



Product transfer without segregation

■ Decelerator VTS 200

The **Decelerator VTS 200** was particularly developed and designed for a product transfer without segregation. It prevents the segregation based on product handling by gravity.

In case of charging a tablet press or coater for example the decelerator is able to produce a **huge raised economic efficiency** by reduction of quantity of rejects. The amount of **output per batch is optimized**. (refer next page)

The technology is based on a system similar to „pneumatic dispatch“. as to the leading pipe (product contacting) needs no supply lines in it.

The system (designed according GMP) **only** is supported by pneumatic air.

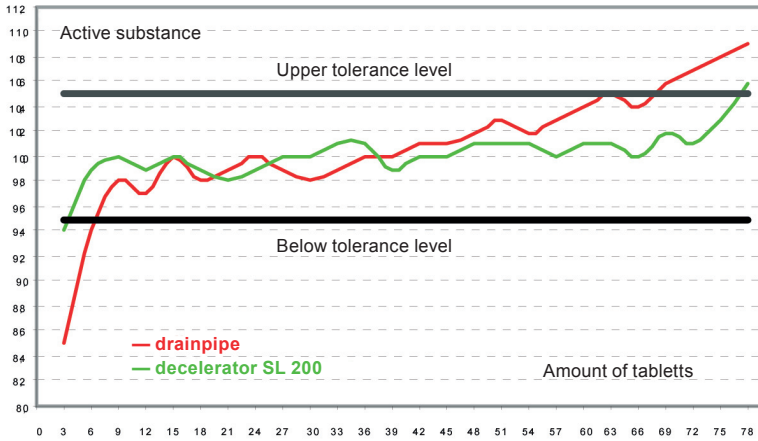
In case of sensitive products (i.e. tablets) a **careful transfer** is secured.

A staggered position between outlet of ceiling and inlet of machine can be adjusted with a slope up to an angle of nearly 0°.

■ Decelerator VTS 200 function:

The pneumatic head (plunger) is leaded with pneumatic air up to the product inlet (at top) while the inner membrane is closed. The product will be handed over to the head, That plunger will be moved in a very slow speed downwards, so that there can't be any segregation initiated by gravity. Reaching the outlet point (at bottom) the membrane opens slowly and releases a free area for the product flow.

Comparison of different types charging a tablet press



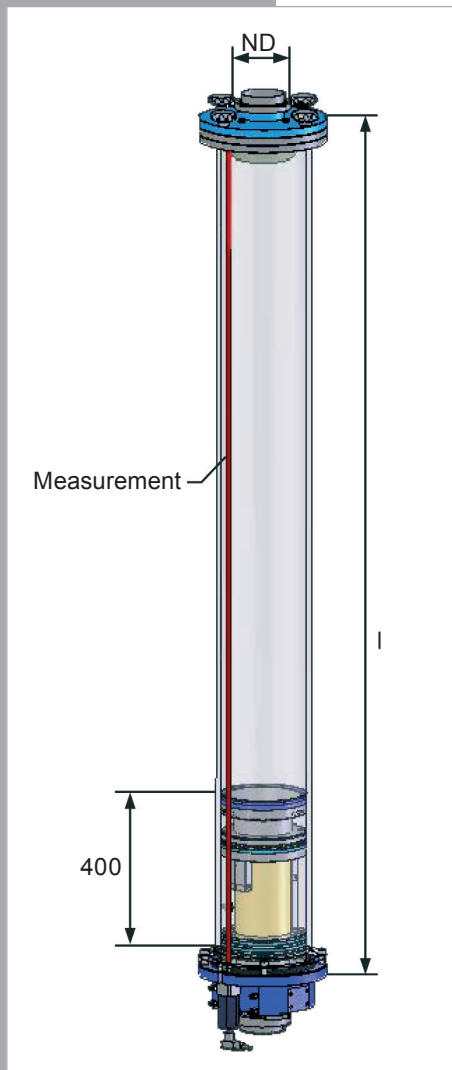
Example of profitability:

(base: reduced amount of rejects)

Condition: max. amount of tablets per batch: 800.000 tablets

Amount of rejects	Amount of tablets, absolute	Share of the batch, proportional
1. Product transfer drain pipe L = 1600 mm	72.000	9 - 10 %
2. Product transfer Decelerator VTS 200 L = 1600 mm	15.000	1,5 - 2 %

The result is an **increase of efficiency for approx. 8 %** per batch. The still remaining rejects are dependent of the tablet press modifications per batch.



Decelerator VTS 200 Technical data:

Product contact parts	AISI 316 L, polished, Ra ≤ 0,1 µm EPDM, PTFE (according FDA)
Non product contact parts	AISI 304
Leading pipe	ND 200 mm
Length of leading pipe	0,5 - 6 m, modular design
Free flowing area	ND 100 mm
Length head	400 mm
Weight head	Type stainless steel approx. ca. 26 kg Type titan approx. ca. 15 kg
Pneumatic supply	6 bar - oil free, dry
Electr. power	Approx. 0,5 kW
Air consumption	Approx. 600 l/min (by moving)
Lifting speed	Individual adjustable, dependent on product: up, empty: approx. 25 s /2m down, loaded: approx. 90 s/2m
Control	Electro-pneumatically, CSP - Siemens S7
Control panel	Touch panel - Siemens OP7
Maintenance	Min. 600 lifts without
Products	Blended granulates and powders, tablets
Measurement	Magnetic, signal input analogue with outside mounted system