

WELCOME





UNITEC S.p.A. for 100 years working for the fruit and vegetable industry.



OUR PRODUCTION AND R&D SITES

Our **Production** and **R&D** sites are based in Emilia Romagna and cover an area of over **96,000 m²** (315,000 ft) including:

23,500 m² (77,100 ft) dedicated to **production**

6,600 m² (21,650 ft) dedicated to **offices**





OUR HEADQUARTERS



The **Headquarters in Lugo (RA)** hosts the new R&D Center, opened in 2022, that includes production and offices area, a showroom and a museum.



CONNECTION TO INNOVATION



This new building, dedicated to **UNITEC innovation**, also hosts the new site of the **Degree in Mechatronics** of the University of Bologna, an ambitious project that further demonstrates our connection to **innovation**, that has always been in our DNA and that we want to maintain in the **future**.



THE ROBOTIC DIVISION OF UNITEC

UNI Robotics, specialized in **intelligent robotic solutions**, born from the desire to give an **exclusive and high-performance technological response** to the needs of fruit and vegetable packing houses, in particular in terms of **reducing process-related costs** through the use of **anthropomorphic and non-anthropomorphic robots**.





UNITEC IN THE WORLD

We have a branch network of **20 operative branches** located in some of the most important countries in the fruit and vegetable industry and a sales structure that enables us to meet the needs of Customers around the world.





100% BY UNITEC & MADE IN ITALY

We design and manufacture internally **100% of our technologies**, taking care of the whole process without intermediate manufacturers:

Electronic HW & SW

Automation

Mechanics

Robotics

Informatics





ALL OUR KNOW-HOW IN THE FRESH FRUIT INDUSTRY ...



Since 1924 **UNITEC S.p.A.** has been designing and manufacturing innovative solutions for handling, sorting and internal and external quality selection of more than 50 kinds of fresh fruits and vegetables.

MACADAMIA VISION
Unitec Technology

PISTACHIO VISION
Unitec Technology

HAZELNUT VISION
Unitec Technology



WALNUT VISION
Unitec Technology

ALMOND VISION
Unitec Technology



... WE HAVE BROUGHT IT
TO THE TREENUT WORLD.

YESTERDAY



UNITEC
We work for your results

TODAY WITH UNITEC SOLUTIONS





TREENUT SORTING AND SIZING TECHNOLOGIES



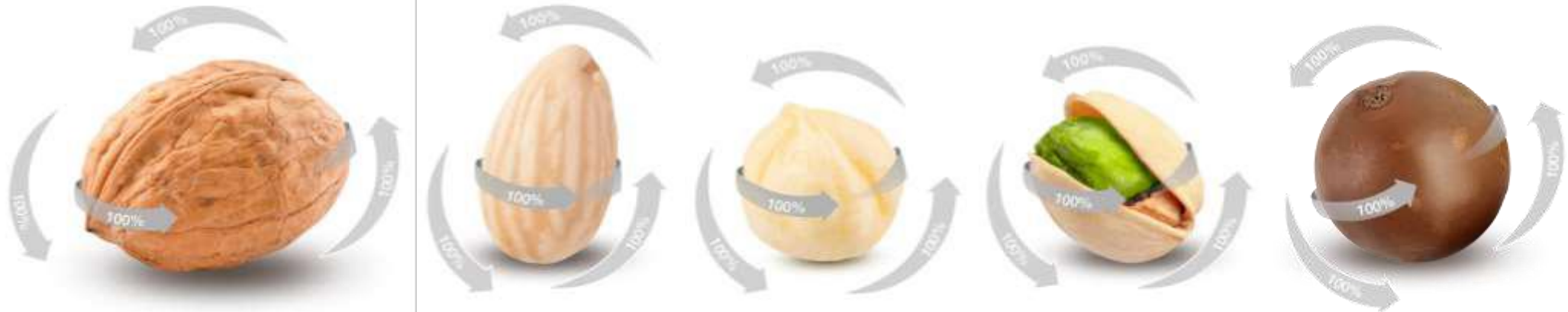
Over the past few years, UNITEC has conceived very performing solutions for the treenuts industry with the **totally innovative concept of INTEGRAL selection** of fruits defects, in addition to a **more precise electronical sizing** compared to currently used systems.



ADVANTAGES WE CAN BRING TO PROCESS

ALL IN ONE STEP

All the grading, sorting and sizing processes of the product, could be done all in one step in order to **avoid mechanical damages and additional costs** derivating from the reprocess of the product. It won't be necessary to rerun the product to recover the false negative.



