

universal **ELEVATOR**

Dosing feeders
Continuous product feeding



Simatek Drum Feeder

Gentle Product Feeding

Simatek Drum Feeder (patent pending) is a perfect feeding system when conveying easy-running products. The system continuously fills the buckets separately without waste and does not require any overlap from bucket to bucket.

The function makes it possible to run with a low chain speed in combination with high filling resulting in an increased capacity despite the low speed. This optimisation also ensures a minimum dust generation when conveying dusty products.

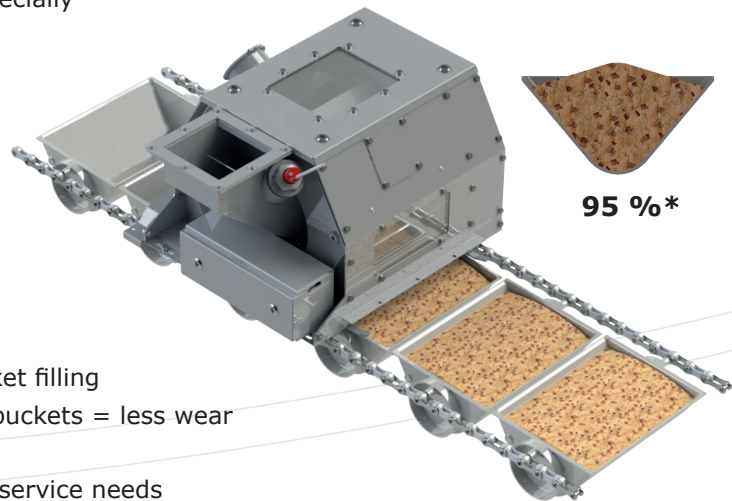
The gap between the buckets means that there is only need for a forced guidance of the buckets at emptying, which implies significant cost savings on wearing parts and a substantial enhanced operational reliability.

The drum feeder can advantageously be delivered for traditional Simatek elevators with overlap on the buckets, and it can likewise be retrofitted on existing elevators.

The drum feeder is directly driven by the elevator chain and rated relative to the buckets and requires no further energy supply. The integrated dosing damper valve is controlled electronically from the enclosed control unit or directly from PLC.

The feeding system is executed in an "easy to clean" design, which makes it possible to open and disassemble the main components in few minutes.

This is a reliable and gentle feeding system specially suited for the process industry for conveyance of fragile as well as abrasive products.



Advantages:

- High capacity at a low speed
- Gentle product feeding with optimum bucket filling
- Minimum forced guidance of the elevator buckets = less wear
- "Easy to clean" design
- Increased operating reliability and limited service needs
- Minimum dust generation when conveying dusty products
- The drive of the drum requires no further electrical installation or energy supply
- Integrated electrically controlled dosing damper valve



Application	Product example
Easy-running products	Sugar, powder, corn
Fragile products	Enzymes, catalysts, smaller granules
Abrasive products	Minerals, metal oxides

* Highest possible filling degree depending on the configuration of the elevator

Simatek Product Dispenser

High filling degree at a low chain speed

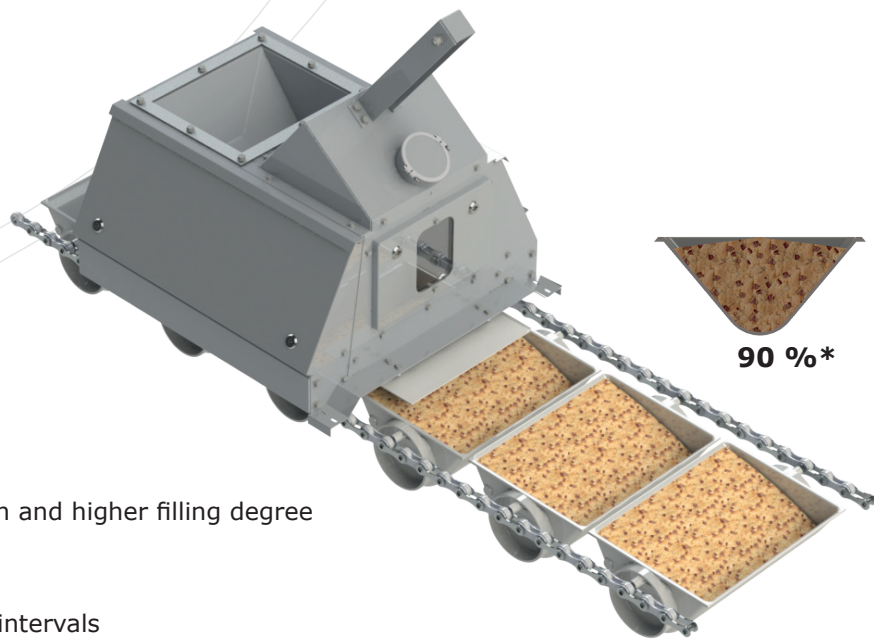
Simatek Product Dispenser is a patented solution specially developed for controlled feeding of bucket elevators when conveying pelleted, extruded, and granular products with a particle size of approximately $\varnothing 4\text{-}\varnothing 20\text{mm}$.

