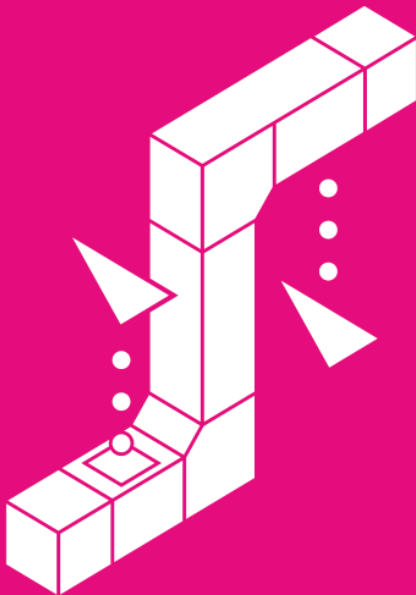


FACTSHEETBOOK

Bucket Elevator



Always moving dreams to reality

Standing on the shoulders of her ancestors, Claudia is the 6th generation of the Van den Pol family. A family of entrepreneurs that grew from a blacksmith that started in 1847 into a worldwide player in a niche market. Being a worldwide player, means Claudia and all Royal APOLLO employees are committed to enable Royal APOLLO customers to achieve their long-term goals. By providing excellent support with energy, drive and vision.



U.S.A.



Europe



HQ, the Netherlands



India



Thailand



China

Worry-free service

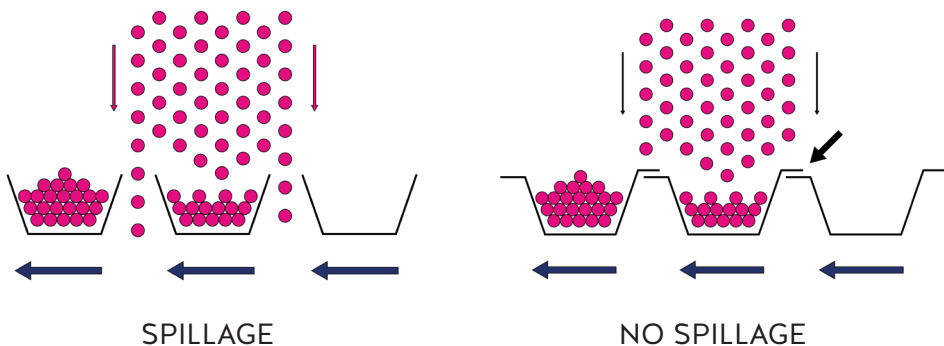
Royal APOLLO Group is the world's leading supplier of vertical conveying systems, pursuing the key elements of high-quality machines; developing the machine in cooperation with the customer, thinking in solutions, 24/7 customer service and flexibility.

Bucket Elevator

The bucket elevator specialises in handling irregular shaped items, as well as particulate or granular products such as grain or seed. They can be installed as stand-alone unit, or as a part of a total solution, linking other bulk material handling machines. We guarantee a high degree of durability, low noise and low power consumption in conveying operations.

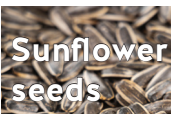
Available in three sizes, Royal APOLLO pendulum bucket elevators can cover extensive horizontal and vertical distances. This means users can replace combinations of belt conveyors and conventional bucket elevators by one bucket elevator, saving on initial investment as well on maintenance costs. No discharge from the bucket elevator onto the conveyor belt lowers dust levels and related pollution, which leads to a cleaner working environment.

An unique feature is that incoming product can be fed continuously into the pendulum bucket elevator which saves the need for an additional dosing system to feed the elevator. The edges of the buckets overlap in the inlet section which avoids that product falls through which helps to prevent spillage. The buckets also have a pivotal mounting in the chain which maintains their horizontal position throughout the the conveyor route, before they are finally tilted when the buckets reach the outlet.



Designed to handle

Bucket elevators are used in various industries due to its ability to handle a wide range of products. Whether it is large bulk transport of abrasive minerals in the mining sector, high temperature products in chemical processing or a chocolate manufacturer where dealt with stringent food safety regulations, all can be handled successfully with Royal APOLLO's bucket elevator. The bucket elevator originated from the agri sector and hence still a strong presence on seed and nut processing applications.



