



BREAKING LINES DRY FRUIT SORTING



MAQUINARIA AGRÍCOLA SEGUÉS S.L.

Av. Santuari s/n
25215 SANT RAMON
(Lleida) - Spain
Tel.: +34 973 524 336

www.segues.es
www.seguessl.com
www.segues.fr
segues@seguessl.com
export@seguessl.com

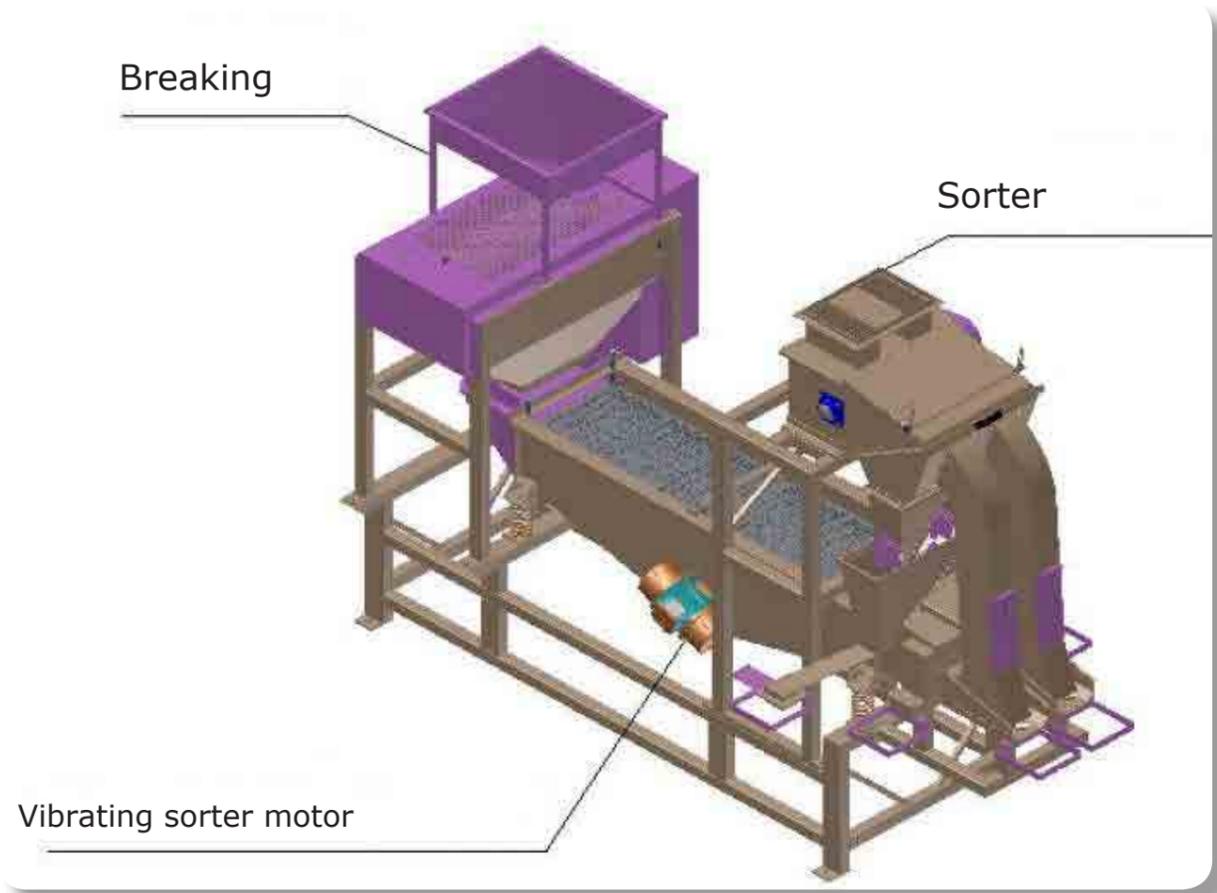


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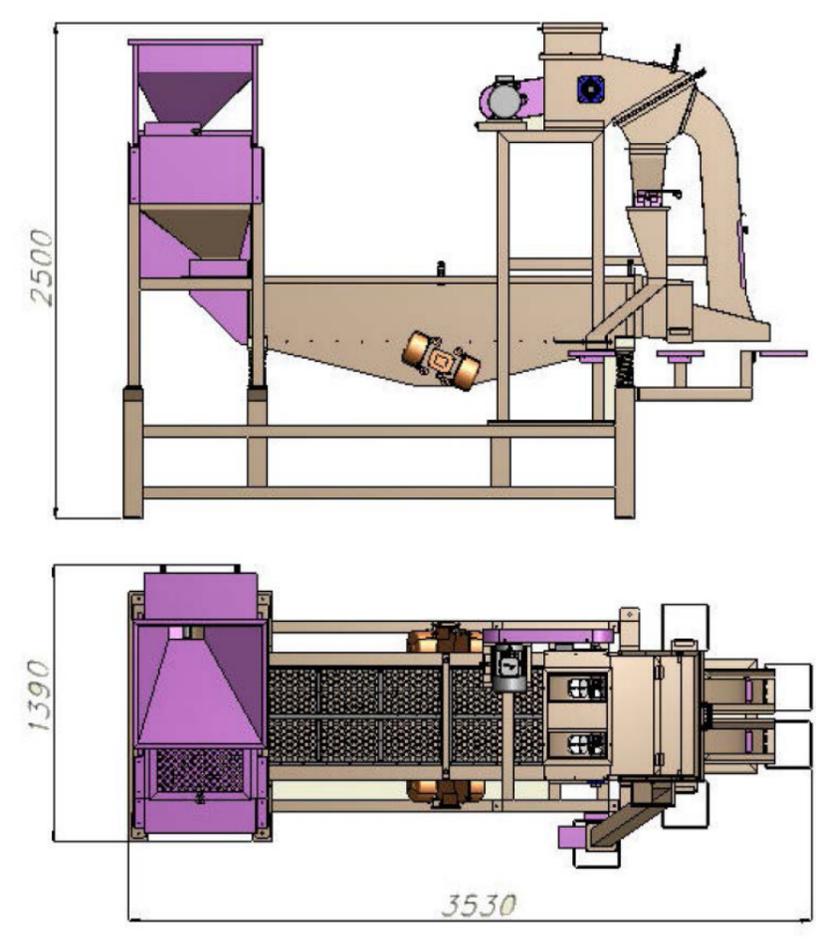
MAQUINARIA AGRICOLA SEGUÉS has different breakers, classifiers, calibrators ... for different productions.
 Personalized lines adapted to each farm and for different types of dried fruit such as almonds, hazelnuts, walnuts, carob beans ...
 Here we will find different examples of machine lines and their components.

STR1/50 combined machine



The **STR1 / 50** is a combined machine with a **production of 130kg / h** depending on the variety and quality of the dried fruit composed of:

- **Feed hopper** of the breaker.
- **Shell breaker (STR1)** composed of **1 adjustable cast iron cone roller** with a series of blades that rotate against a rotational cage in the opposite direction. The peel fragments and the fruit emerge from the roller through a **special adjustable cage**.
- **Vibrating** sorter feeding
