



universal **ELEVATOR**



Conveying of Aqua Feed

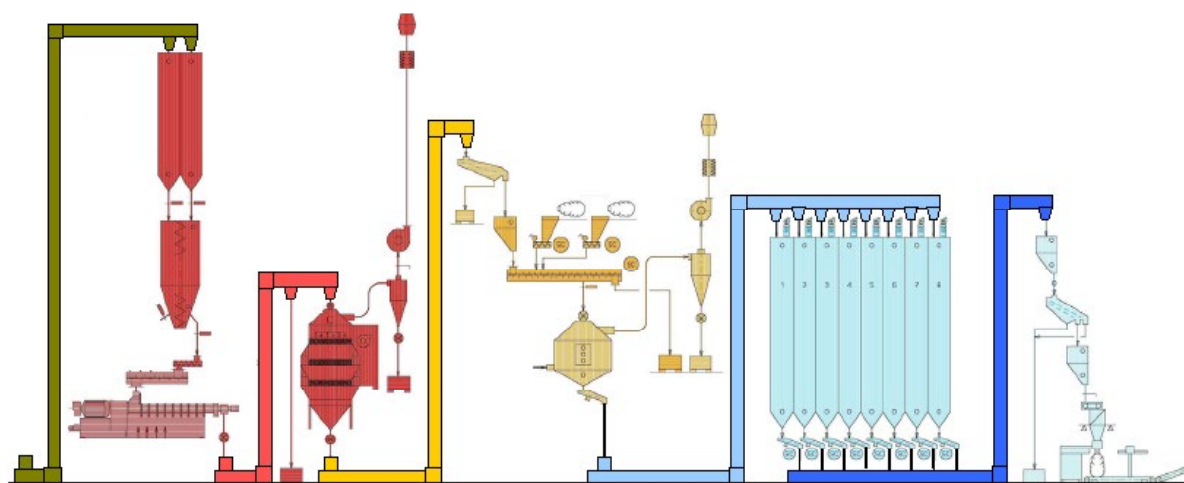
Simatek Bulk Systems A/S is a company specialised in the mechanical conveying of fragile products. For decades our company has been an acknowledged supplier of pendulum bucket elevators for the aqua feed industry. A long-running development process on the elevators focusing on reliability and maintenance has resulted in a broad variety of pendulum bucket elevators specially suited for implementation in continuous processes for the production and handling of fish pellets.

Extruding fish pellets

Simatek Universal Elevators are unique for the conveying of extruded pellets with special consideration to maintaining the structure and quality of the pellets. From filling to emptying of the pendulum buckets the product will not be affected by any mechanical impacts. This will secure an unchanged pellet quality without fines formation.

Aqua feed

With a long-term commitment to the aqua feed industry Simatek Bulk Systems A/S offers the optimum internal conveying solution for the production of aqua feed.



- Mixing
- Extruding
- Drying
- Sifting
- Cooling
- Coating
- Storing
- Packing

Execution

Simatek Universal Elevators may be delivered in an open or closed design and with a choice of materials according to customer requests. Special designs according to product quality and individual hygienic demands are possible.



Biomar – Scotland
Simatek Universal Elevator in a packing process



Ewos – Chile
Simatek Universal Elevator in connection with pellet drying



Polar Feed – Norway
Simatek Universal Elevator in connection with pellet cooling

Aqua Feed

Simatek Universal Elevator – Pendulum Bucket Elevator

The Simatek Bulk Systems series of modular pendulum bucket elevators offers space-saving and energy-efficient solutions for the conveying of bulk products.

Simatek Universal Elevators come in various forms and with two different pendulum bucket designs. The traditional design is with overlap and forced control of the buckets but an alternative design without bucket overlap and with reduced forced control is also available. The latter is primarily used for abrasive products.

Intermediate outlet

Electric pneumatic intermediate outlets can be mounted on the horizontal sections as per request.

Corner section

Corner section with shaft and sprockets. Double bearing construction of both shaft and free-running sprockets.

Filling and tensioning section

Optimum operation requires a controlled filling of the elevator. For further information please see separate program on feeding and dosing systems.

