

# Herbert Oculus

Intelligent Optical Sorting



**HERBERT**

**OCULUS**

Intelligent Optical Sorting



**A new vision in optical sorting...  
for washed carrots**

More accurate, more efficient, more consistent and more effective

T: +39 030 2594 201 F: +39 030 2594 212 E: [info@sgorbatigroup.com](mailto:info@sgorbatigroup.com)

[www.sgorbatigroup.com](http://www.sgorbatigroup.com)

# OCULUS

Intelligent Optical Sorting



## The next generation in intelligent optical sorting



**OCULUS** heralds the next generation in high performance, compact, optical sorters for washed carrots.

Available in two sizes, 1300 and 2000, **OCULUS** development is an exciting advance in optical sorting that delivers more accurate, more efficient, more consistent and more effective sorting. This means better quality produce for end users and lower costs for growers, packers and processors. **OCULUS** also provides better quality throughput, ultimate flexibility of grading, increased detection of reject produce and, importantly, better food safety.

**OCULUS**: from Herbert Engineering, the leaders in handling systems for the agricultural, fresh pack and processing industries.

Designed for  
quick easy clean  
down and routine  
maintenance



Improve throughput, increase quality and consistency, improve food safety and save costs...

- Up to 16 images of the surface of each individual carrot
- Roller system that provides a complete 360° rotation of the tuber
- Sorts by size, shape, colour and texture of the surface
- Highly accurate grading for food safety defects, including rot, mechanical damage and growth cracks
- Flexible sorting into two grades with any grade directed to any outfeed
- Outstanding gentle handling of the crop with low drop points
- High grading performance: up to 95% efficient
- Detailed data collection of grading results and throughput, with data easily exported to an Excel document

Reduces your labour requirement and gives excellent return on capital investment







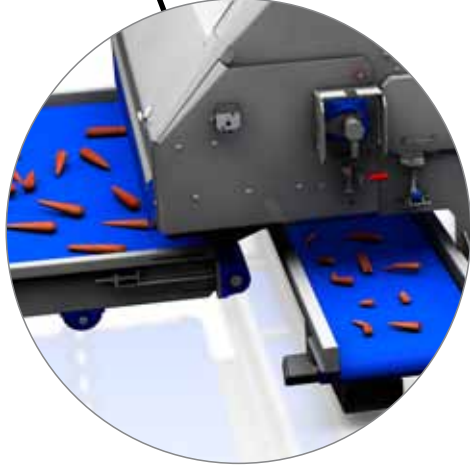
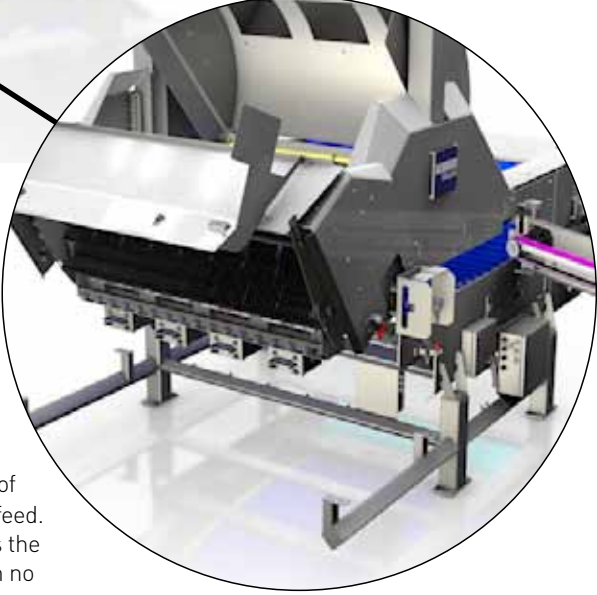


**Higher throughput**  
Wider rollers and more controlled presentation guarantees better vision, increased accuracy of sorting and 10% higher throughput

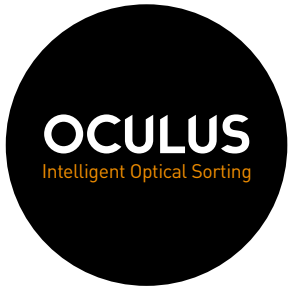
**360° vision**  
More comprehensive sorting with 360° vision and new roller design to allow up to 16 pictures of each tuber for exceptional accuracy of defect identification

**Space saving design**  
1M shorter so takes up less space and easier to fit into existing operations

**Easy cleaning and low maintenance**  
New exoskeleton design means fewer parts, with more accessible easier maintenance



**Multiple choice 2 way sort**  
Greater flexibility as any grade of crop can be directed to any outfeed. Low drop design makes Oculus the most gentle in the industry with no product damage



## More accurate, more efficient, more consistent and more effective

### Simple design with easy maintenance

With an advanced process industry design specification that uses fewer moving parts, installation, maintenance, downtime and running costs are all reduced. Cleaning is easier too with stainless steel construction and no bug traps.