ADVANTAGES WE CAN BRING TO PROCESS

360° VISION OF EACH FRUIT

Thanks to the **total vision of each fruit**, UNITEC analyzes **the whole surface** and grades the product by splitting the batches, based on the specific sales needs.

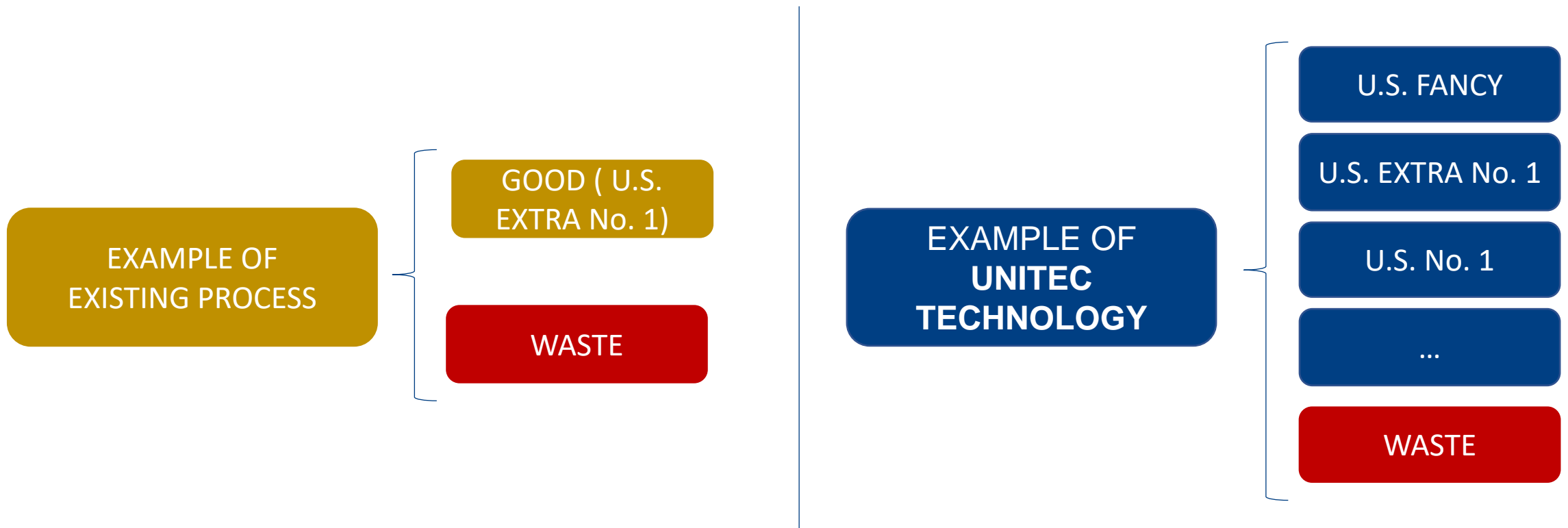


ADVANTAGES WE CAN BRING TO PROCESS

GRADING AND SORTING DIFFERENT QUALITIES

The grading and sorting system is capable to **detect and segregate defects depending on the needs of the Client**, in order to have multiple grades of quality, at the same time, and/or creating new ones depending on the market requests.





