

SIMATEK BUCKET ELEVATOR

Gentle
Quiet
Reliable



SimatekTM

BULK SYSTEMS A/S

System Design

Simatek Bucket Elevators have been designed on the basis of a flexible and space-saving method combining horizontal and vertical conveying of bulk products.

The modular system provides for a wide selection of construction forms. The elevators are manufactured for capacities of up to 60 m³/h.



Elevator construction form C for processing of seed.



Elevator construction form C with intermediate outlet. Seed cleaning plant.



Crushed Cinnamon



Grass Seeds



Rape Seeds



White Pepper



BULK SYSTEMS A/S

Gentle Conveying

The product is not exposed to external impacts from filling to emptying when using this gentle conveying method.

Cornflakes and potato chips are examples of fragile products, which can be conveyed without being damaged.

As a standard, the elevator buckets are manufactured in white FDA food-approved polypropylene. Other colours and qualities are also available.



Production of snacks.



Simatek™

BULK SYSTEMS A/S

Sanitary Design

Bucket elevators for conveying of food are usually manufactured in stainless steel AISI 304 or AISI 316.



Simatek Washing Unit offers facilities for steeping, washing and drying of chains and buckets. One unit can be applied for several elevators.



Beans



Meatballs & Dumplings



Simatek bucket elevators are available in a closed, dustproof design. When conveying food, open elevators equipped with safety coverings are more common.



Tomatoes

Simatek™
BULK SYSTEMS A/S

Technology



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

The soft starter facility provides safety against overloading of vital parts.



By means of the **Simatek Frequency Converter** you will attain full utilization of the elevator as to the desired capacity. At the same time you will ensure that the elevator does not run faster than necessary, which means that service parts and moving parts in the elevator are not loaded more than necessary.

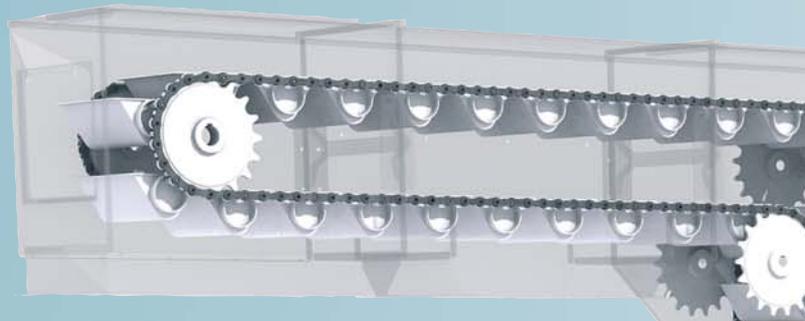


The buckets have been especially designed and are supplied in polypropylene, mild, or stainless steel depending on the type of product to be conveyed. Temperatures from -25°C to $+250^{\circ}\text{C}$.

SimatekTM

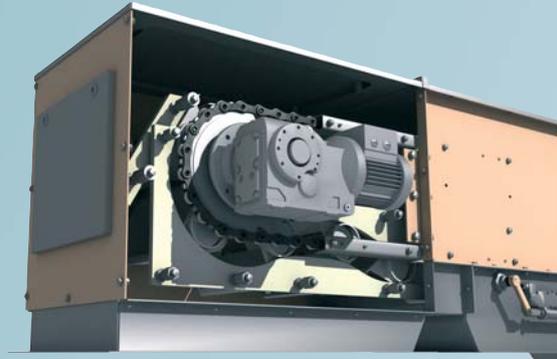
BULK SYSTEMS A/S

Construction



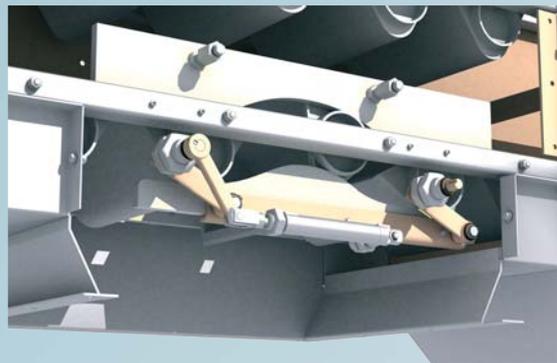
Low Power Consumption

The drive section is equipped with a directly coupled helical-bevel gear and mechanical backstop.