- The standard bucket and the detectable bucket comply with the following food regulations:



FDA regulation 21 CFR parts 101-190

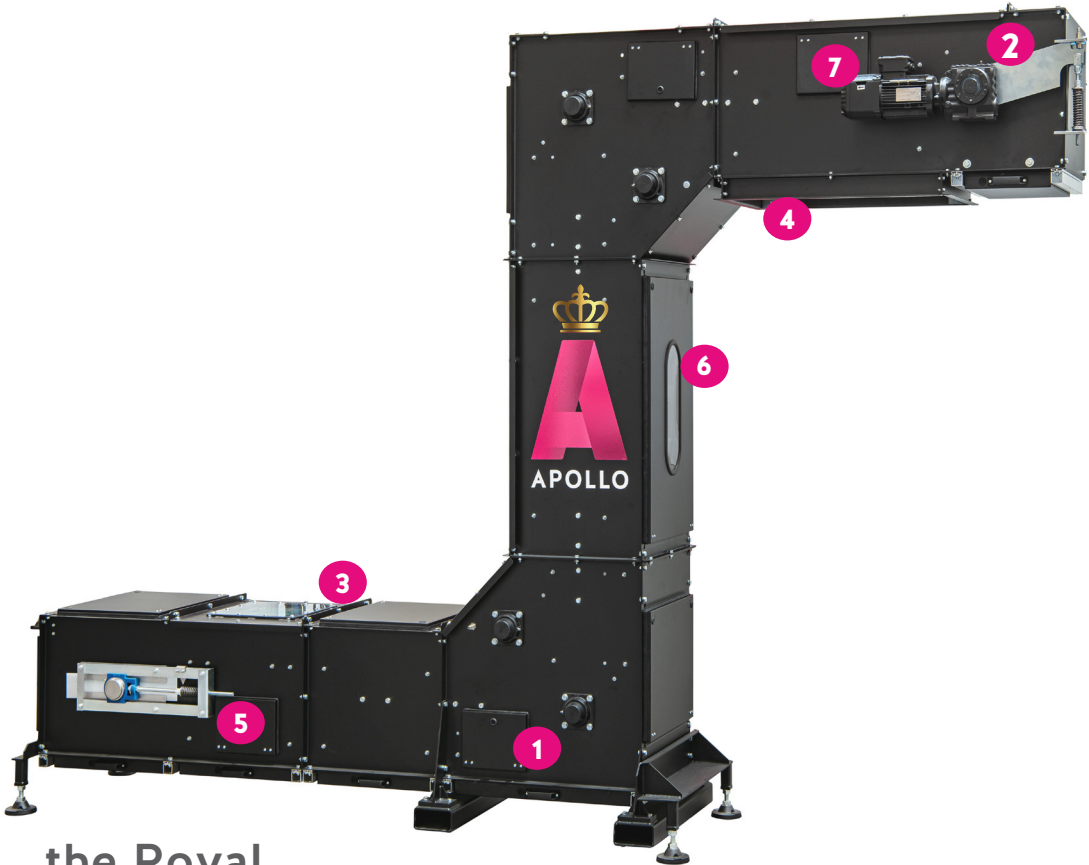


EC1935/2004, EU regulation 10/2011

Unique feature of the Royal APOLLO bucket elevator is that product can be fed continuously into the machine without spill. This thanks to the overlap of the edges of the buckets. An ancillary feeding system is not needed but can be used if desired.

Due to the pivoted mounting of buckets in the chain, buckets keep their horizontal position all the way around in the conveyor until they finally reach the outlet.

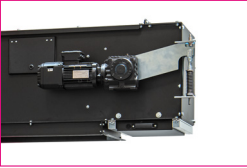
There, each bucket is tilted and the product falling out is gently led into the outlet hopper. The pendulum bucket elevator can be equipped with a number of several inlets and outlets. Inlets can work at the same time, while outlets are used one at a time, which means only one outlet is active momentarily.



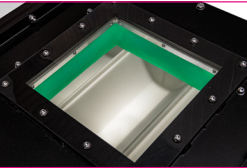
the Royal
APOLLO solution
for horizontal
and vertical conveying
in 1 machine



- 1 Chain break detection**
A sensor detects the rotation of the sprocket. In case of a chain breakage, the bucket elevator will be switched off to avoid further damage.



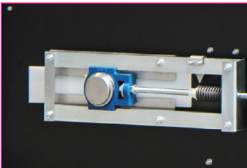
- 2 Overload switch**
An overload switch fitted on the drive station stops the drive immediately if abnormal torque is experienced, preventing possible machine damage.



