



**AWETA**

# AVOCADO SORTING SOLUTION

[AWETA.COM](http://AWETA.COM)



# QUALITY SORTING

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AWETA

## QUALITY SORTING

**The face of agriculture is changing. A change driven by substantial growth in the world's population and an increasing demand for more varied, healthier, and higher-quality food. Aweta has responded to this appetite for change with cutting-edge avocado sorting technology.**

Our state-of-the-art sensor systems analyze all internal and external characteristics to determine the quality of the avocado and provide a perfect sorting result while simultaneously reducing costs and labor.

In addition to the best sorting technology available, Aweta provides the logistical solutions you need for an efficient avocado packing operation including bin handling, avocado transportation, and palletizing.

We understand that to improve margins you need a partner to help you improve your quality while reducing your operational costs, increasing your return on investment. That is what keeps you ahead of the competition.



**Otto Vink**  
CEO Aweta





## INFEED SYSTEM

With over 55 years of experience we are here to help you find the optimal solution for your specific avocado infeed system challenges.



### MANUAL INFEED

Manual dumping of crates.  
Front / side infeed.  
Flexibility in cartons & crates.

### AUTOMATIC INFEED ROTARY DUMPER

Automatic and continuous crate emptying.  
Most gentle discharge possible.  
High capacity.  
Labor reduction.



### AUTOMATIC INFEED BIN DUMPER

The bin dumper ensures your products to be carefully transferred into the sorting machine in a constant high production flow, whilst reducing labor. Both wet and dry solutions are available.





**CUPSIZER**

**ROLLERSTAR**

**TWINCAMERA**

COLOR & DIAMETER

ARTIFICIAL INTELLIGENCE

**TWINVISION**

EXTERNAL QUALITY

**INSCAN PULSE**

INTERNAL QUALITY

**AFS SENSE**

FIRMNESS



## GRADING & SENSORS

There is an increasing demand for higher external and internal quality. Esthetic appearance is the main decision criteria for purchase. Internal quality (texture, taste, and absence of internal defects) is linked to aspects that are not generally perceived externally but are equally important to many consumers.



## CUPSIZER

THE CUPSIZER ALLOWS  
ACCURATE WEIGHT  
MEASUREMENTS  
REDUCING LABOR COSTS  
AND WEIGHT GIVEAWAY.



### CUPSIZER

## AT SOURCE GRADING

The cupsizer is specifically designed to handle both your round avocados as well as your greenskin avocados. Thanks to the designed unique brushes and cups our automated singulator can align and rotate your avocados without manual operators. Ensuring perfect singulation of your avocados, optimal camera presentation, and accurate weight measurements reducing labor costs and weight giveaway.



## SINGULATOR

Very robust design.  
Extra thick shafts.  
Ensures perfect singulation.  
Rotation of single product for optimal camera presentation.

## MAIN GRADER

Fruit friendly, quiet, accurate.  
Low cost of ownership.  
Maintenance friendly.



## HIGHLIGHTS

Saves costs on labor.  
Weight optimisation.  
Reducing weight giveaway.  
Sensor options: weight, color, diameter.  
Twinvision – external quality.  
Inscan pulse – internal quality.



## ROLLERSTAR

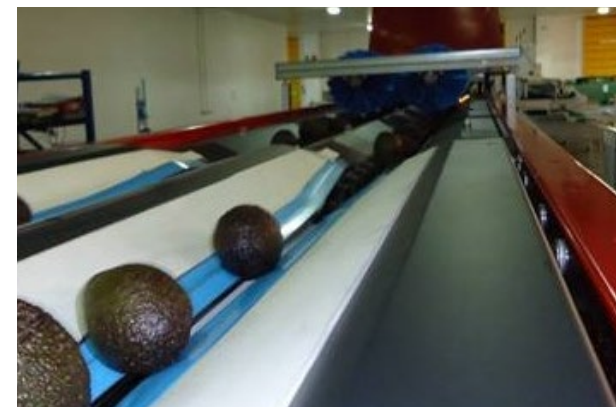
THE AWETA  
**ROLLERSTAR IS FAST,  
SMOOTH AND THE  
MOST EFFICIENT  
SORTING MACHINE ON  
THE MARKET.**



### ROLLERSTAR

## READY TO EAT AND AT SOURCE GRADING

The Rollerstar is your choice when it comes to a sorting machine at source and after ripening. The spreading belts ensures a smooth transfer onto the carrier. From there the carrier's mid-positioned rotating axis ensures a gentle transfer to the outlet-brushes.

