Effortless changeover from dilute flow conveying to dense phase conveying with the Gericke mini double vessel conveyor

What can be done, if a dilute flow conveying system cannot cope with the handling of a new bulk material e.g. when product attrition is beyond the defined specifications? A dilute flow conveying system can easily and quickly be converted into a dense flow conveying system with the Gericke mini double conveyor.

There are products which cannot be transported efficiently in a dilute flow conveying system. On the one hand, sensitive products may suffer from considerable attrition whereas abrasive products may cause excessive wear on the conveying system.

With the Gericke Mini Double Vessel Conveyor, PTAD 20, the existing dilute flow conveying system can easily be converted into a dense phase system. The mini vessels can be installed directly below the storage device in place of a rotary valve. The following advantages can be achieved:

- Extremely gentle conveying
- No demixing
- No wear on piping and valves
- No rotating parts in contact with product
- Drastic reduction of conveying air and energy consumption

The PTAD 20 twin vessels permit dense flow conveying whenever space available is extremely limited. The system is made up of two 20 l pressure hoppers (vessels) and is operated in continuous mode. The vessels are either supplied with an inlet manifold or directly connected to the downstream process. The low construction of up to 750 mm permits installation of the double vessels instead of the rotary valve. One appropriate line of action is to install these downstream from the dryers. Throughputs of 4-10 m³/h can be achieved depending on selection of the piping (DN65 – DN100) and product to be handled.

In the meantime, several conveying systems of this kind are being operated successfully in the food industry in conjunction with milk powder, whey powder, gelatin, granulates and powders as well as various premixes. The Gericke conveying system with mini double vessels is also very suitable for gentle conveying of granules.

In the Gericke Test Centres, tests can be carried out with this conveying system and other conveying processes and exact conveying parameters can be determined. Moreover, insight can be gained into product quality (attrition) and potential product agglomeration in piping. In addition to this, Gericke also provides various types of hire equipment for use on customer’s premises.

For further information:
www.gericke.net