- 3 Inlet**
The incoming product is fed to the pendulum bucket elevator continuously or batch wise. The edges of the buckets overlap each other in the inlet section and therefore prevent spillage of kernels.



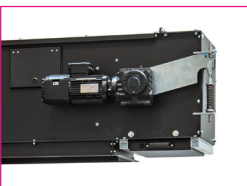
- 4 Outlet**
The number of outlets on a pendulum bucket elevator is flexible. The last outlet is always fixed, while additional ones are actuated pneumatically. Actuation occurs when the bucket reaches the unloading skate in the outlet section. When the unload ridge on the side of each bucket runs over the unloading skate, the bucket is gently tilted and empties. Additional outlets further optimise flexibility and enhance product handling.



- 5 Tension station**
Chain tensioning via manual spindles ensures high machine durability



- 6 Chain and buckets**
- Long life, high-tensile, chromated chain, with steel or nylon rollers (noise reduction)
 - Chain also available in stainless steel with stainless steel rollers
 - Standard buckets glass fibre reinforced polyamide
 - Buckets in compliance with food grade standards, FDA and EC 1935/04
 - Anti-static or detectable buckets are optional



- 7 Drive**
Solely high quality components are used to ensure optimal durability and minimal down-time. Geared motors on our bucket elevators are supplied by SEW. Their renown low power requirements reduce energy consumption and eventually costs.

Models and capacities

Models

As standard, the pendulum bucket elevator is supplied as a Z, I, C or CZ-version.

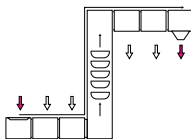
For special installations, the elevators are formed as a C-Z-version, an E-version or a double Z-version, referred to as the stair version. Additionally, other models can be supplied on request.

Capacities

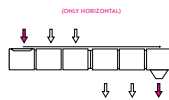
The pendulum bucket elevator is available in three different types based on a bucket filling degree of 75% and a machine design speed of 0,35 m/s.