The feeding system ensures a consistent product distribution and a high filling degree in the bucket and thereby increases the capacity.

Focusing on gentle conveyance, the system even makes it possible to lower the chain speed and at the same time preserve the capacity.

The possibility of reducing the chain speed due to the higher filling degree results in less wear on the elevator, longer service intervals, and at the same time reduces the risk of undesired production stops.

The product dispenser is directly driven by the chain-/bucket system and requires no further energy supply. The integrated dosing damper valve is controlled electronically from the enclosed control unit or directly from PLC.



Advantages:

- Consistent product distribution and higher filling degree
- High capacity at a low speed
- Gentle product handling
- Less wear and longer service intervals
- Reduces the risk of undesired production stops
- The filling function requires no further energy



Application	Product example
Pelleted and extruded products	Petfood, animal feed, wooden pellets, fish feed
Granular products	Corn, peas, beans, seeds, nuts

* Highest possible filling degree depending on the configuration of the elevator

A Gentle and Flexible Solution

Simatek Vibrating Feeder

Continuous and gentle product feeding

Simatek Vibrating Feeder is a solution for traditional filling of bucket elevators with most product types. The system ensures a continuous and gentle filling, however, with a limited filling degree.

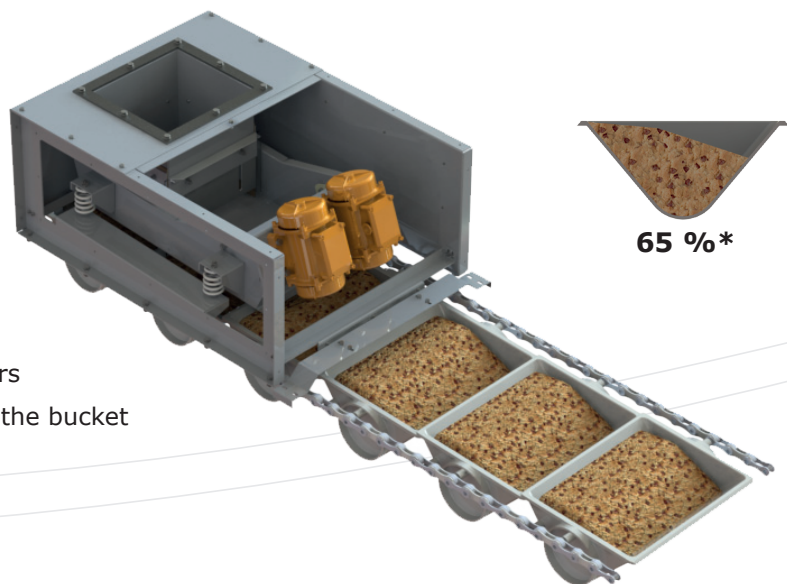
The vibrating feeder is specially suited for asymmetric, packed, and larger product types, where the metering based feeding systems have limited application.

The system supplies a regular product flow to the passing buckets.

To ensure the most optimum distribution and volume across the entire width of the bucket, it is possible to adjust the percussion power (adjusted on the fly weight of the motor), the layer thickness (controlled by means of the integrated damper), and the vibration frequency (requires connection to the frequency converter).

The vibrating feeder is primarily used for products, where there is no focus on neither dust generation, high capacity, nor very gentle conveyance.

Alternatively, we can deliver specially developed vibrators for handling e.g. corncobs and potatoes.



Advantages:

- Traditional filling of bucket elevators
- Supplies a regular product flow to the bucket
- Simple capacity control
- High operating reliability
- Simple product handling

Application	Product example
Asymmetric products	Snacks, chocolate, pasta, tablets
Packed products	Candy, food
Larger products	Frozen food, corncobs, potatoes, granules

* Highest possible filling degree depending on the configuration of the elevator