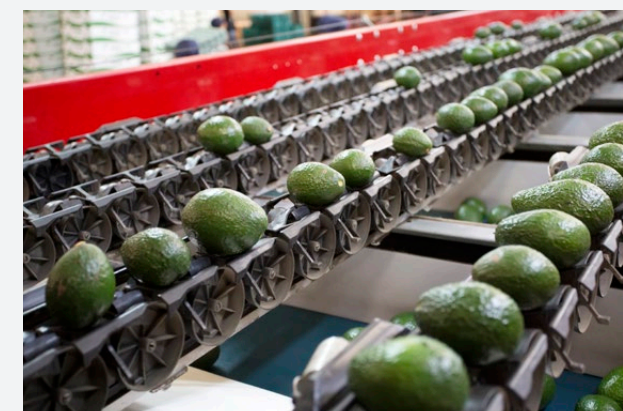


## SINGULATOR

Patented design.  
Robust design.  
Spreading V-belts.  
Ensures perfect singulation.  
Optimal camera presentation.

## MAIN GRADER

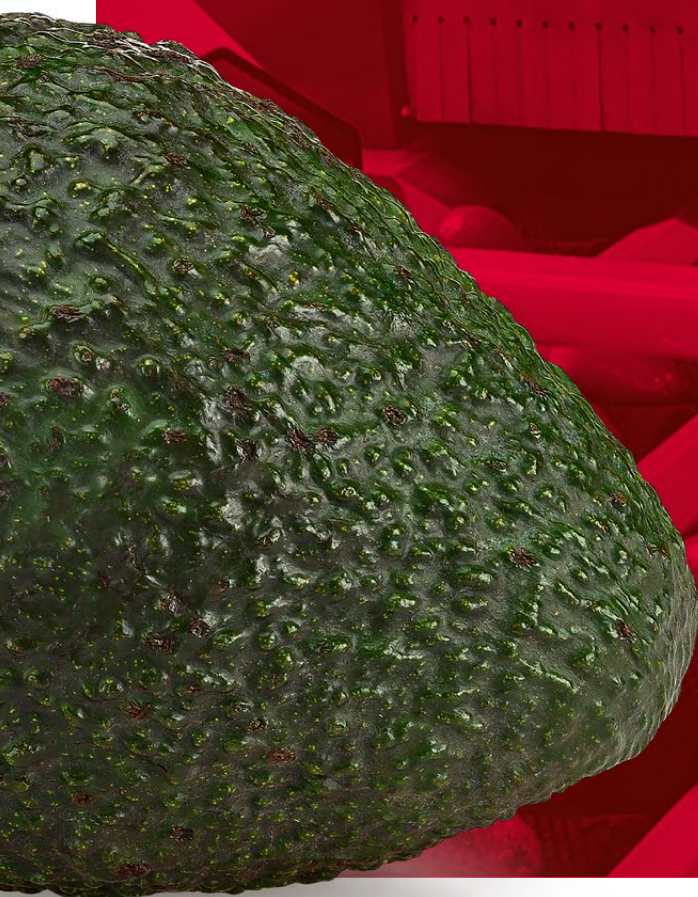
Accurate weight measurement.  
Automatic chain lubrication system.  
Automatic chain tensioning system.  
Two side tipping from carrier.  
Each lane is powered individually



## HIGHLIGHTS

Fast, smooth, and efficient sorting machine.  
Sensor options: weight, color, diameter.  
Twinvision – external quality.  
Inscan pulse – internal quality.  
AFS Sense – firmness.