- BE 100 for max. 10 m³/h
- BE 200 for max. 23 m³/h
- BE 600 for max. 59 m³/h

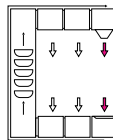
STANDARD INSTALLATIONS



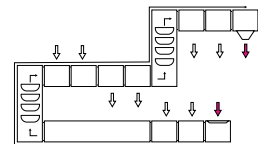
Z-INSTALLATION



I-INSTALLATION

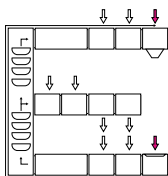


C-INSTALLATION

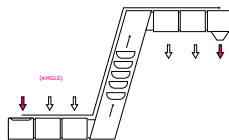


C-Z-INSTALLATION

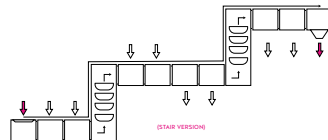
SPECIAL INSTALLATIONS



E-INSTALLATION



Z-INSTALLATION



DOUBLE Z-INSTALLATION

Assembly & maintenance

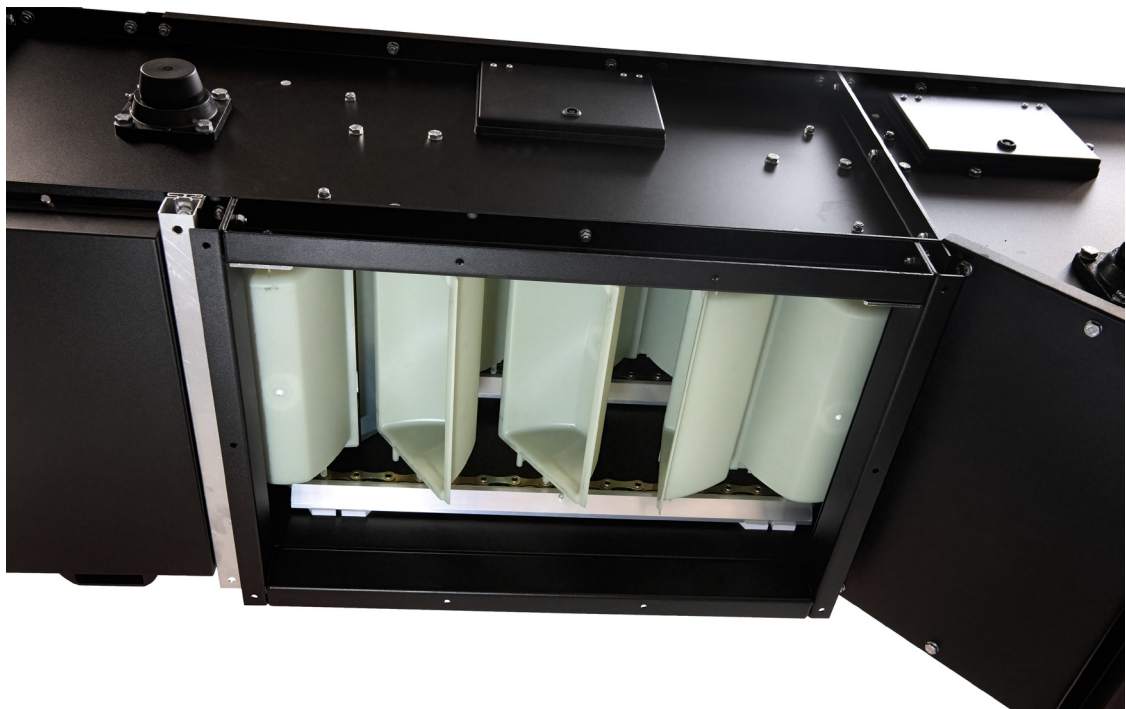
Modular sections of APOLLO bucket elevators are delivered to your site pre-assembled so interruption to your production is reduced to a minimum.

Generous maintenance doors and monitoring windows allow visibility and access to the inside of the machine for inspection, cleaning and maintenance.

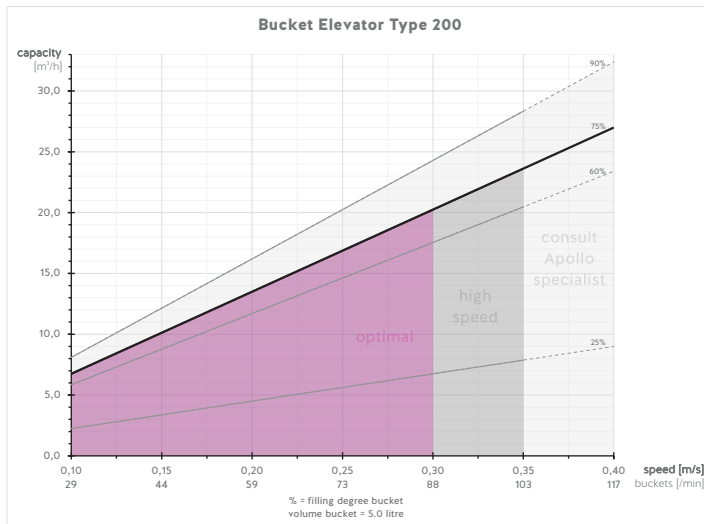
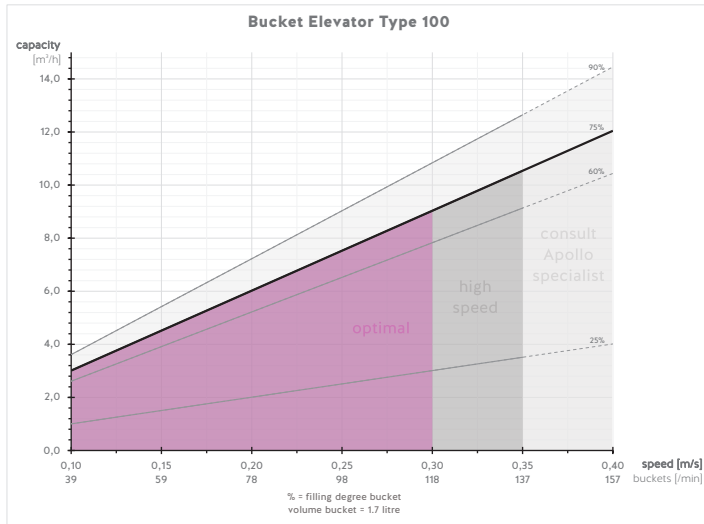
Any spillages can be easily removed out of the bucket elevator by means of the special spillage collection drawers in the horizontal sections as well by means of the numerous coverages which can be removed easily and quickly.

In addition to the physical maintenance manual video tutorials on the most common maintenance and repair jobs can be found on apollobv.com. To gain access, scan the QR code on the machine with the camera function of your smart device.

