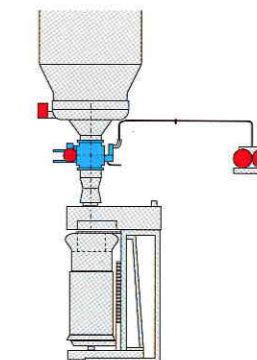
- Densification of aerated powders up to 100 % or more
- No mechanical degradation of the product
- Easy access for cleaning and inspection
- Compact design
- Easily fits packaging, mechanical compaction, bulk loading and bin discharging processes
- Easy to operate
- Stable continuous operation by automatic cleaning system
- With the densification, offers constant feeding or discharging operation



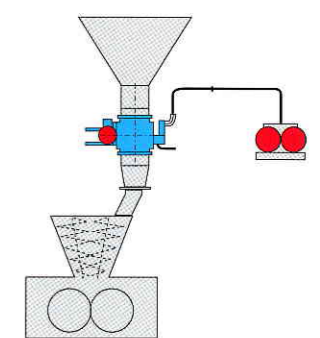
Bulk loading



Bin Discharging



Packaging lines



Mechanical compaction