- **Sorter (STR50)** with a vibrating casing with **4 perforated screens** of different shapes and sizes that will separate the fruit from the mixture. The classifier is composed of a tubular bearing structure and an eccentric shaft that transmits the movement to the vibrating casing supported by the transverse bars.
- **The separator** is completed with a suction field consisting of a **2 channel vacuum cleaner**, which allows the removal of dust and small shell fragments at the product outlet.



Model	STR1/50
Precalibrate cage	nd
Calibration format	nd
Breakthrough roller	1
Screens	4
Separate products discharge outputs	2
Separation typology	Eccentric shaft in the frame by crossbows
Maximum production	130 kg/h
Total installed electrical power	4,45 kW
Line length	3.530 mm
Line width	1.390 mm
Maximum height	2.500 mm
Empty line weight	700 kg
Empty noise level	83,2 dB(A)

Adjustable roller to the variety and sized

Adjustable breaker feed

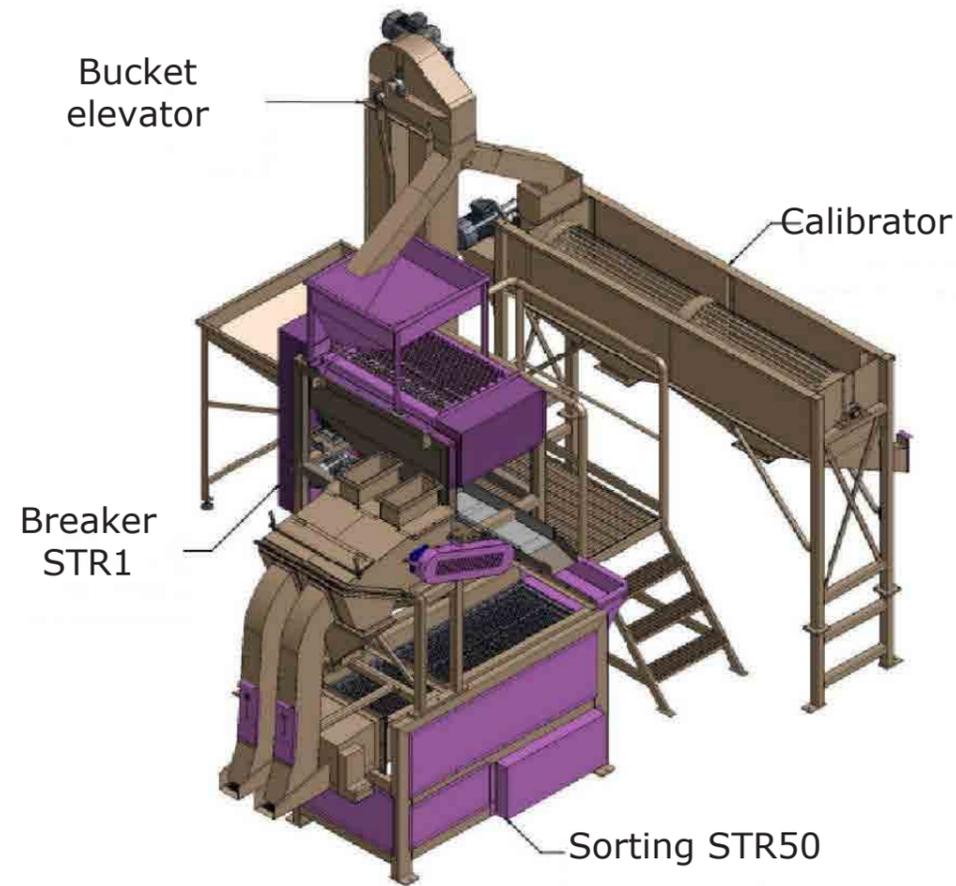
4 Calibrates screens

Vibrating motor of the sorter

Suction area for a final cleaning of the product

2 out put of the dried fruit and 3 of shell frangments

Breaker line STR1 + STR50



The **STR1 + STR50** breaking line with a **production of 130kg / h** depending on the variety and quality of the dried fruits, is composed of:

