



Christiaens
Agro Systems



(SNACK/MINI/MIDI) CUCUMBER SORTING LINE



Operating principle:

Christiaens Agro Systems designed a machine for grading snack/mini/midi cucumbers. Products can be sorted on weight. It's also possible to make packages by weight. Another option is grading the cucumbers on size, shape and colour. A lot of options are possible, ask Your advisor for advice. Then the machine will be optimal for the way You want to work.

Film: <https://www.christiaensagro.com/en/products/mini-cucumbers#product-video-10>

Advantages:

Uniform Product because of high quality grading with high capacity
Maximum flexibility/options
Reliable and maintenance friendly

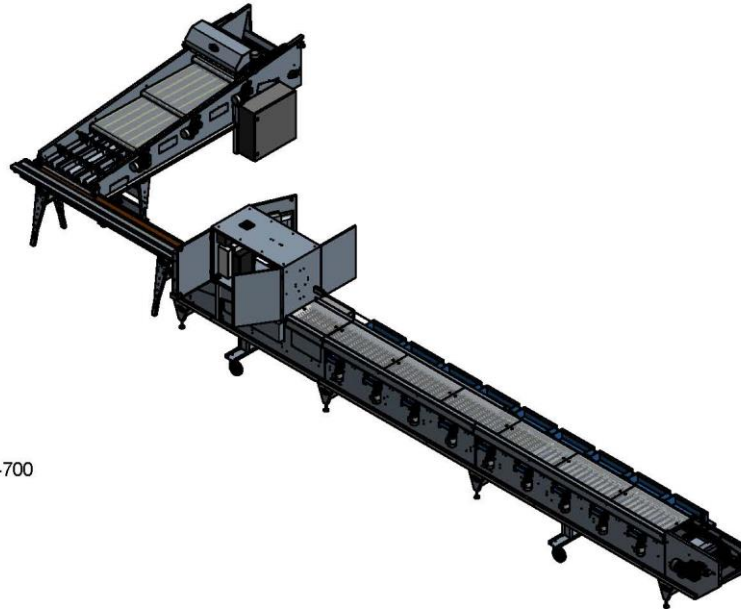
Options:

Logistics, Robotics, Infeed system

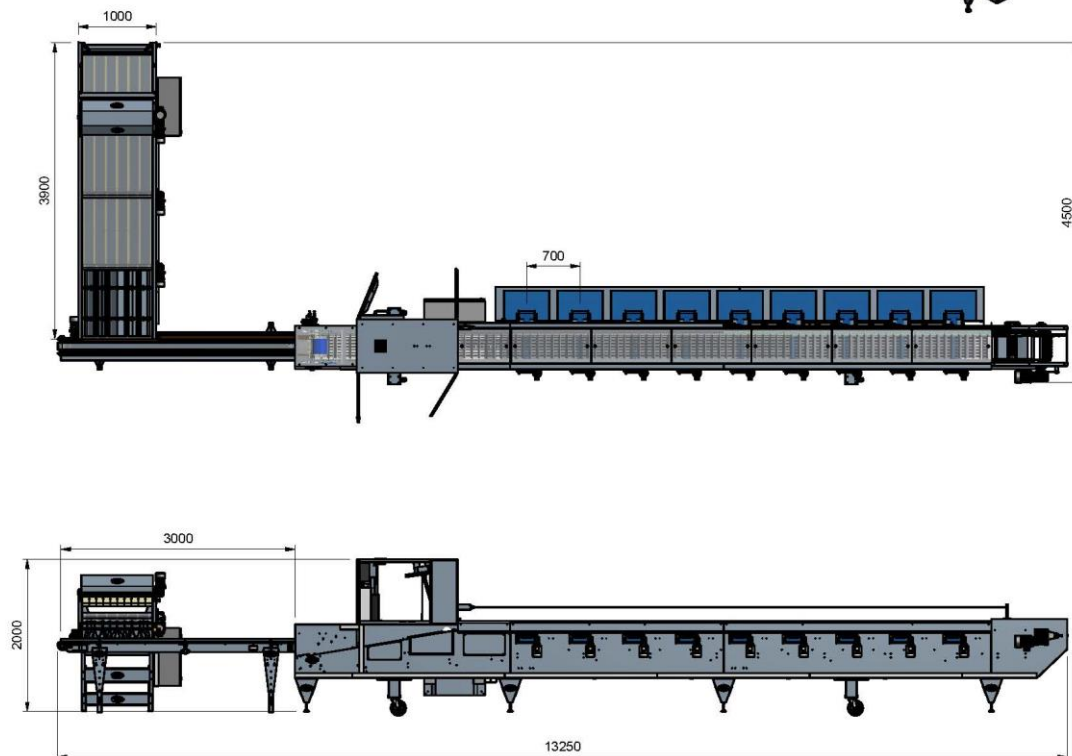
Technical Data	
Length	13.500mm (depending on setup)
Length infeed belt	3.000mm (depending on setup)
Width	1.300mm (depending on setup)
Height	2.000mm
No of exits	Max. 40 (depending on setup)
Capacity	30.000 pc/h with an infeed system
Power supply	16A 400V 50Hz 3ph+N+pe



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525-9-700





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Infeed System:

Length +/- 4.000 mm, Width +/- 1.000 mm. To create a buffer and reach the desired capacity we use an infeed system. It is made of 4 different belts each with a different speed to be sure the cucumbers are aligned. The speed of each belt is adjustable. The last belt feeds the input part of the grading line. Along this system it is possible for workers to do a first manual grade of the snack cucumbers.

Input part:

To create a buffer, and to reach enough capacity, a feeder belt is mounted to the machine. Belt is equipped with V-belt conductor and risers, 40mm from each other, on the top that will make it easier for the cucumbers to lay straight. Belt is driven by the grading machine. The frame is adjustable in height. Design frame stainless steel 304. On the end there is a separating part to take over the product from the input belt to the cups of the grading line. There is also the possibility of extending the machine with a mechanical system for removing flowers of the cucumber if cucumbers are laid manual on the infeed belt with all flowers to the same side. (Not possible in combination of the infeed system).

Grading:

The system can be suited for grading the product on length, thickness, curvature, colour, and weight. Inside the machine is a rotation system for better camera pictures. Rotating of the products depends on the straightness of the product. When weighing, a load cell is used that weighs each individual product. The system can count the numbers or measure the weight per mini cucumber and the total set weight per exit. An accurate fill program can also be used to make packages with as little given away weight as possible.

Note: whenever you use the weighing unit you have to be sure that the floor is free of vibration. If heavy transport is done next to the machine this will influence the accuracy of the weight.

Exits:

From the cups of the sorting line, the product falls on belts. At the end of the belts, the product can fall directly into the boxes or bins. When a small package is made by weight, it remains on the end of the belt. A lamp with a push button is mounted at the end of the belt. When the preset weight or number is reached, the lamp lights up and the exit is closed and the mini cucumbers go to the other exit. When the full box has been changed or a package has been removed, the exit is released again with the push of a button. When all exits are closed, the mini cucumbers go to the last exit. This last rest exit is also used for mini cucumbers that fall outside the set specifications. A maximum of 40 outputs can be mounted.

Logistics:

A crate plate can be mounted for each belt to buffer empty trays and as a work table. Various logistics systems can be mounted to packaging, label and palletizing machines. This is custom logistics.