**TWINCAMERA**

COLOR & DIAMETER

ARTIFICIAL INTELLIGENCE

**TWINVISION**

EXTERNAL QUALITY

**OPTIMIZE** BATCH  
QUALITY TO **ADD**  
**VALUE** BY **SATISFYING**  
**THE NEEDS** OF YOUR  
DIFFERENT MARKETS  
AND CLIENTS.

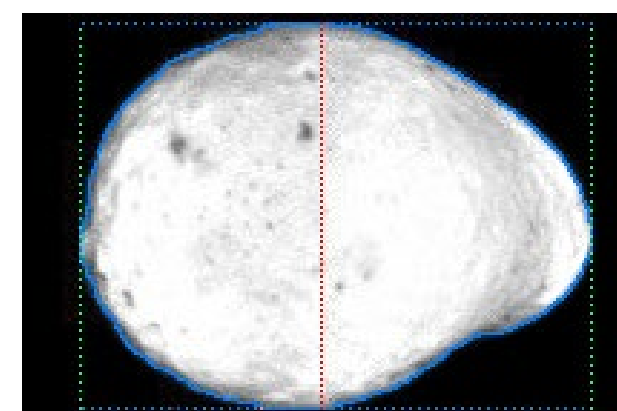


## COLOR & DIAMETER

The Twincamera camera system use multiple cameras to take images from 2 sides simultaneously in order to determine color & diameter of your product.

## EXTERNAL DEFECTS

The Twinvision camera system creates a full 3D representation of your avocados. It can identify and grade defects based on individual characteristics instead of solely by color and diameter alone. The camera system can detect on- skin defects such as mechanical damage (light scars, limb rub, etc.), and through-skin defects such as rot, sunburn, stem-end-rot, and cracks.



## SHAPE & SIZE

The Twinvision camera system can make a distinction between shape and size and sort accordingly by width, length, volume, and density.