- **Bucket elevator** with **bidirectional outlet** with the possibility of loading the calibrator or the breaking machine.
- **Calibrator** composed of a roller with an **adjustable cage** of 2 sizes obtaining **3 different calibrations**. Product calibration is recommended to optimize the work of the breaker by reducing the percentage of broken product.
- **Shell breaker (STR1)** composed of **1 adjustable cast iron cone** roller with a series of blades that rotate against a rotational cage in the opposite direction. The peel fragments and the fruit emerge from the roller through a **special adjustable cage**.
- **Vibrating sorter** feeding
- **Sorter (STR50)** with a vibrating casing with **4 perforated screens** of different shapes and sizes that will separate the fruit from the mixture. The classifier is composed of a tubular bearing structure and an eccentric shaft that transmits the movement to the vibrating casing supported by the transverse bars.
- **The separator** is completed with a suction field consisting of a **2channel vacuum cleaner**, which allows the removal of dust and small shell fragments at the product outlet.



Adjustable roller to variety and size



adjustable breaker feed



4 calibrated screens



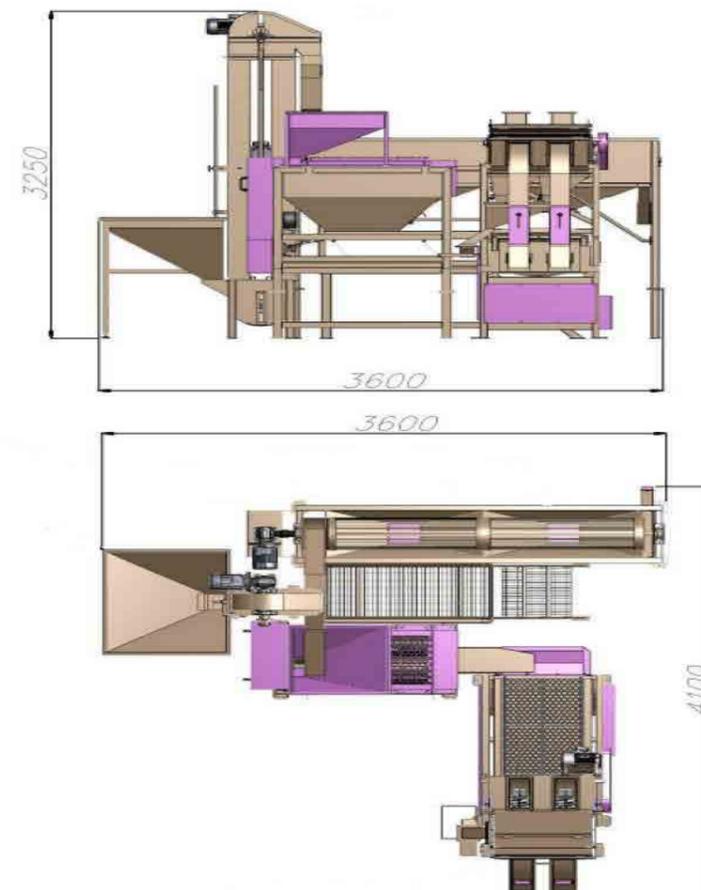
Bucket elevator with dosing blade



Suction area for final cleaning of the product



3 of the shell fragments, 2 outputs of the products

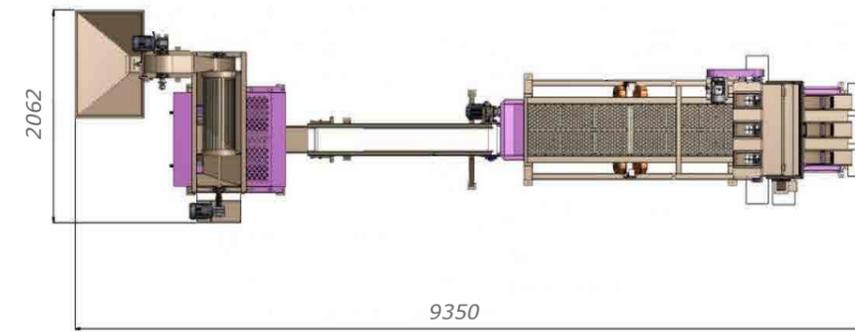
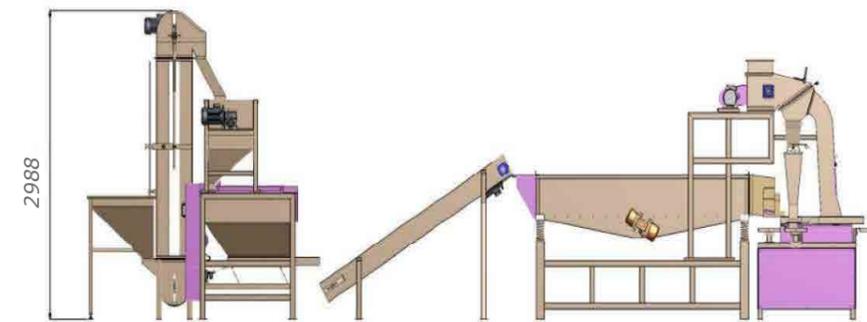