ADVANTAGES WE CAN BRING TO PROCESS

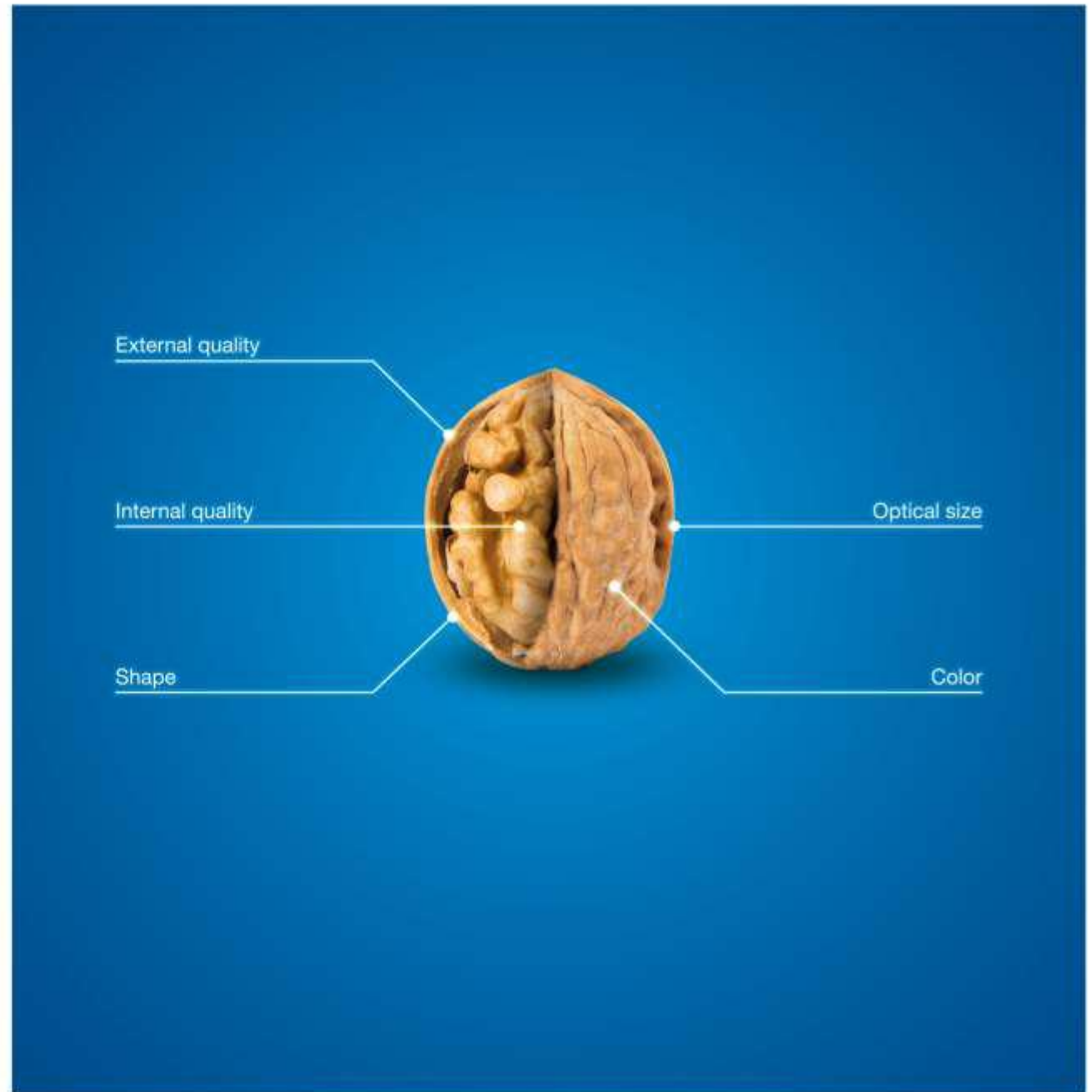
SEGREGATED AND CUSTOMIZED QUALITY

UNITEC grading, sorting and sizing systems allow to **customize the classification of the product in different grades** respecting the needs of the market to which the Client refers to.



QUALITY SELECTION

WALNUT VISION
Unitec Technology



A vision as never achieved before.

Detectable defects with

WALNUT VISION
Unitec Technology



UNITEC
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White dirt

Broken fruit

Husk

Fruit fly damage

Oiled walnut

Mould

Black walnuts

Albino

Shriveled / Kernel wrinkling

Detection
of kernel wrinkling.

WALNUT VISION
Unitec Technology

UNITEC has created a «patent pending» solution
to detect the kernel wrinkling,
to separate empty or half-empty shelled nuts
from good ones.



Naked eye
vision



Vision with
UNITEC technology

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QUALITY SELECTION

HAZELNUT VISION Unitec Technology



Optical size

Color

In shell hazelnuts

Shelled hazelnuts: raw or roasted

External quality

Optical size

Shape

Color

The diagram is set against a dark blue background. At the top, a single hazelnut in its shell is shown with two white lines pointing to it: one from the text "Optical size" on the left and one from "Color" on the right. Below this, a horizontal bar contains the text "In shell hazelnuts". Underneath the bar are three rectangular images: the first shows a pile of whole hazelnuts in their shells; the second shows a pile of hazelnuts that have been partially shelled; the third shows a pile of fully shelled, light-colored hazelnut kernels. Below these images is another horizontal bar with the text "Shelled hazelnuts: raw or roasted". At the bottom, another single hazelnut in its shell is shown with four white lines pointing to it: one from "External quality" on the top left, one from "Optical size" on the top right, one from "Shape" on the bottom left, and one from "Color" on the bottom right.