The tension section has a unique pneumatic chain tensioner ensuring correct, parallel tensioning.

Vertical and horizontal sections

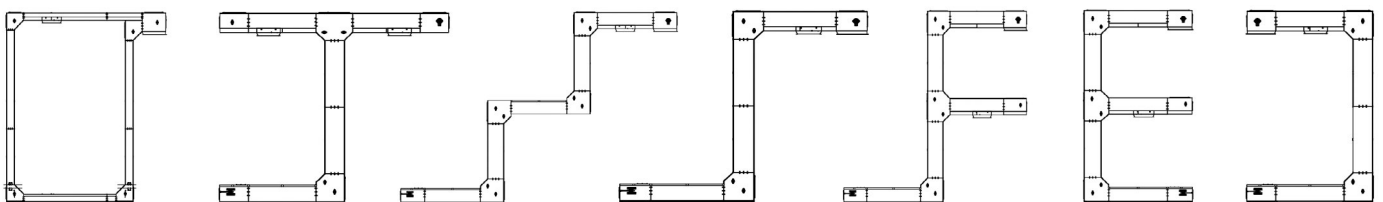
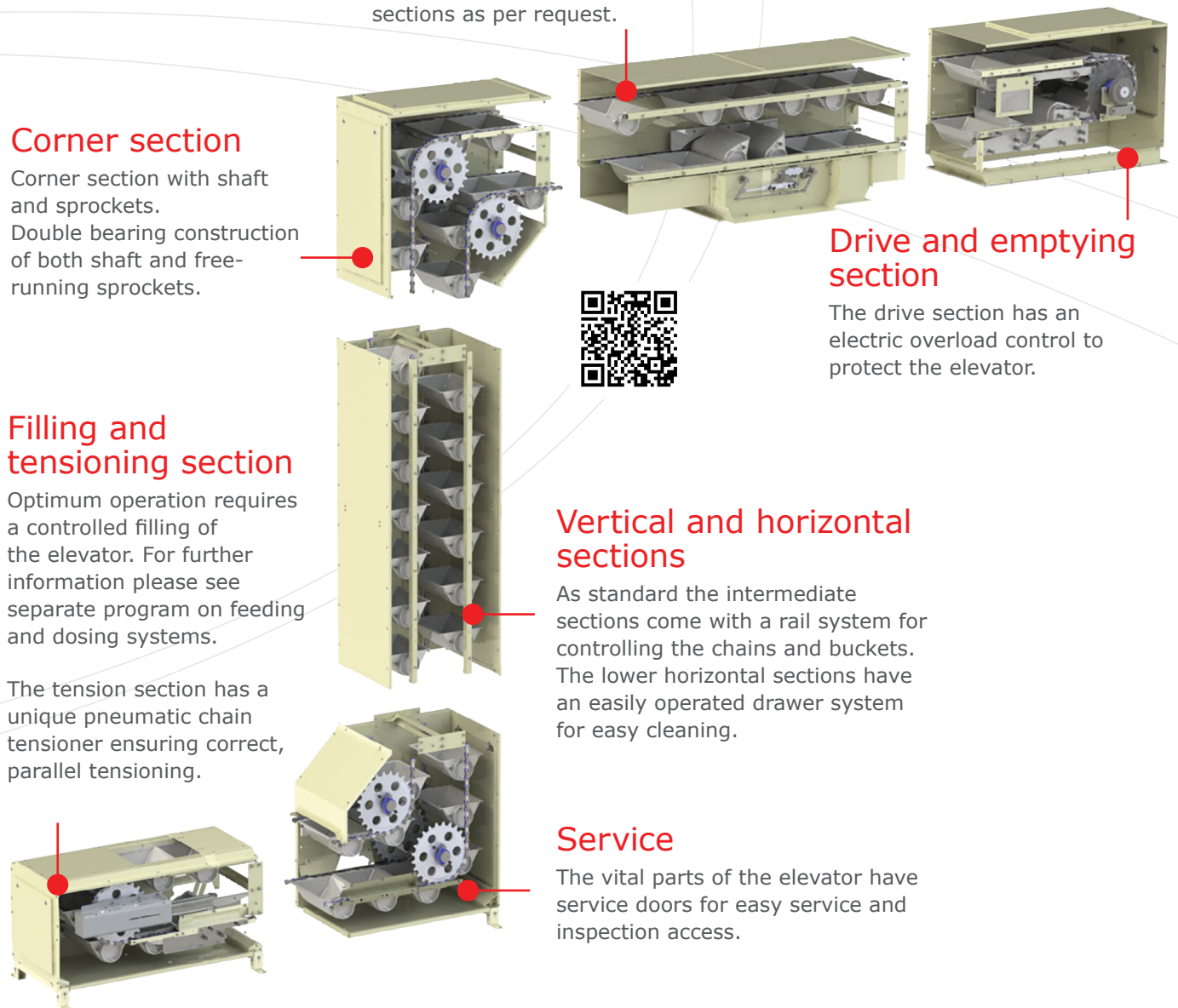
As standard the intermediate sections come with a rail system for controlling the chains and buckets. The lower horizontal sections have an easily operated drawer system for easy cleaning.