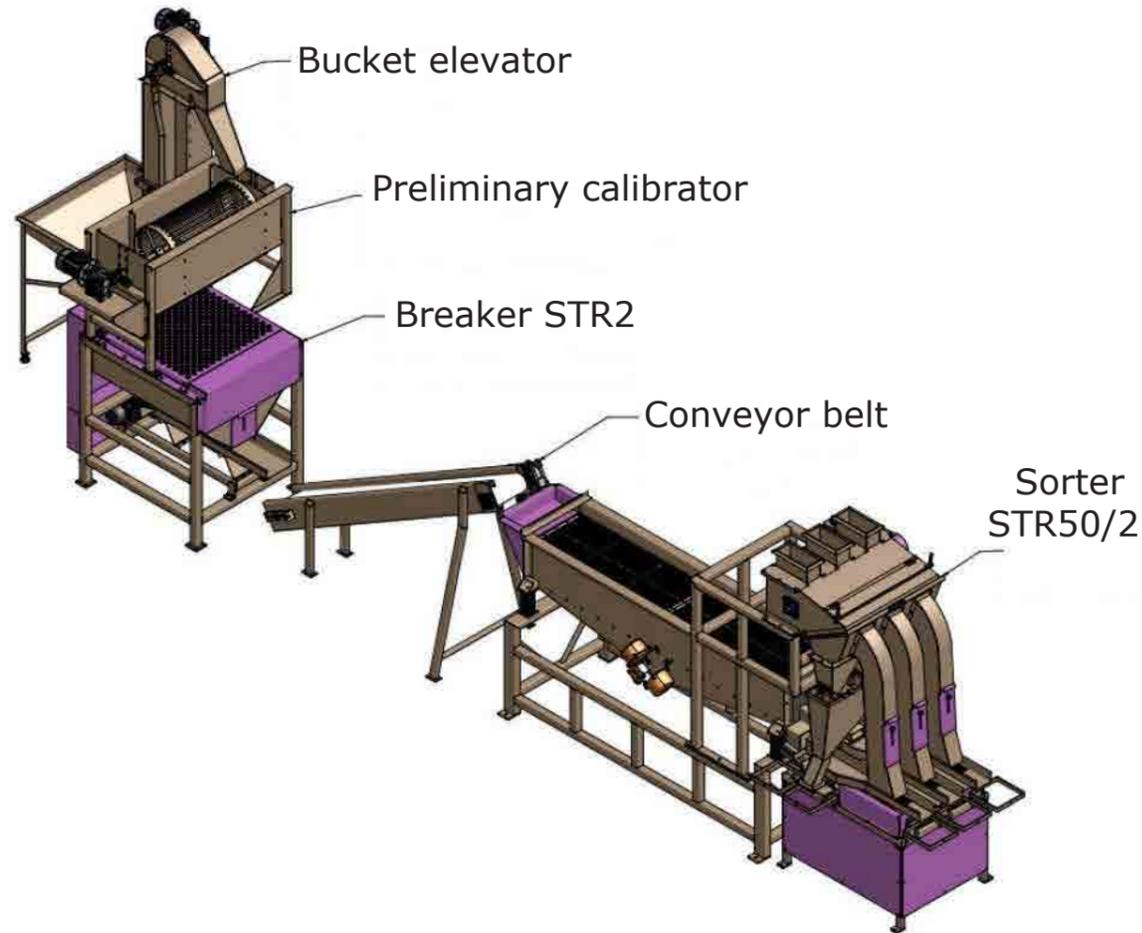


Model	STR1+STR50
Precalibrate cage	2
Calibrating format	3
Breakck down roller	1
Screens	4
Separate product discharge	2
Separating typology	Eccentric shaft in the frame supported by leat spring
Maximum production	130 kg/h
Total electric power installed	6,69 kW
Line lenght	4.100 mm
Line width	3.600 mm
Maximum height	3.250 mm
Empty line weight	1.500 kg
Empty noise level	83,8 dB(A)

Breaker line STR2+ STR50/2

The **STR2 + STR 50/2** breaking line with a **production of 260 kg / h** depending on the variety and quality of the dried fruit, is composed of:

- **Bucket elevator** with a discharge hopper and a dosing scoop to improve the load of the elevator.
- **Calibrator** composed of a roller with an adjustable cage obtaining **2 different calibrations**. Each calibration section discharges the product directly onto the corresponding roller of the breaker.
- **Shell breaker (STR2)** is composed of **2 conical rollers**.
- **Vibrant** product outlet
- Steel **conveyor belt** that feeds the sorter.
- **Sorter (STR50 / 2)** with a vibrating casing with **5 perforated screens** of different shapes and sizes that will separate the fruit from the mix. The classifier is composed of a tubular bearing structure and a vibrator that performs the movement to the vibrating box actuated by springs.
- The separator is completed with a **suction field** consisting of a vacuum cleaner with **3 channels**, which allows the removal of dust and small shell fragments at the product outlet.