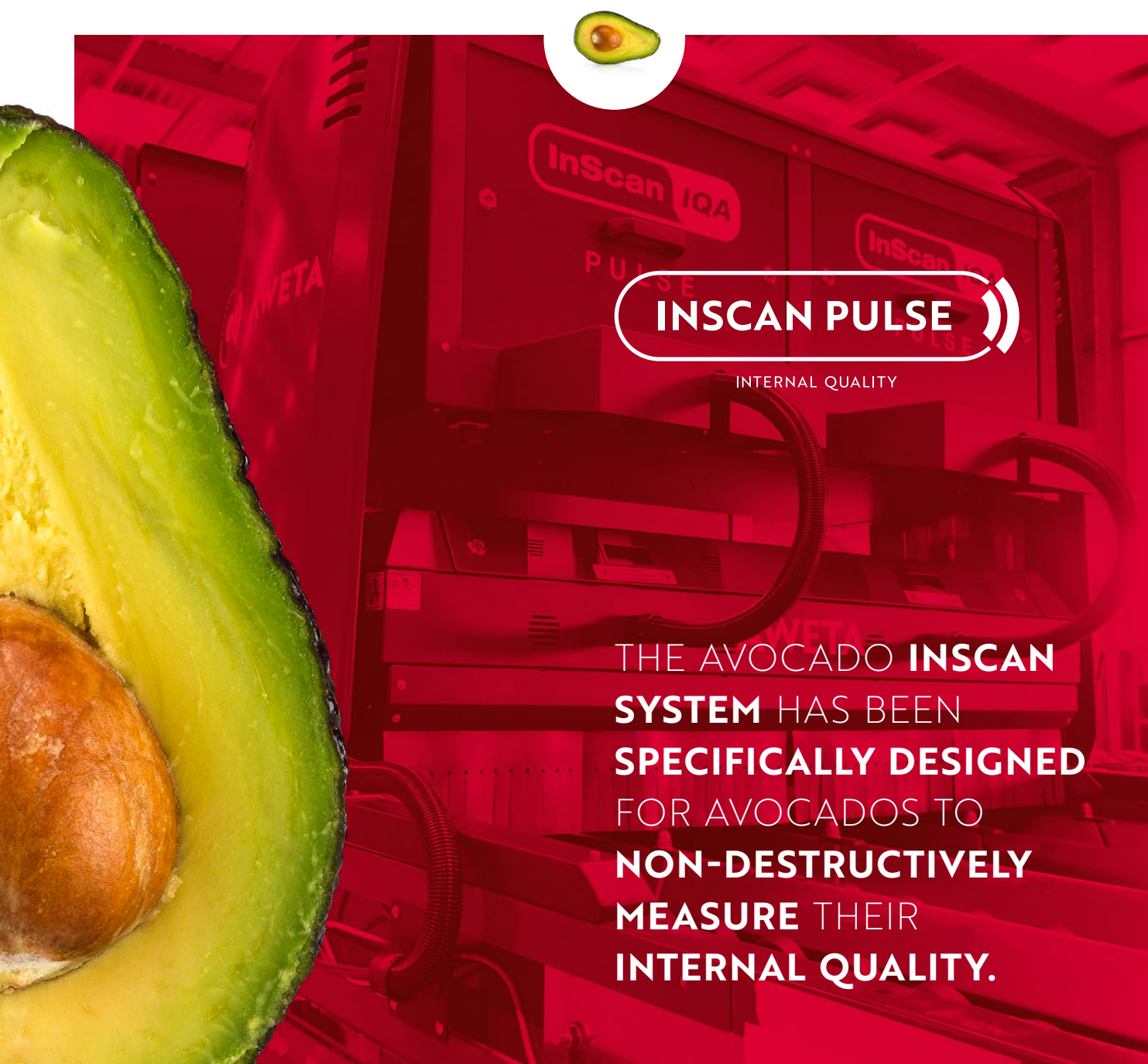


TWINCAMERA & TWINVISION

## EXTERNAL QUALITY

Both camera systems each have their unique capabilities when grading avocados. The Twincamera system is specifically designed to grade your product by color and diameter. The Twinvision camera system works with a variety of user defined quality sorting parameters allowing each product passing the cameras to be sorted into a specified category. With the use of Artificial Intelligence, deep learning and our state-of-the-art product sample libraries, you are ensured to have the best sorting solution possible.





INSCAN PULSE

## INTERNAL QUALITY SCAN

The avocado Inscan system has been specifically designed for avocados to non-destructively measure their internal quality. This allows you to remove the internal browning or internal decay from your batch, yielding a perfect product to your customers.



## INTERNAL QUALITY

The avocado Inscan system will allow you to remove the vascular browning, or internal decay from your batch in order to meet customer demand in creating a homogeneous batch.

## DRY MATTER

The Inscan sensor determines the dry matter content for optimum taste.



## FIRMNESS

The Inscan system gives a non-destructive evaluation of the maturity and firmness of avocados.





**AFS SENSE**

FIRMNESS

**AFS SENSE** IS YOUR  
CHOICE WHEN YOU  
**NEED TO CREATE**  
UNIFORM FIRMNESS  
BATCHES.



## FIRMNESS INDEX

Creates a more precise, reliable, and consistent result to meet market demand for uniform firmness batches. With the ability of sorting the commercial classes: too soft, ready to eat, triggered, and hard.

## ACOUSTIC MEASUREMENT

Two different methods inside one sensor. It combines the acoustic response with the surface elasticity measurements.



AFS SENSE

## FIRMNESS

Our Acoustic Firmness Sensor (AFS) measures the firmness and elasticity properties of your product across the surface of the avocado, guaranteeing a global result instead of a local result.



## ROBUST PERFORMANCE

No need for any calibration or modelling.  
Non-destructive.  
Measurements on every single avocado.





