

## Dense Phase Continuous Pulse-Pne conveyor

Dense phase conveying is a highly reliable pneumatic conveying system with a low velocity and a high product/air ratio. This system is suitable to convey powders and granule. With dense phase conveyors the product is introduced into the conveying line through a pressure vessel and is suitable to convey products from a single point to one or more receiving points.

By pressurising the vessel a product plug will be forced to slide slowly through the conveying line, resulting in low wear of the conveying line and causing a low particle movement. The inlet valve, being the only moving part, makes the Conti Pulse-Pne conveyor suitable for conveying abrasive products and products where no segregation or degradation is allowed.

The Conti Pulse-Pne conveyor is a continuous conveying system with the vessels in a vertical stack-up or side by side configuration. The middle vessel in the vertical stack-up configuration is an airlock, which can refill the bottom vessel without de-aerating or decreasing the pressure in the system. In the side by side configuration the vessels are conveying and refilling alternately. The major advantage of this system is, besides continuous conveying, a very high capacity through a relatively small tube diameter.

Due to the dense conveying principle the pressure in the system will be higher than a standard conveying system and results in pressures of 1 to 6 bar. Conveying velocities of 1-10 m/s and distances of 500 m. or more with capacities up to 100 t/hr can be achieved. The Dense Phase Conti Pulse-Pne conveyor is suitable for conveying of easy flowing or fluidisable products like cement, silica, plastics granulate etc.

### Outlet

The system will be executed with a standard 90° outlet bend or with a special designed fixed valve in the outlet. The valve controls the product to air ratio in order to optimise the conveying rate. Another important benefit is the fluidising effect created by the turbulence of this static valve as the compressed air passes under it.



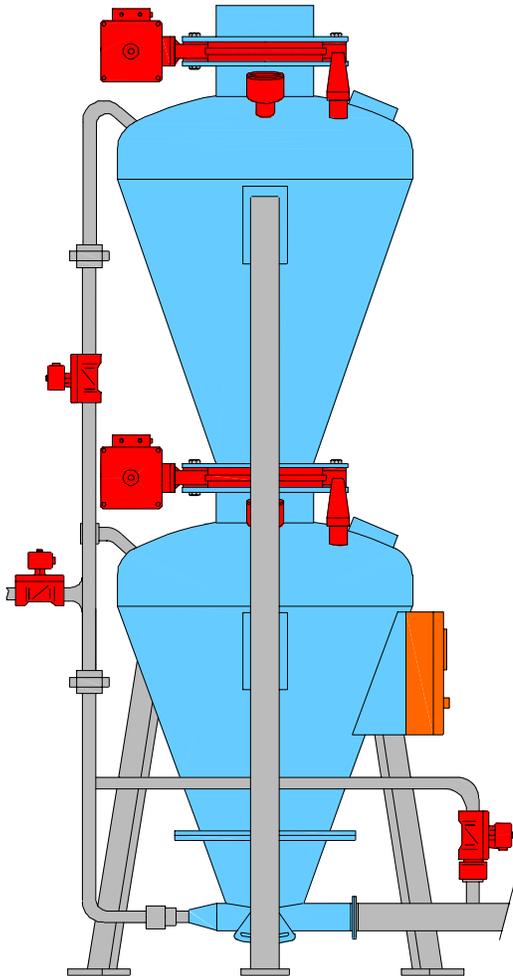
### Pulsation system

If required the system can be executed with pulsation system. This interrupts and divides the endless product plug into small plugs, resulting in a lower resistance of the product column.

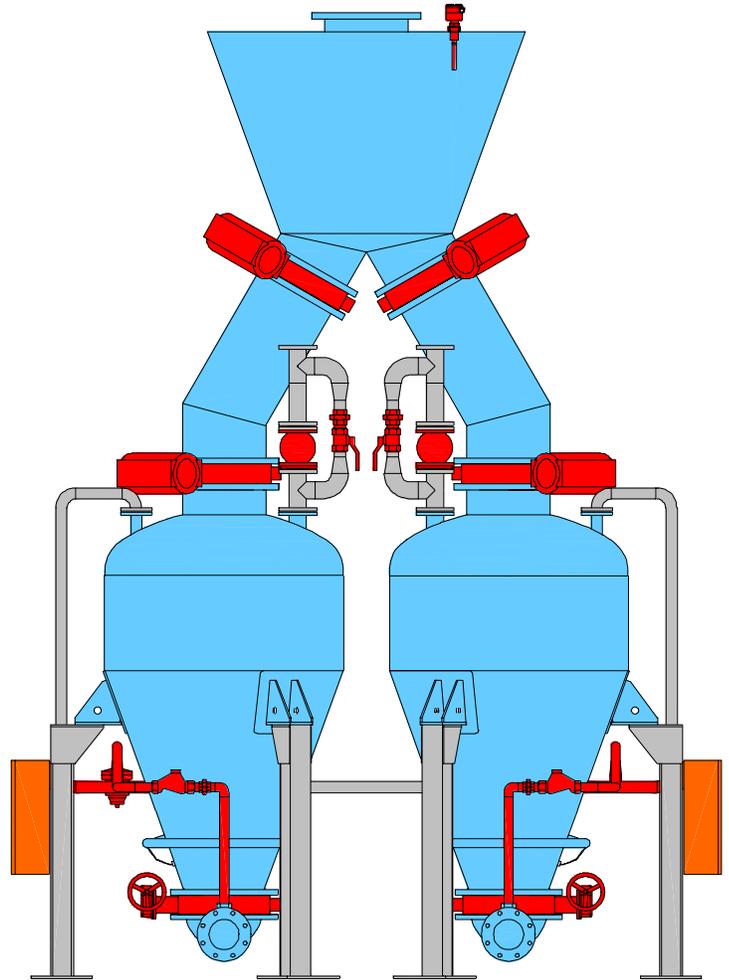
### Benefits:

- Low velocities
- Little segregation
- Smaller piping diameter
- Little air consumption
- Low investment
- Little maintenance
- Low wear
- Complex routing
- No moving or rotating parts
- Conveying abrasive products
- Conveying fragile products

## Serial execution



## Parallel execution



## Handled Products

<b>Polyester</b>	<b>Potato starch</b>	<b>PTA powder</b>
<b>Cement</b>	<b>Charcoal</b>	<b>Diatomaceous earth</b>
<b>Plastic Pellets</b>	<b>Enamel powder</b>	<b>Coal powder</b>
<b>Catalyst</b>	<b>Cement</b>	<b>Radimix flakes</b>
<b>Talc powder</b>	<b>PET granular</b>	<b>Quartz sand</b>
<b>DPP</b>	<b>China clay</b>	<b>Marble</b>
<b>Foundry sand</b>	<b>Fly ash</b>	<b>Silica</b>
<b>Pulverised coal</b>	<b>Benton powder</b>	<b>Quartz flour</b>

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