Model	STR2+STR50/2
Precalibrate cage	1
Calibration format	2
Breakdown roller	2
Screens	5
Separate product discharge outputs	3
Separation typology	Motor-vibrator of the box supported by spring
Maximum production	260 kg/h
Total electric power installed	7,48 kW
Line length	9.350 mm
Line width	2.062 mm
Maximum height	2.988 mm
Line weight	1.700-2.000 kg
Empty noise level	83,9 dB(A)



2 Adjustable roller to the variety and sized



Bucket elevator with dosing blade



5 Calibrate screems



Compact conveyor belt



Suction area for final cleaning of the product

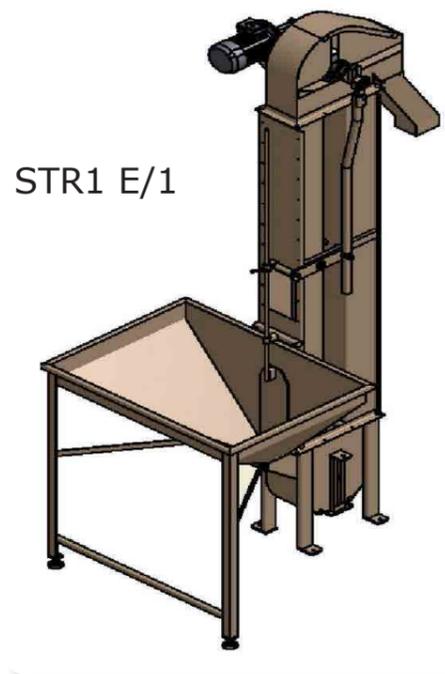


3 Out puts of the product and 6 of the shell fragments

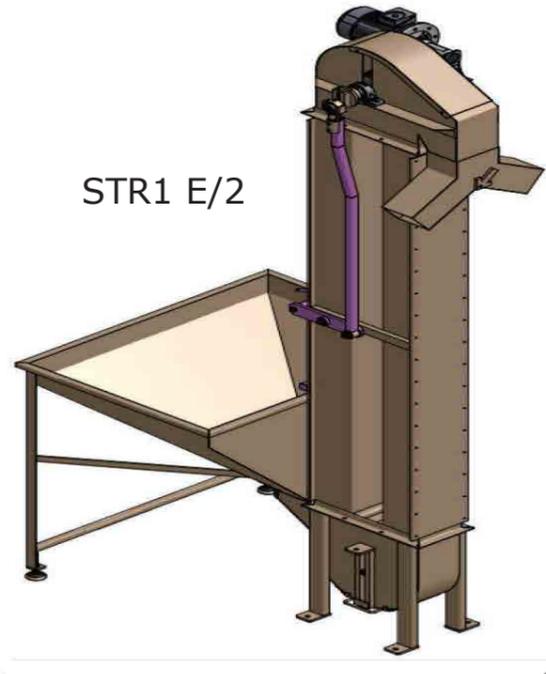
COMPONENTS OF THE DIFFERENT BREAKING LINES - SORTING

Bucket elevator

The **Bucket Elevator** is composed of a hopper for receiving the dried fruit to load the buckets directly and a dosing pallet. The dimensions may vary depending on the need.



STR1 E/1



STR1 E/2

Model	Elevator exit	Loading volumen of the hopper	Maximum line production	Intalled total electrical power	Empty noise level
STR1 E/1 Line 130 kg/h	2 Flow regulation paddle	0,5 m ³	400 kg/h	0,75 kW	83,9 dB(A)
STR1 E/2 Line 260kg/h	-	0,5 m ³	400 kg/h	0,75 kW	83,9 dB(A)

Model	Lenght	Maximum wide	Maximum height	empty line weight
STR1 E/1 Line 130 kg/h	1.405 mm	1.048 mm	3.238 mm	168 kg
STR1 E/2 Line 260kg/h	1.603 mm	1.048 mm	2.988 mm	168 kg