A vision as never achieved before.

Detectable defects with

HAZELNUT VISION
Unitec Technology

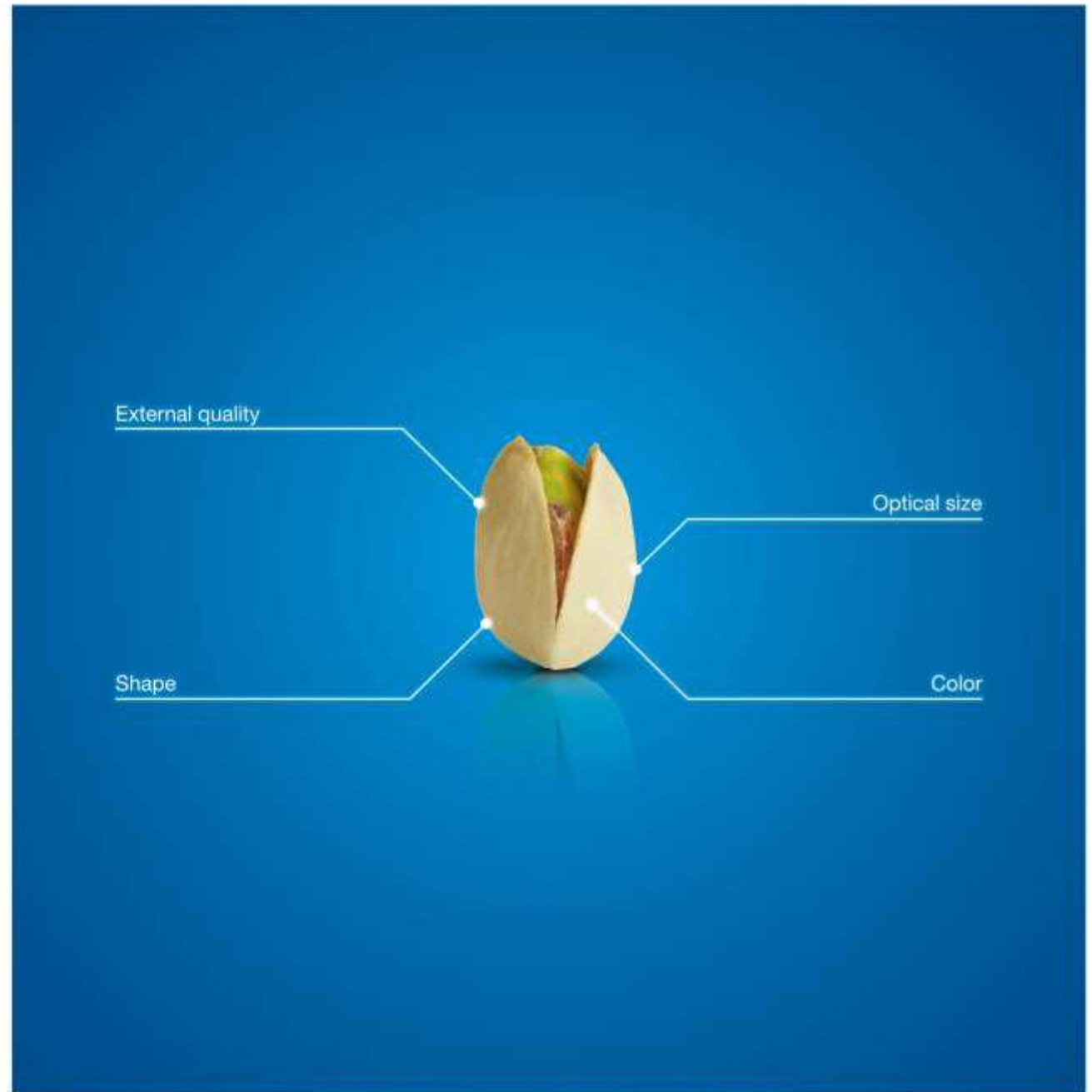


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QUALITY SELECTION

PISTACHIO VISION Unitec Technology



A vision as never achieved before.