## PACKING

Aweta provides tailor-made, unique, and versatile packaging system solutions in accordance with individual requirements of the customer and its retailers. All packaging can be labelled with the date of production and any other desired information, enabling accurate track-and-trace in compliance with the latest produce traceability standards.



### MANUAL PACKING TABLES/STATIONS

Products can be fed into the exits continuously or per exact weight/count batch before manual packed into a box or crate. Full boxes or crates can be transported by chain conveyors to be labelled with the date of production and all other desired information, enabling accurate tracking and tracing.

### BOX FILLER

The full automatic box filler fills your boxes or crates with avocados. This solution includes automated feeding of the empty and discharge of full boxes or crates.



### FLEX FILLER

The full automatic flex filler fills your boxes or crates with ripened avocados in the most fruit friendly way.





## BIN AND BOX LOGISTICS

All of Aweta's bin and box logistics processes operate using a unique management and supervision system. This will ensure full control of the entire plant's bin and box logistics, ensuring a higher efficiency throughout the whole production process. With the clever and strategic use of accuveyors and palletizers, plant productivity will increase, while decreasing operational costs.



### PALLET SPIDER

With our automatic pallet retrieval system, combined with empty pallet buffer and positioning spider, the system will be continuously fed with empty pallets.

### ACCUVEYOR

Implementing an accuveyor buffer system will ensure that all palletizers are utilized to their full maximum potential. This will enhance your total production and minimize waiting times.



### PALLETIZING

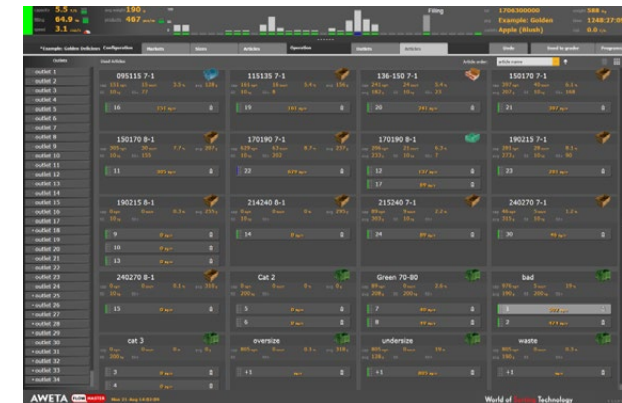
With our palletizers, you are able to automate your installation even further while decreasing personnel costs, and eliminate heavy workload. With various stacking patterns and operating options, the Aweta palletizers will make your life a lot easier.



# FLOWMASTER

USER INTERFACE

OUR HIGH-END SOFTWARE SYSTEMS COLLECT DATA TO ENABLE YOU TO MAXIMIZE PERFORMANCE.

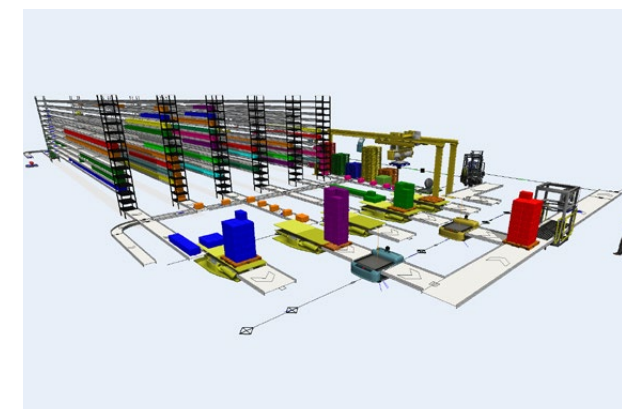
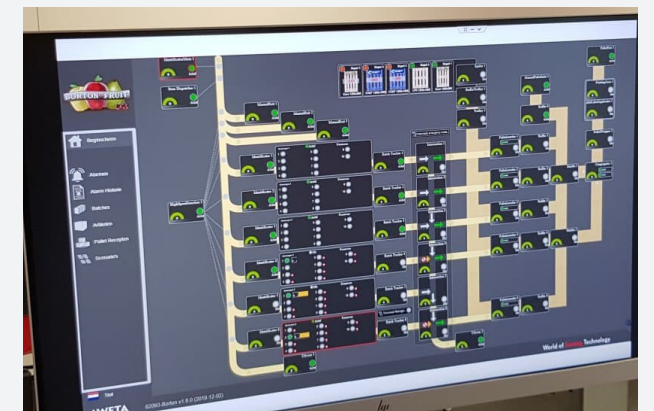