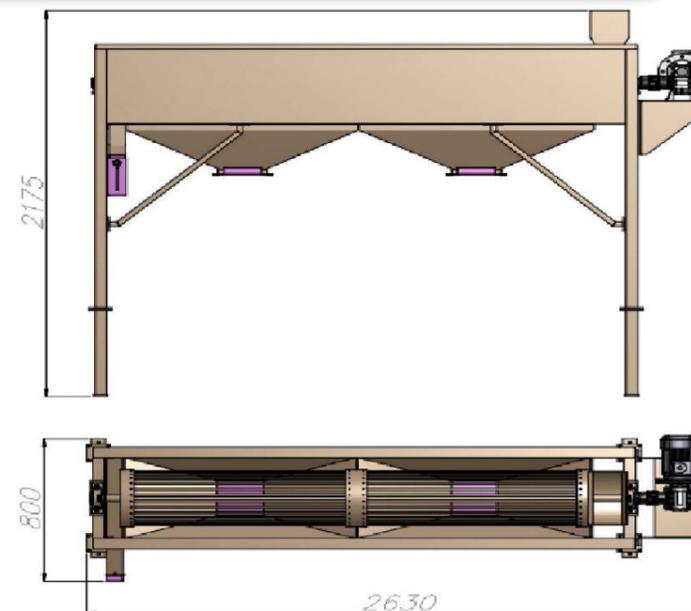
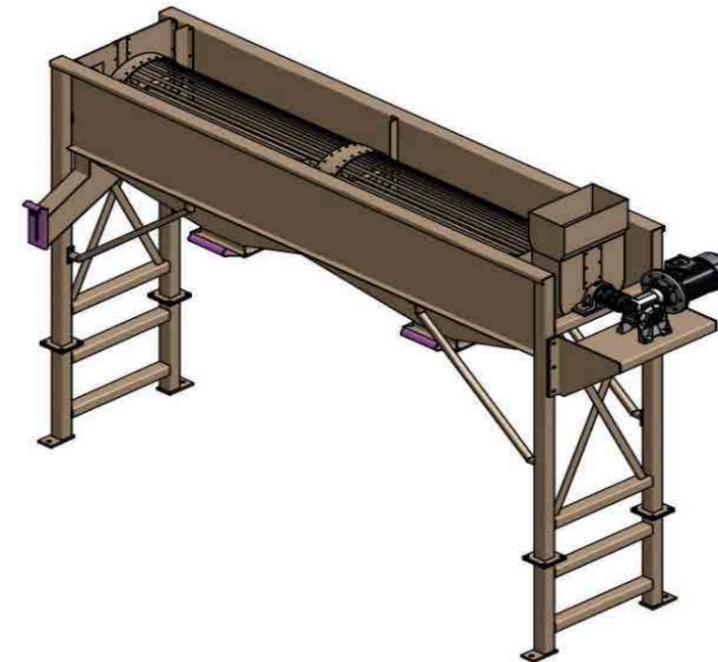
Preliminary sorter

The sorter is a fundamental component of the line because it has the function of dividing the shell product into different sizes.

By calibrating the product there is the possibility of optimizing the work of the breaking line to reduce the percentage of broken product.

It consists of a steel support structure that contains a roller with an **adjustable cage** of up to 2 sizes, obtaining **3 products of different calibers**.

Each calibration section unloads the product into a hopper with a 25 to 50 kg bag placement system.

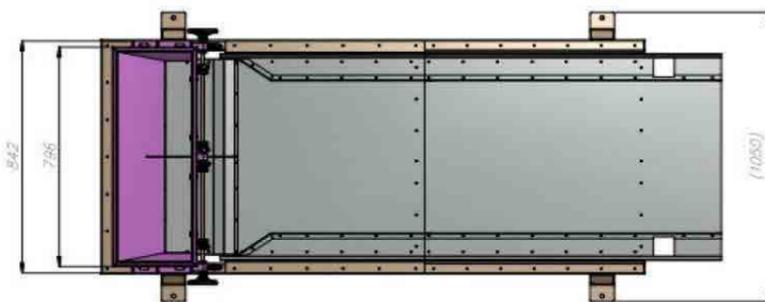
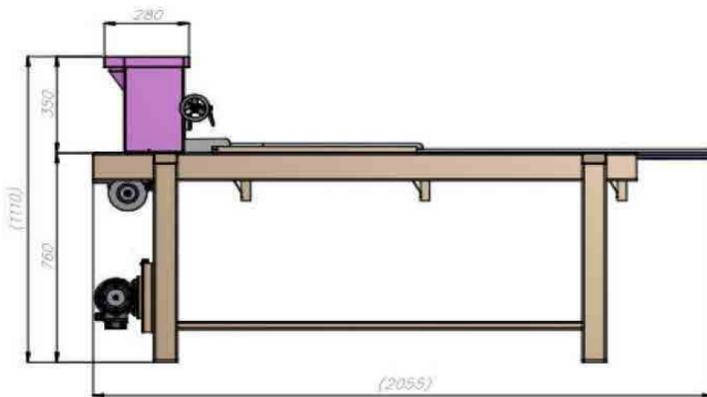
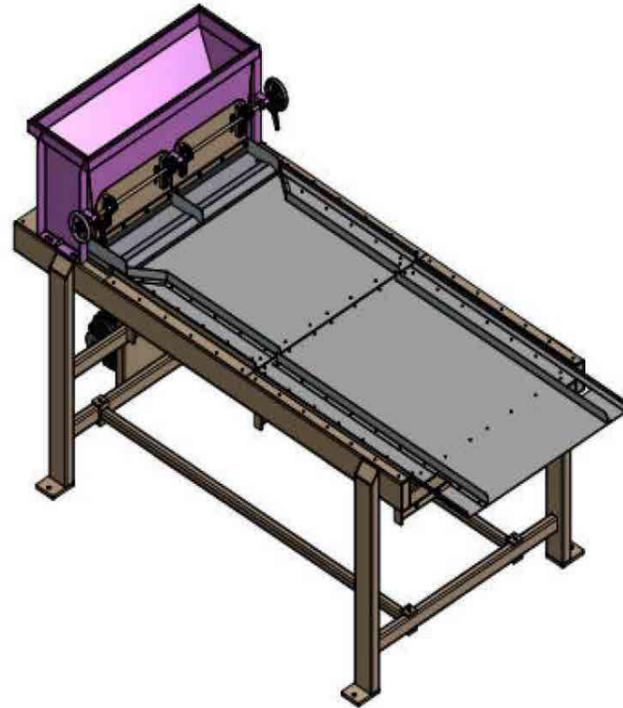


Model	STR C/1
Precalibrating cage	2
Calibrate format	3
Maximum production	400 kg/h
Total electric power intalled	0,75 kW
Lenght	2.630 mm
Widht	800 mm
Maximum height	2.175 mm
Empty line weight	205 kg
Empty noise level	83,9 dB(A)

Sorting table

The **manual selection bench** with **4 workstations** for the selection of the dried fruit mixed with the peel or the peel mixed with the fruit.

