Pendulum bucket elevator  

The pendulum bucket elevators produced by Cimbria can be delivered in three types, depending on the amount of product to be transported. This conveyor has the big benefit of combining both horizontal and vertical transport in one machine. Adding the very gentle way of transporting, the pendulum bucket elevator is the perfect conveyor for seeds and other sensible products. By means of using different speeds, there’s a wide range of different hourly capacities that can be reached.

Max. capacity m³/h | 10 | 23
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Type | PBE 10 | PBE 20

Cimbria pendulum bucket elevators are designed modularly and are normally painted. On request, galvanized or powder coated surfaces are also possible.

1. tensioning station:
This station is situated in the foot section as the first part. By means of turning a spindle, the tension of the chain carrying the buckets is easily adjustable.

2. inlet section:
The overlapping of the buckets in this section grants that all product inserted will go into the buckets passing by without any loss. Generally, a vibratory feeder should be used before the inlet to guarantee a harmonious filling of the buckets. The installation of several inlets is possible.

3. slots:  
The vertical and horizontal slots are delivered in a standard length. To reach the correct heights and lengths of the system, fitting pieces with specific lengths for each order are attached. The connection of the slots with each other and with the other stations is done by means of flanges that are screwed with each other.

4. corner sections:
These corner sections can either form an “L” or a “T”, thus being able to form various transport lines (please find schemas on page 2).

5. outlet section:
During the whole way through the pendulum bucket elevator, the buckets are always in a horizontal position. Only in the outlet section, the buckets are tilted by a lever that can also be operated pneumatically if several outlet stations are installed. In this case, one of the outlets is activated, all the others are not in operation and the buckets pass them by in horizontal position. The total rotation of the bucket at the outlet guarantees a complete emptying.

6. drive section:
This is the last station in the system. The gear motors have torque control (=overload protection) and a brake. Speed guard and variable speed are available on request. It is necessary to use a soft starter. Braking must happen temporally delayed after stopping the feeder.

7. buckets:
The buckets are made of plastic that can be food safe and antistatic on request. Stainless steel buckets and automatic bucket cleaning system are also available.

8. chain:
The metal chain grants long life and is easy to assemble by means of using simple master links. The buckets can be taken off the chain without any tools, therefore changing of buckets is very easy.