## USER INTERFACE

Flowmaster is our user friendly user-interface that allows our customers to control their sorting and packing needs in a very simple and efficient way.

## PLANT CONTROL

Our SCADA system is controlled from a central control panel, ensuring a full overview of all your vital production sections. This results in an optimal production environment, year in, year out.



## TRACK & TRACE

Our Track system manages the entire route of your product data during the sorting and packing process. Information is collected and can be exported to 3rd party databases to enable tracing.



## FLOWMASTER SOFTWARE

This means you have a total overview and control of your sorting and packing process. Aweta is a world leader in produce traceability and plant control. This will enable you to reach the highest level of flexibility while maintaining a very high level of control of information.





## CUSTOMER CARE

Aweta's industry-leading service and technical support network is dedicated to ensure optimal runability of your Aweta machine. Thanks to the strategic positioning of our service teams, we are ready to support you anywhere in the world, at any time.

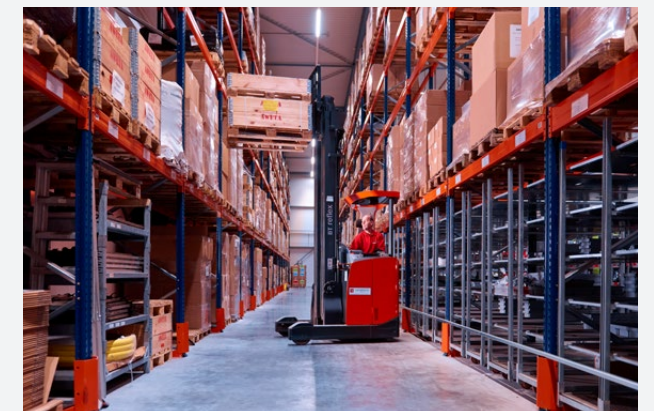


## MAINTENANCE & UPGRADES

Preventive maintenance for maximum up-time.  
Machine adjustments.  
Replacement of wear and tear parts.  
Update software to latest standards.  
Upgrade to current hardware.  
Check-up of sensors and camera's.

## UP-TIME PACKAGE

Checklist for easy replenishment.  
Contains all consumables.  
Periodic check of your system, online or onsite.  
24 hour helpdesk available.



## SERVICE & SPARE PARTS

On-site visit from our field service engineers.  
Quality parts supply.  
Local storage of spare-parts.





## TRAINING & SUPPORT

With our advanced technology it is very important to have a good grasp of how to operate your sorting equipment. At Aweta we do everything possible to make sure that our state-of-the-art technology is easy and intuitive to operate. But on the other side, we also want you to have a good understanding of the capabilities. Boost your productivity and quality, enhance your operator's capabilities and learn more about the technology incorporated in your Aweta.



### USER INTERFACE

Training at your own facility.  
Training at our facilities in The Netherlands, Italy or in the USA.  
Training certificates will be issued after a successful training.

### TRAINING

Our operator training covers all the hardware and software basics needed for the day-to-day business of operating the sorting process. With our advanced operator training, our experts will take you even deeper into the system. Learn all about quality sorting, software adjustments and extended plant control!



### HELPDESK

We assist you with questions on functioning of your Aweta equipment, and help detecting and solving problems. We help you with ordering spare parts and can arrange a technician for on-site visit or offer you online support.

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# AWETA

WORLD OF SORTING TECHNOLOGY



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