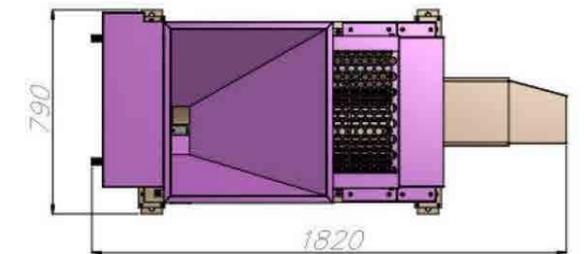
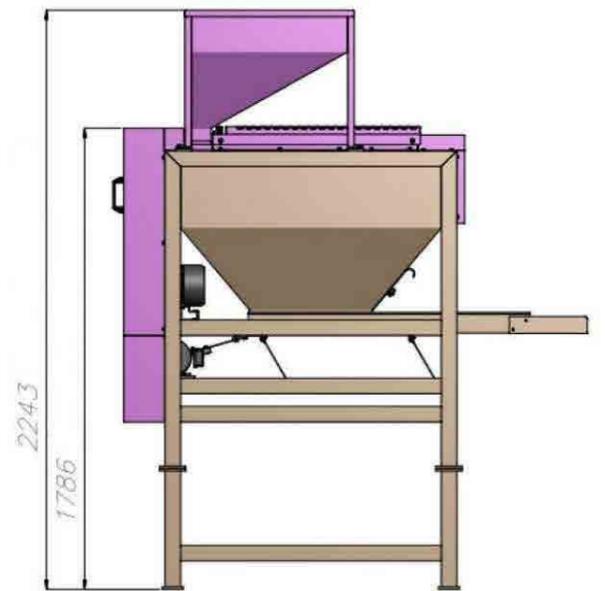
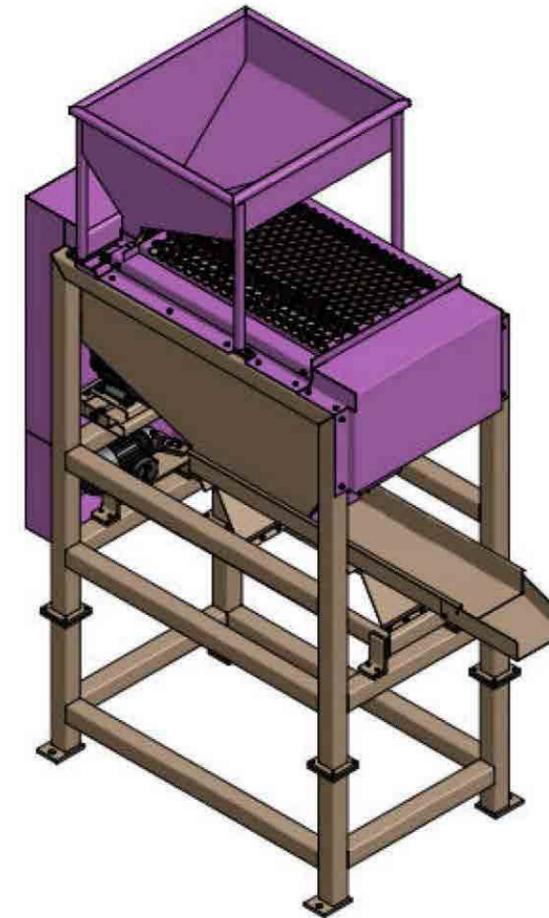
It consists of a vibrating steel surface, with a commercial profile support structure and eccentric shaft, complete with manual flow adjustment.



Model	STR BSM/1
Operator maximum number	4
Total electric power installed	0,37 kW
Lenght	2.055 mm
Width	1.050 mm
Maximum height	1.110 mm
Empty weight	153 kg
Empty noise level	83,9 dB(A)

