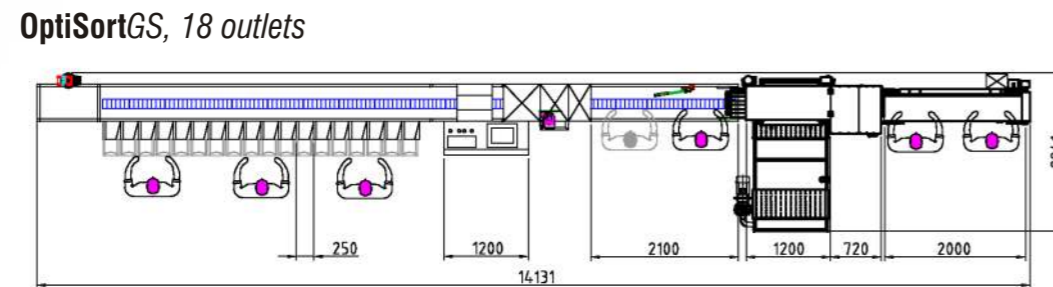
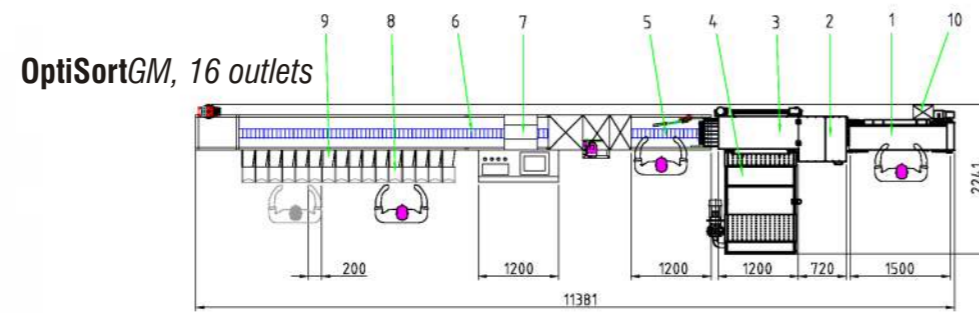
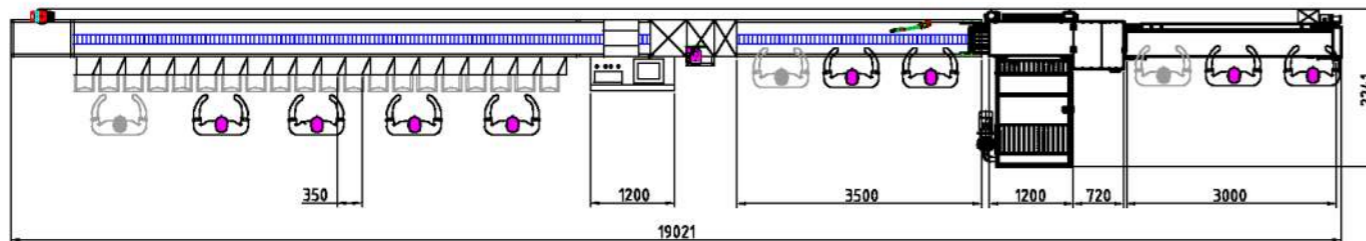


Asparagus Grading Line G-Series

The grading line for white and green asparagus



OptiSortG, 20 outlets



Components of the machine:

1. Infeed belt
2. Precutting unit
3. Washing unit
4. Water recycling unit
5. Separation and cutting unit
6. One-lane grading line
7. Optical recognition
8. Chutes and collecting cups
9. Deposit for boxes above the outlets
10. Scanner

Options

- precutting:**
The spears are cut to 250 mm prior to washing.
- cutting on the machine:**
The asparagus are adjusted in the machine and cut to a preset length.
- bunch signal:**
visual flashing signal which indicates that the preset weight in a chute has been reached
- transport belt/roller conveyor:**
for the transportation of full boxes