Service

The vital parts of the elevator have service doors for easy service and inspection access.

Drive and emptying section

The drive section has an electric overload control to protect the elevator.



A Gentle and Flexible Solution

Next generation of Universal Elevators

Simatek Bulk Systems A/S is constantly developing and implementing new ideas and technical improvements on the universal elevators. The latest initiatives ensure the best and most secure elevator solution within the aqua feed industry today.

New Feeding System

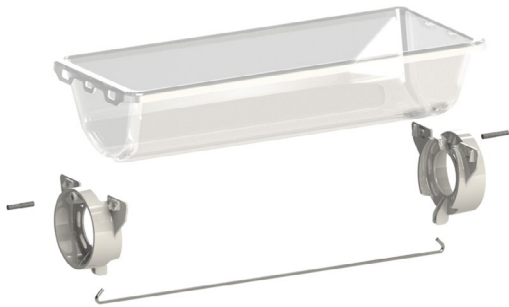
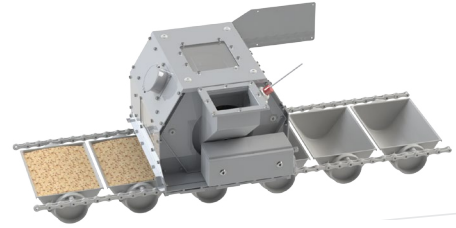
Simatek Drum feeder – **Continuous Batch Feeding System (CBFS)**

CBFS is mechanically synchronised with the elevator and ensures a consistent and controlled filling of the buckets.

The buckets are filled separately without spillage.

The slow pace enables gentle and less abrasive conveyance and a high filling degree.

With CBFS there is no overlap nor mechanical contact between the buckets which is a significant advantage, especially when conveying abrasive products.

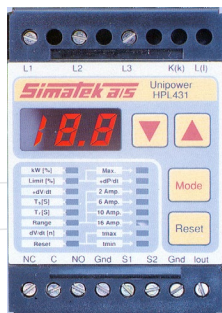
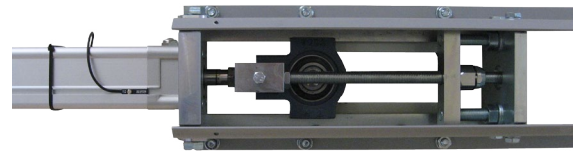


Elevator buckets

For the new drum feeder system a new bucket system, Free Rotating Buckets (FRB), without overlap between the buckets is available. The bucket endurance has been improved considerably, and wear parts are limited to easily replaceable bucket gables.

Automatic Chain Tension System

When using the pneumatic chain tensioner an automatic and parallel chain tensioning is secured with no need for continued manual adjustments. The chain tensioner has an alarm indicating timely service.



Electronic overload protection

Simatek Unipower HPL 431 constantly monitors the power consumption and switches off the power if the load exceeds the preset values.

New features

- Higher capacity - now up to 120 m³/h
- Dust-proof / closed construction
- Fewer wear parts
- Two directions of rotation
- Easier to clean
- Longer service interval
- Free running sprockets with dobble ball bearings
- More feeding systems available