Detectable defects with

PISTACHIO VISION
Unitec Technology

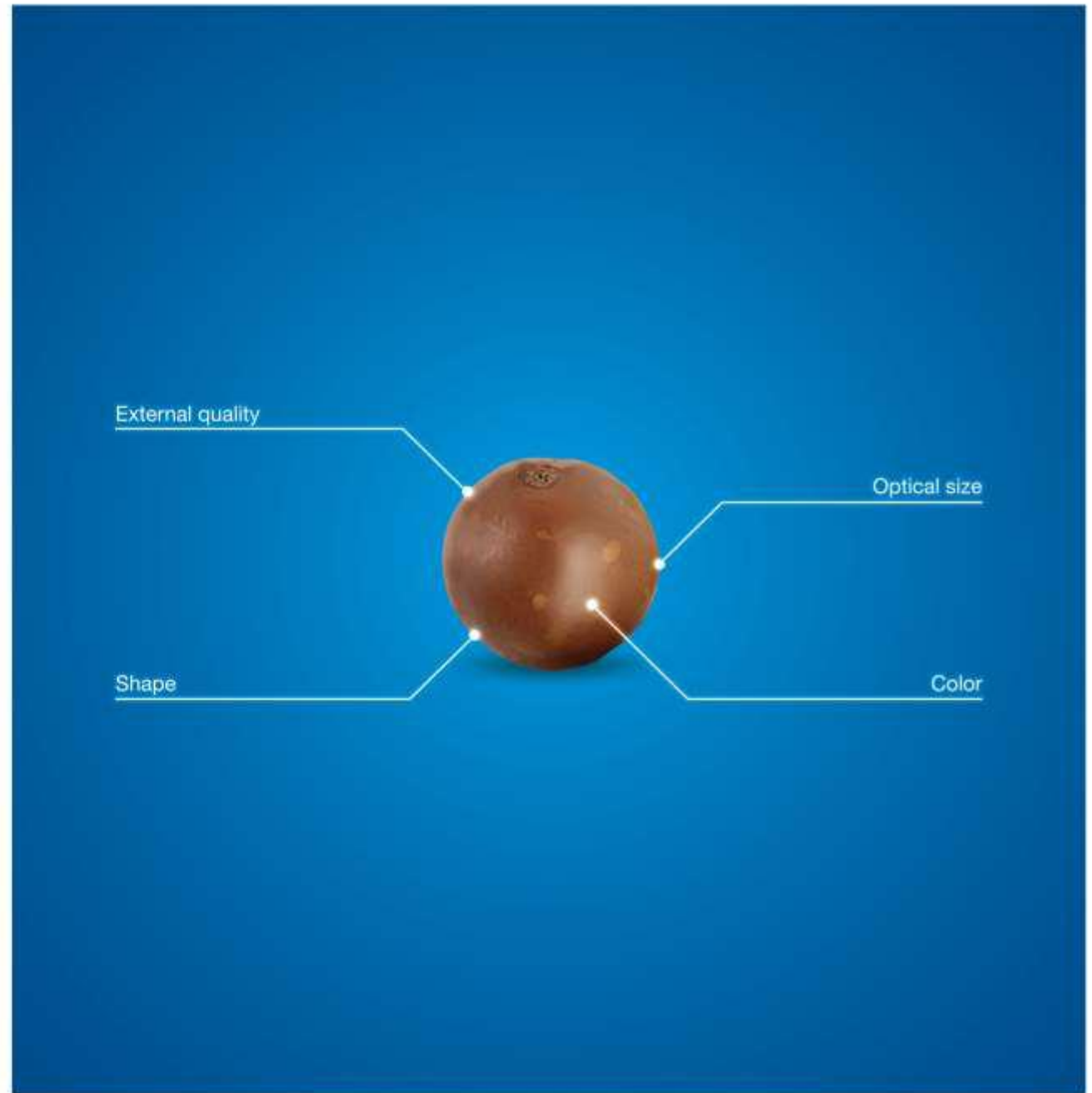


UNITEC
We work for your results



QUALITY SELECTION

MACADAMIA VISION
Unitec Technology



A vision as never achieved before.