### Intuitive software

New look, simplified software is highly intuitive and easy to use. The thumb-friendly touch screen is designed for a factory environment and analysis and data is easily saved to an Excel document. The computer will indicate why it rejects or accepts specific tubers giving the operator the option to decide whether or not the parameters need adjusting.

### Exceptional accuracy

Oculus features remarkable 360° vision. This enables easy and effective inspection of every part of the carrot, infrared cameras for the most effective identification of defects, LED lighting and the latest digital colour cameras delivering market leading resolution of down to 0.25mm sq pixel size with up to 16 pictures of each carrot for exceptional up to 95% accuracy of defect identification.

### More for less

In designing Oculus, Herbert has engineered a more efficient sorter that is simpler, easier to operate, with fewer moving parts and with a smaller footprint. This also means that Oculus is offered at a very competitive price, making it excellent value for money.

### System Optimisation

Many washers have the capacity to go faster than manual inspection allows. Oculus gives users the opportunity to wash at their most efficient running capacity with most of the inspection done prior to human interaction.

More tonnes per hour of carrots with fewer people in less time equals improved returns on investment. If fed into a Herbert holding bin, packing weighers will always have a constant supply of produce reducing unnecessary stopping and starting of the washing process and Oculus.

### Intelligent design

Oculus' ergonomic design gives improved lines, a better and more attractive machine, as well as being smaller. Set up is also faster and easier, saving time and minimising line disruption.

**OCULUS** effectively and efficiently sorts for surface abnormalities and diseases, such as bumps and notches, skin discolouration and common defects like:

