

Vertical pneumatic conveying system of powder and granular materials

HIGH FLOW LIFT

High Flow Lift provided by Denka Consultant & Engineering Co., Ltd., (DCE) is a vertical pneumatic conveying system for powder and granular materials, which supersedes a bucket elevator. This maintenance-free system enables automation and is labor-saving.

The Lift Tank has a built-in fluidization mechanism. The mechanism allows the system to convey materials with a high solids loading ratio at low speed.

Features compared to a bucket elevator

- Conveyance with a high lifting height is possible with one unit.
- The conveyance power source is only a blower.
- The system is completely sealed and a clean work environment can be maintained.
- Maintenance free.
- The simple structure keeps the installation cost low.

Since the system is provided with a physical powder-tight seal instead of a mechanical seal, it can convey powder and granular materials continuously.



- Blow tank has a built-in fluidization mechanism. The mechanism allows the system to convey materials with a high solids loading ratio at low speed.
- The conveyance rate can be adjusted automatically.
- The amount of remaining material can be minimized to zero during maintenance.
- The system can re-start without clogging in cases where it stopped during conveyance due to power failure.
- The pressure of conveyance is low, so the blower is powerful enough for the power source.
- The system is suitable for conveying granular and crystalline materials, since crushing and powdering of the material during conveyance can be kept to a minimum.

Application

- For conveying plastic (such as PE and PP), ceramics, cement, metal powder (such as iron powder), coke, carbonaceous materials, unslaked lime, slaked lime, clay, talc, bentonite, carbide, acetylene black, fly ash, sand, dust, wheat flour, starch, medical and pharmaceutical products, detergents, fertilizers, grain, granulated sugar, salt, etc.

System Structure of High Flow Lift

Powder and granular materials are uniformly lifted as they are fluidized with the injected air from the bottom of the blow tank.

A blower is used as the air source.