Intermediate Outlet

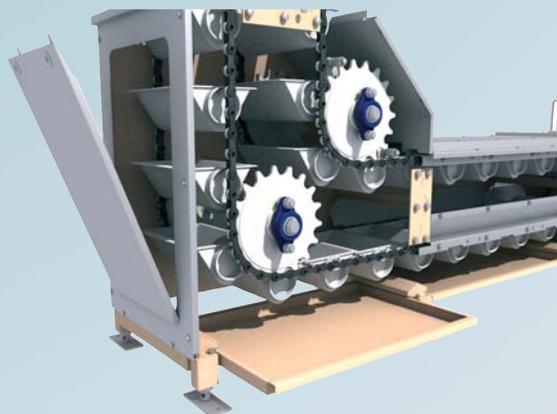
Electric pneumatic intermediate outlets can be placed as required on horizontal sections. Computer-designed curve guides ensure low friction and minimum wear.



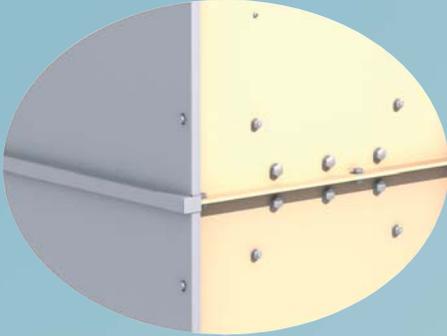
Service

Where service and inspection are required, the bucket elevators are equipped with inspection hatches.

The drawers under the lower horizontal section can be pulled out for cleaning.



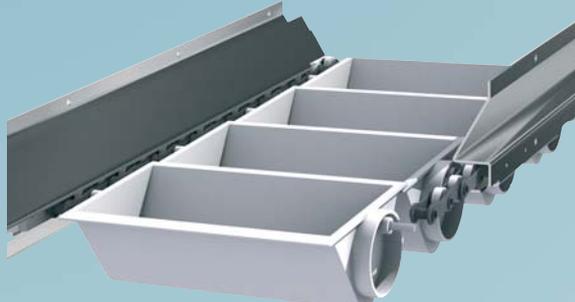
BULK SYSTEMS A/S



Flanged joints reinforce the elevator construction and can be equipped with seals if a dustproof execution is required.

ATEX

A Simatek bucket elevator in a dustproof design can be placed in ATEX zones 21 and 22.



The buckets are suspended in pegs between two parallel running chains and are kept in a horizontal position from filling to emptying.



The high-quality chains have been equipped with nylon rollers ensuring long lifetime and quiet operation.