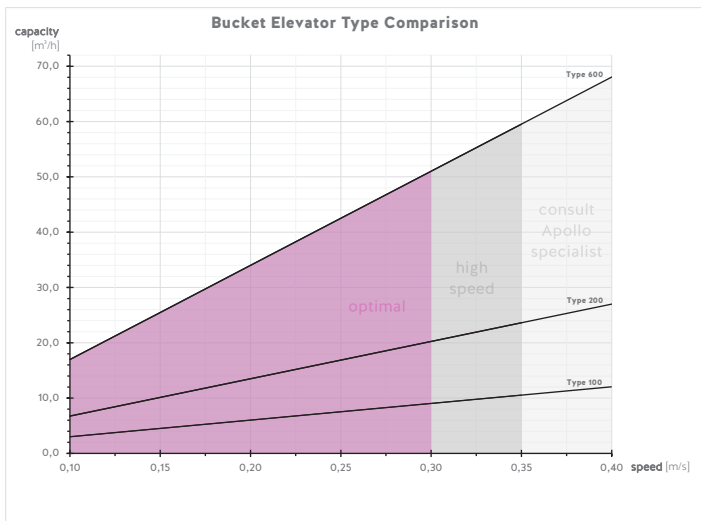
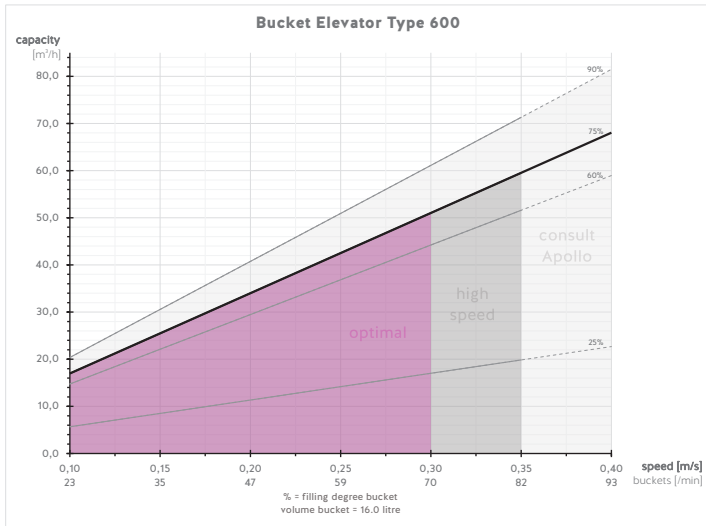
Maintenance
Instructions



Types



Types & Comparison graph



About the Royal APOLLO GROUP

Every day we strive to develop and deliver products and services that help our customers grow.

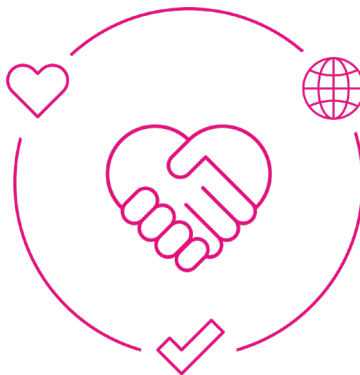
Royal APOLLO customers benefit from:

- 175 years experience
- Customised solutions to suit specific requirements
- Instant remote support service 'Apollo Assists'
- Stock of standard components for fast delivery
- Extensive range of accessories
- Global representation relying on our global Customer Support offices and Service Organisation

A global family driven company

Joyful workplace

The company feels like a playground, you can make mistakes, be open and vulnerable while at the same time, the energy is exciting, joyful and innovative.



Global partner

APOLLO's people show the joy, passion and expertise to develop the best machines & deliver the best service globally!

Everybody knows the direction of the company and the goals we have set. Everybody in his or her own way is actively contributing towards reaching our goals.

Result- and quality driven

Royal APOLLO is the company you need to talk to about your logistic challenges. We bring 175 years of experience. This is carried by our people, our vibe, our outstanding service and our innovative atmosphere. It's only obvious that we produce machines with the highest quality standards!

Contact

WHEREVER YOU ARE IN THE WORLD, A MEMBER OF THE APOLLO GROUP IS ALWAYS ABLE TO HELP YOU IN YOUR OWN CONTINENT, TIME ZONE AND LANGUAGE.

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International and APOLLO Service

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