

## Application report

### *FlowSlide replaces weigh feeder*

**Application:** Pfanni requires a reliable solid flow meter to control the production of potatoe powder and chips.

To control the daily production rate of dry potatoe powder and chips Unilever-Bestfoods ( Pfanni ) has installed 3 compact weigh- feeders in their Stavenhagen site. Due to the low product density ( 0,2—0,3 kg/l ) an the high dust content the weigh- feeders require daily maintenance - the measuring error of the systems exceeds sometimes 20% of the actual flow rate.



FlowSlide installation behind a conveyor belt.



**Solution:** The weigh- feeder has been replaced by the precise FlowSlide meter. Due to the fact, that the meter includes no „moving parts“, the system is maintenance free and dust tight. The FlowSlide offers an accuracy better 0,3 %.

Inside the FlowSlide meter the product is sliding over a curved measuring chute. According to „Newton's second law of mechanics“ the product is generating a centripetal force that is directly proportional to the flow rate. This force is measured via a high precision load sensor - the electronic converts the linear voltage signal into flow rate ( kg/h ) and absolute flow. ( kg ) If powders are measured the electronics provides a periodical relay output to activate a „self cleaning“ process via integrates air nozzles. The FlowSide system is available for measuring ranges between 50 and 100.000 l/s.

The accuracy is nearly independent from product density and grain size.