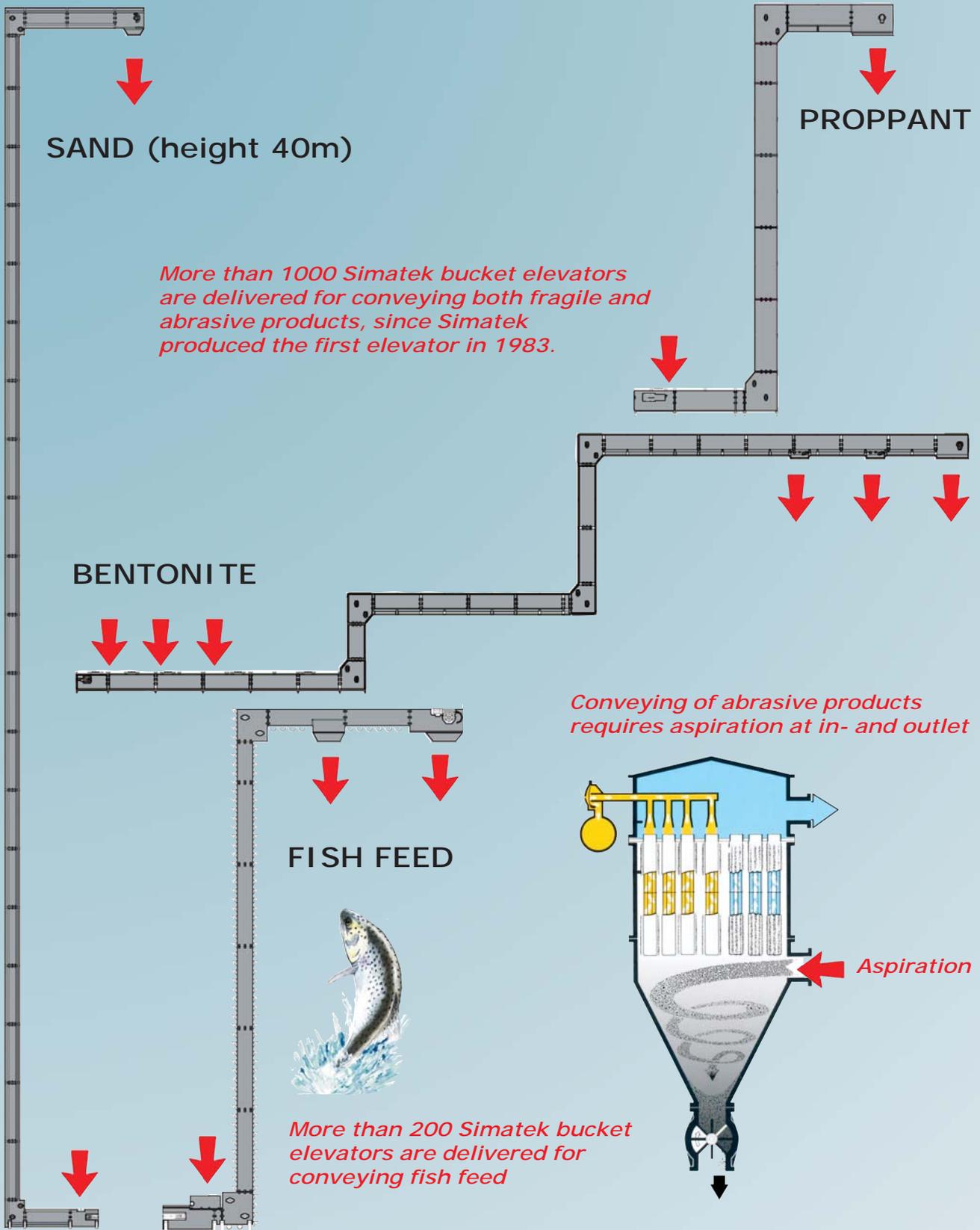
The lower horizontal section has been equipped with chain guides and brushes protecting the chains against dust.

Aspiration is required when conveying products that contain dust.