Detectable defects with

MACADAMIA VISION
Unitec Technology

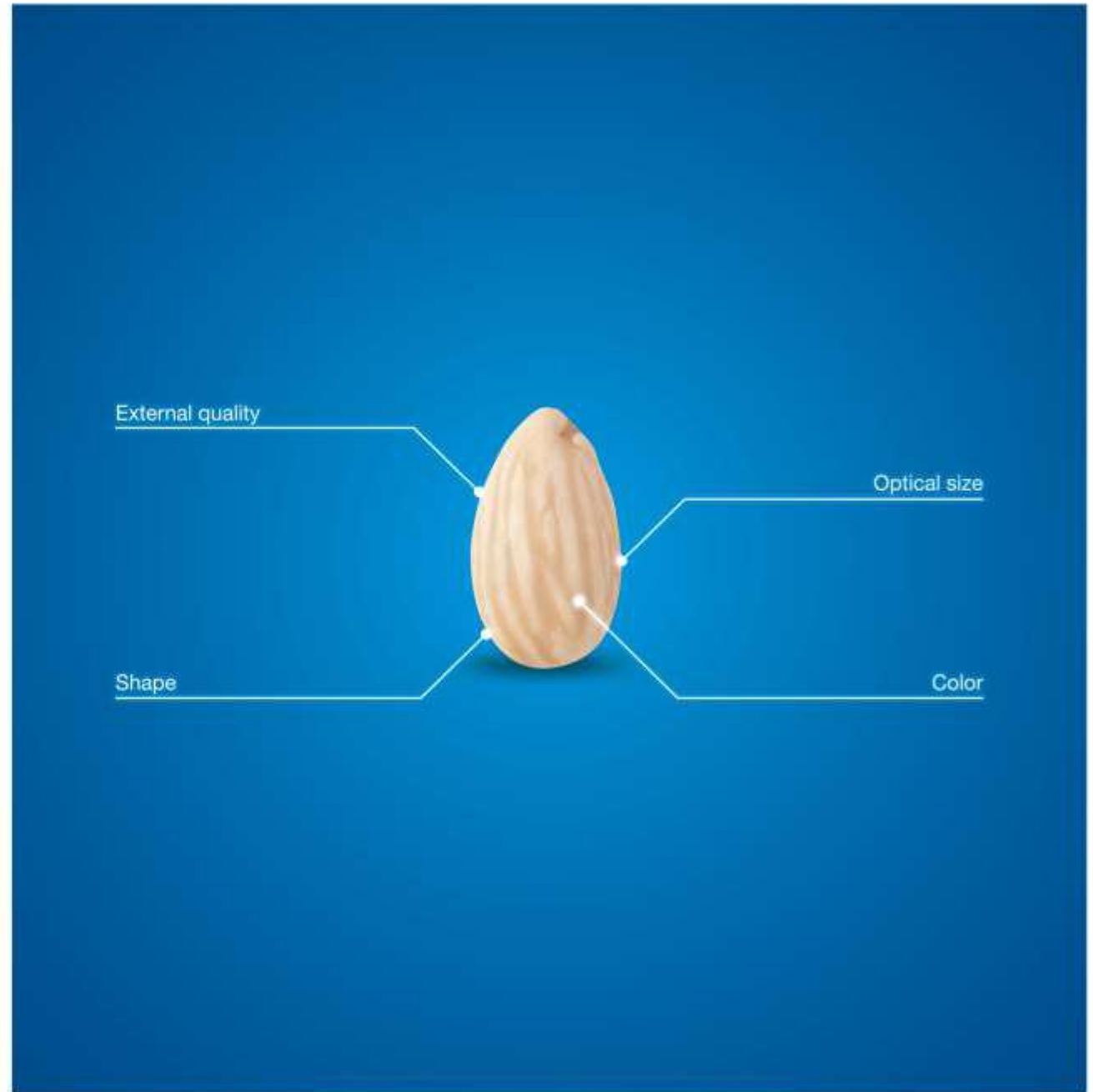


UNITEC
We work for your results



QUALITY SELECTION

ALMOND VISION
Unitec Technology



A vision as never achieved before.

Detectable defects with

ALMOND VISION
Unitec Technology



UNITEC
We work for your results





ADVANTAGES WE CAN BRING TO PROCESS

VOLUMETRIC OPTICAL SIZER

The volumetric optical sizer turns out to be **more precise and accurate** compared to the currently used sizing systems.



ADVANTAGES WE CAN BRING TO PROCESS

GENTLENESS

We chose to dedicate a transportation system and an ejection system in order to process every single fruit based on its natural characteristics, so that we could **limit eventual mechanical damages** on the surface of the fruit during the process.



REPORTS



Thanks to a dedicated software, it is possible to **export the processing data** from the sorter to the main management software of the Client.

THANK YOU! FOR YOUR ATTENTION.