- waste removal belt:**
to remove asparagus wastage from the precutting, main cutting and additional cutting units
- ascending waste removal belt:**
to remove asparagus wastage
- bar code scanner:**
for the registration of
- harvest date
 - field
 - harvest assistant
 - group of harvest assistants during the sorting process

type	speed spears/h	number of chutes	max. number of sortings
OptiSort GM	max. 21,600	16 – 30 (according to customer specifications)	15 – 29 + 1
OptiSort GS	max. 32,400	16 – 60 (according to customer specifications)	15 – 59 + 1
OptiSort G	max. 43,200	20 – 80 (according to customer specifications)	19 – 79 + 1

The standard number of chutes and the number of sortings available on our machines can be modified to suit your individual needs with up to 128 sortings possible. The machines are subject to technical modifications.



Optional: **Additional cutting unit** on the line to cut the asparagus to a preset length



Floating basin in front of the infeed belt to facilitate the removal of the asparagus from the boxes as well as a waste removal belt system to collect and remove asparagus wastage from the cutting units



The asparagus grading line G-Series is the ideal optical grading machine for short and long white and green asparagus with a capacity of up to 43,200 spears/hour.

High-performance

The ergonomic and simplified workflow ensures an optimal flow of goods and therefore results in an increase in productivity with a cost minimisation simultaneously.

Individual

We will build "your" grading machine specifically to your needs. The infeed of asparagus as well as the complete removal system will be customised and the numbers of outlets can be freely selected.

A special focus should be placed on our well-proven cleaning system. The dirty asparagus is washed from above and below by purpose-built spray nozzles to obtain a best possible degree of purification which is necessary for optimum grading results as well as for a clean and fresh display of the product in the store.

The **OptiSort G-Series** features the easiest separation of the asparagus directly into the grading cup. There are no additional transfer areas – the asparagus spear is assigned to one cup during the grading process so that discrepancies in grading are impossible.

The asparagus spear is scanned multiple times and therefore it is possible to recognize the entire surface of the spear, compared with 23 grading criteria and afterwards graded. Based on the grading criteria, as many individual programs as required can be set up and saved. These programs can then be loaded at any time to change the current grading settings.

After the grading process it is possible to make an analysis per piece or per kilogramme for the harvest assistant, group of harvest assistants, field, grading class as well as grading machine. This analysis can be effected by the use of a provided or an external programme.

The **OptiSort G-Series** for asparagus is the most durable and require the least amount of maintenance compared to other models available on the market. Moreover, our service team can assist you at any time by means of remote access to your equipment and in case of an emergency, will put forth every effort to be on site within a minimal amount of time.



Open doors: Our grading software calculates the weight of the asparagus by its volume. The chutes are each equipped with a flap – „open door“ – that will open as soon as the predefined weight has been reached and transport the package into the collecting cup underneath.



Small washing unit: The small version of the washing unit is sufficient if your asparagus is quite clean after having been harvested. This compact pre-cutting and washing unit has been designed especially to rinse any possible remaining dirt from green asparagus spears.



If the asparagus to be sorted is dirty, it needs to be washed from above and below by specially designed spray nozzles through the filter belt



Scanner with display for the registration of harvest assistant, group of harvest assistants, harvest date and field which was harvested. The registration of these data enable the user to make an analysis per field and per harvest assistant

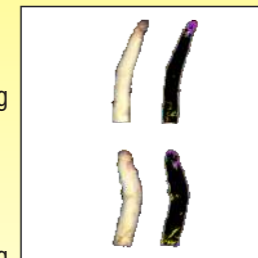


Transport belt on the line, roller conveyor curve, roller conveyor to remove full boxes

23 grading criteria

Typical grading criteria we use:

- diameter (lower or middle part of the spear)
- length
- curvature
- S-shape
- curvature of the head
- shape of the spear
- shape of the tip (flowering)
- neck: violet, light violet, green, light green/discolouring (yellow), rust
- spear: violet, light violet, green, light green/discolouring (yellow), rust, light rust, rotten parts



Colours separately for head, neck and spear (white asparagus):

- head: violet, light violet, green, light green/discolouring (yellow), rust

Colours separately for head, neck and spear (green asparagus):

- head: violet
- neck: violet
- spear: violet, white