BULK SYSTEMS A/S

Gentle Conveying of Abrasive Products

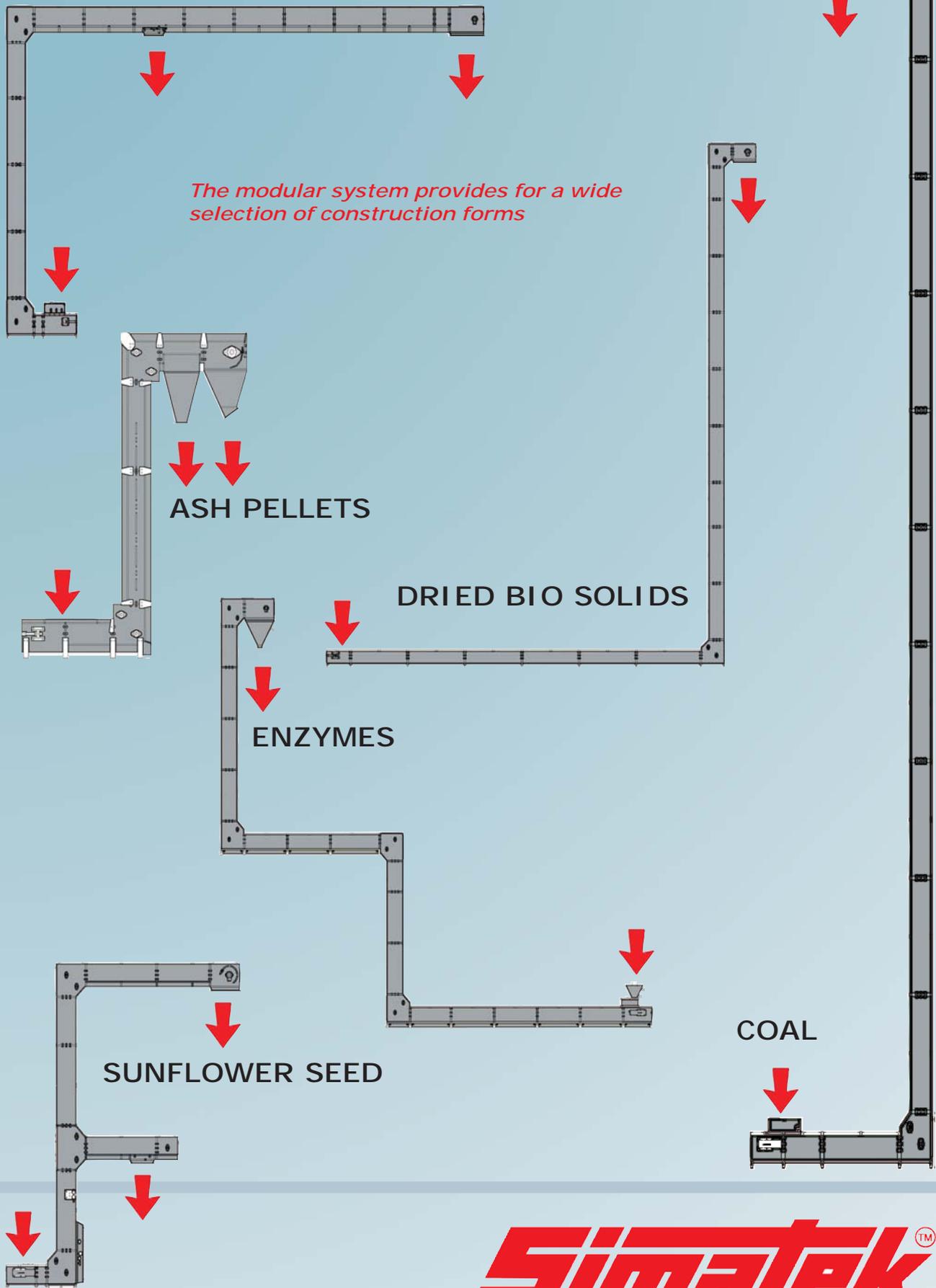


Simatek™

BULK SYSTEMS A/S



FERTILIZER



Simatek™

BULK SYSTEMS A/S

Cooling and Conveying



Pastilles



Simatek bucket elevator construction form T is also applied for cooling.



Gold Toffees



Simatek bucket elevator construction form A mounted in connection with a weighing system for chocolate and liquorice.



Chewing Gum



BULK SYSTEMS A/S

Abrasive Products

Simatek bucket elevators can profitably be applied for conveying abrasive products. The elevators are e.g. applied for conveying fly ash, gravel, stones, crushed marble, etc.

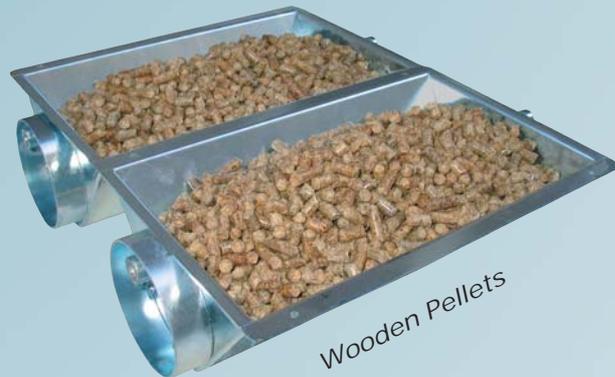
Aspiration should be established at in- and outlets.



Conveying of steel balls in connection with boiler cleaning.



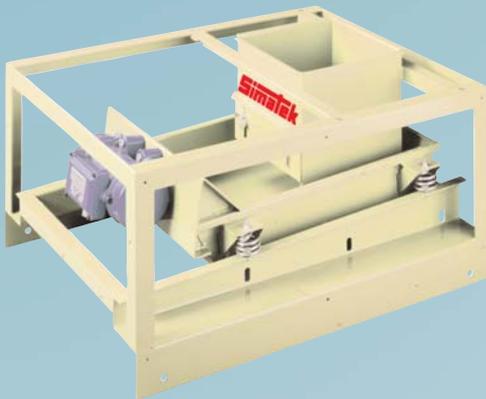
Conveying of crushed marble.



Accessories



Simatek Product Dispenser optimizes the capacity of the bucket elevator. The product dispenser ensures an optimum distribution in the buckets, a gentle product handling, and minimizes product waste. The speed of the elevator can thereby be reduced, and the capacity can be increased.



Simatek Vibration Feeder ensures continuous filling of buckets and minimizes waste. The vibration feeder can be connected to an aspiration branch, and the capacity is controlled via a variable motor control.



Simatek Automatic Chain Tensioner ensures same pressure on both chains.



By means of the **Simatek Automatic Chain Lubrication System** you will attain a lower power consumption, less noise, and higher operating reliability. The amount of oil can be adjusted very precise and thereby be adjusted to the current need.