Split & Cut



Mishapes



Skinny & Fat

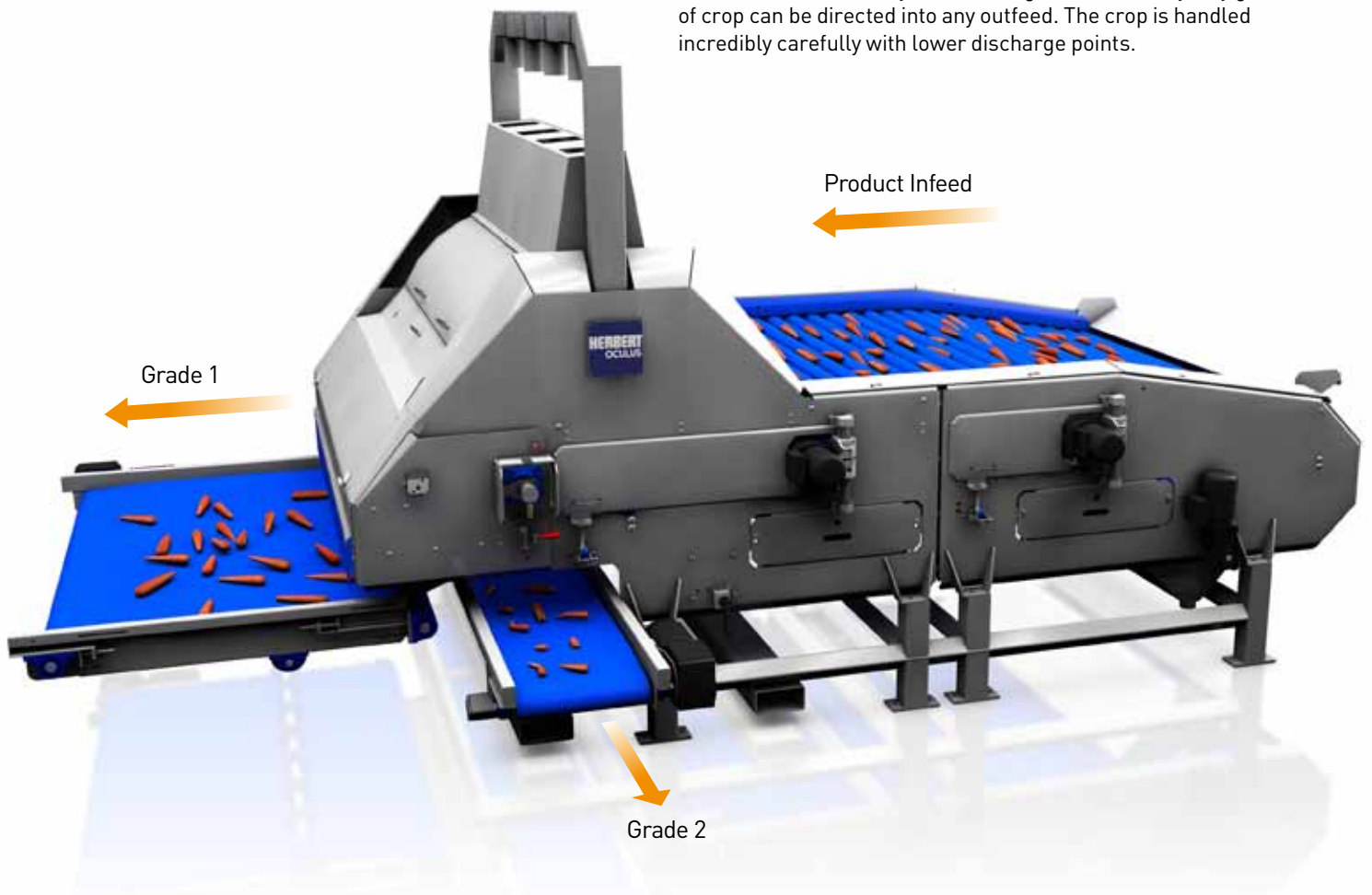


Broken



## The most gentle handling system on the market

The new finger bank assembly gently directs produce into three different outfeed conveyors and, for greater flexibility, any grade of crop can be directed into any outfeed. The crop is handled incredibly carefully with lower discharge points.



## After sales

After you buy an Oculus, Herbert Engineering is still here to support you. Our inclusive training package means that your operators will receive three days set up and training on the Oculus, at no extra cost, to ensure that you will gain optimum performance and efficiency from the machine.

## Class leading warranty

The Oculus warranty includes technical remote access support and a six month service with full inspection and calibration. If you should encounter any problems with your Oculus, our engineers are always on hand and will support you all the way.

Discoloured



Green End



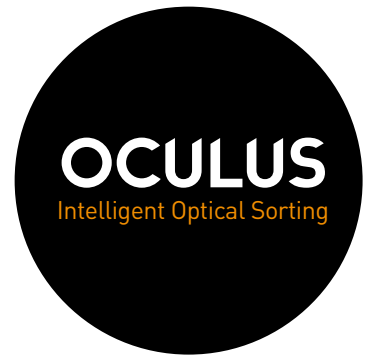
Spots



Selected



# Technical Data



**OCULUS** has been engineered using Herbert's 40 years' experience and is designed wholly around the needs of customers, incorporating key features developed specifically with industry experts.

Both models are available with 2 way sort	Oculus 1300	Oculus 2000
<b>Capacities</b>	<b>up to 5 tph</b> (medium carrots)	<b>up to 8 tph</b> (medium carrots)
<b>Utilities</b>		
Air	2 L/S @ 6 Bar	3 L/S @ 6 Bar
Water	2 Bar Minimum	2 Bar Minimum
Electricity	40A 3 Phase + Neutral	40A 3 Phase + Neutral
<b>Dimensions</b>	<b>1300</b>	<b>2000</b>
Length	4120	4120
Width	1697	2397
Height	2344	2500

## Options

### ● Infeed Options

A range of infeed solutions can be provided to ensure an optimum distribution of produce to Oculus. These include vibratory infeed unit, elevator and conveyors.

### ● Outfeed Options

Options are available including a discharge conveyor, roller inspection table or cross conveyor.



**SGORBATI GROUP srl**  
Via Papa Giovanni XXIII, 83  
25086 Rezzato (BS)  
Italy  
**T:** +39 030 2594 201  
**F:** +39 030 2594 212  
**E:** [info@sgorbatigroup.com](mailto:info@sgorbatigroup.com)  
[www.sgorbatigroup.com](http://www.sgorbatigroup.com)