Simatek™

BULK SYSTEMS A/S

Reliable Conveying



Reliable, non-stop conveying is a must in the pet food- and fish feed industries, where Simatek has supplied more than 300 Simatek Bucket Elevators over the years.

Thanks to a continuous development and a close collaboration with our customers, we have succeeded in developing a reliable elevator.

Our service department with specially trained staff offers qualified and regular service.



Production of fish feed.



At the fish plant Alitec in Chile, fish feed is conveyed in a Simatek bucket elevator, type 160, construction form F.

SimatekTM

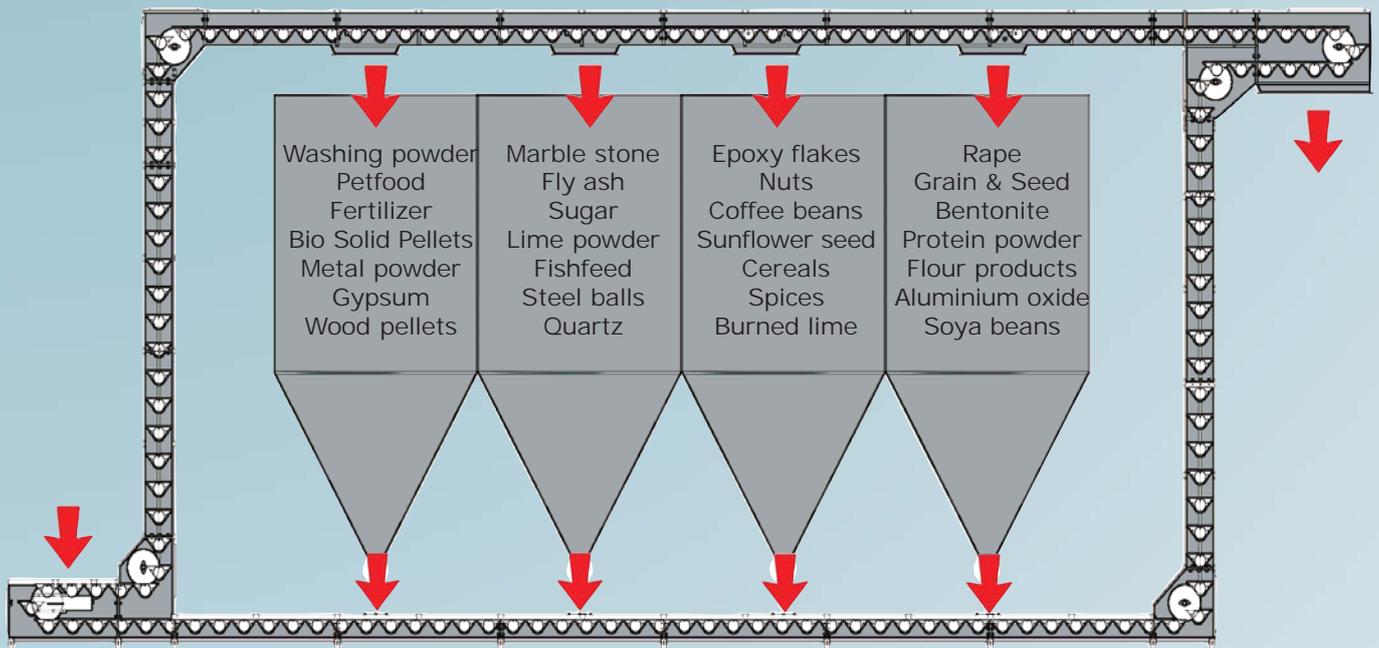
BULK SYSTEMS A/S

Test- & Exhibition Area



The test- and exhibition area presents a selection of exhibition machines and accessories within our product range of Simatek bucket elevators.

We should like to place our machines at your disposal for test conveying of various products.



Construction form „D“
 Elevator type 110E
 Capacity 26 m³/h at 20 m/min.
 Power consumption: 1.5 kW



BULK SYSTEMS A/S

Stainless Elevator Programme

Besides our standard elevator programme, we deliver our elevators in a sanitary execution with special focus on easy and efficient cleaning.

The elevators are manufactured in stainless steel with a smooth finish. They are built in an open design and equipped with inspection doors, which ensures easy access for cleaning and inspection.



Stainless bucket elevator at Kims (Denmark)

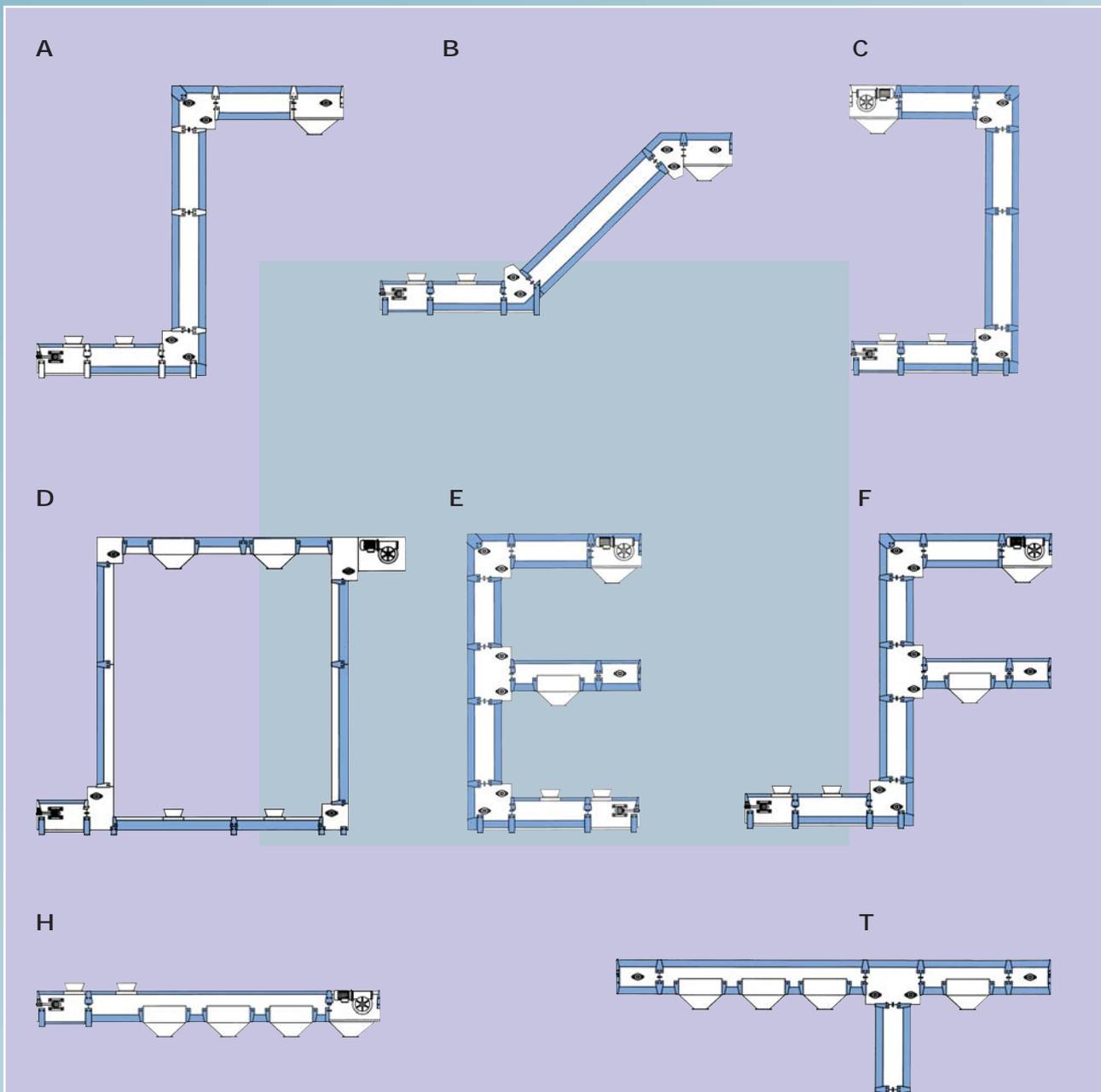


Production of stainless elevators for conveying of enzymes.

SimatekTM

BULK SYSTEMS A/S

Construction Forms



Simatek began production of bucket elevators in 1983, and constant development throughout the years has led to a broad programme in elevators as well as a programme in feeding systems and other equipment.

Simatek™

BULK SYSTEMS A/S

Simatek Bulk Systems A/S
 Charlottevej 8 - DK-4270 Hoeng
 Tel.: +45 5884 1680
 Fax: +45 5885 2443
 www.simatek-bulk.dk
 E-mail: bulk@simatek-bulk.dk