Breaker STR1

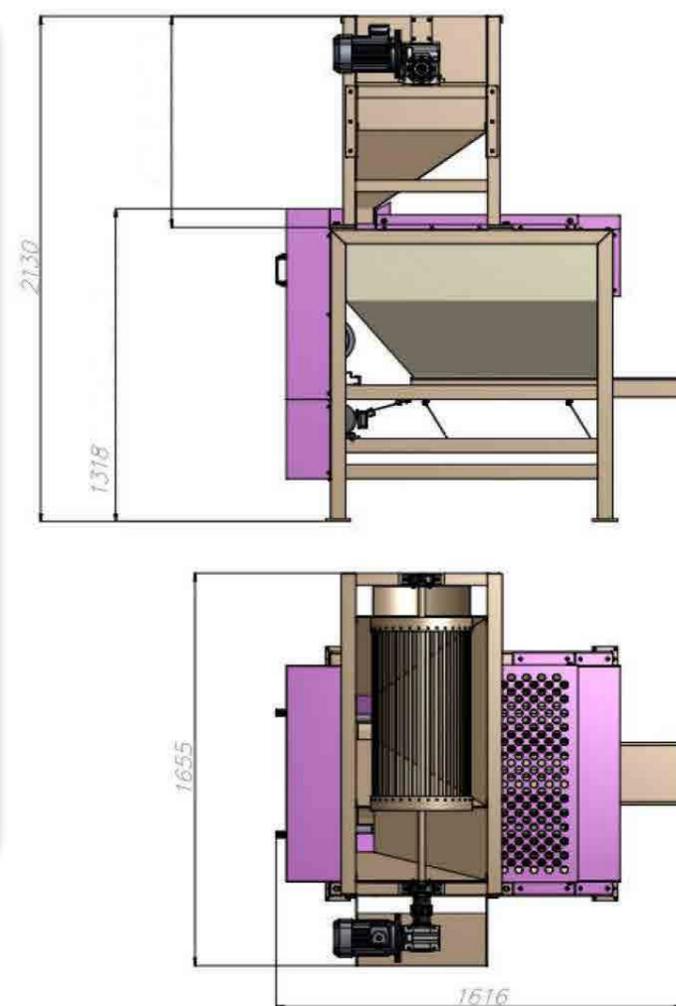
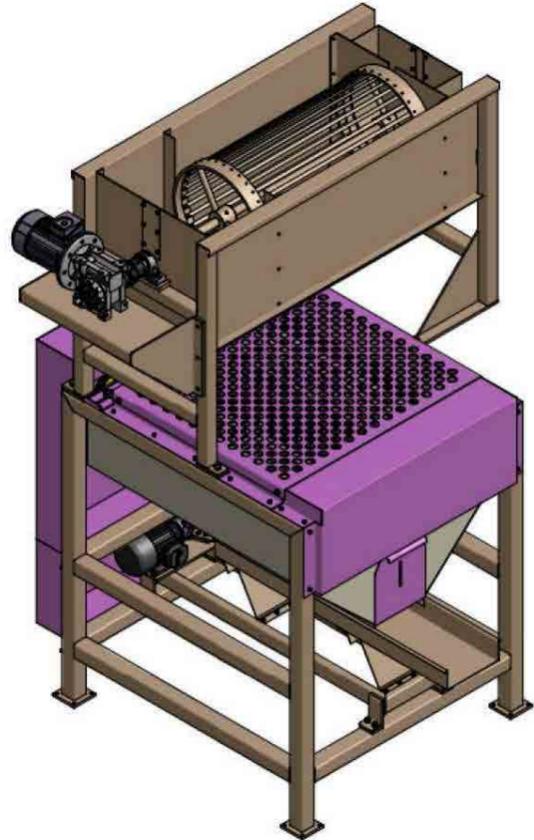
Machine to **break the shell** of died fruit, composed of a steel support structure, loading hopper to contain the product for an autonomy of one hour, with **1 conical roller** with adjustable hammers for the processing of different types of sizes of nuts and vibrating for the discharge of the shelled product.



Model	STR1
Breck down roller	1
Maximum production	130 kg/h
Total electric power installed	1,12 kW
Lenght	1.820 mm
Width	790 mm
Maximum height	2.243 mm
Empty weight	529 kg
Empty noise level	83,9 dB(A)

Breaker STR2

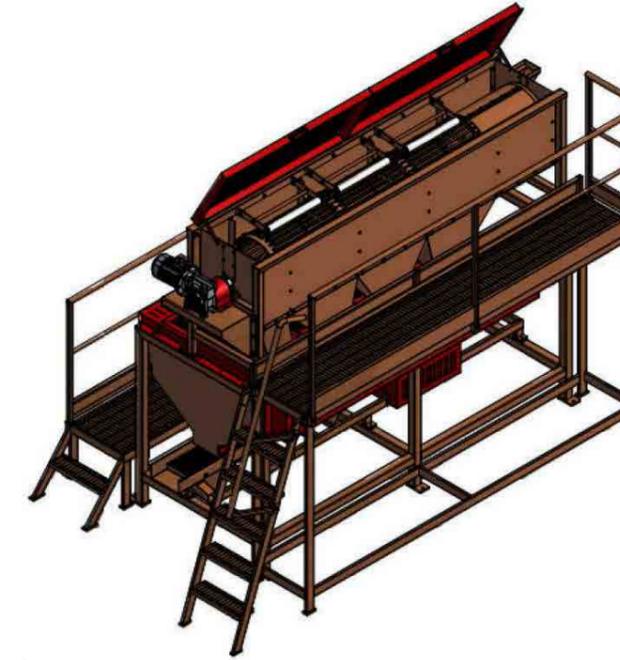
Machine to **break the shell** of dread fruit, composed of 1 steel support structure, a **calibrating roller** with adjustable cage up to 2 sizes, with **2 conical rollers** with adjustable hammers for the processing of different types of product and vibrating calibers for the unloading of the shelled product.



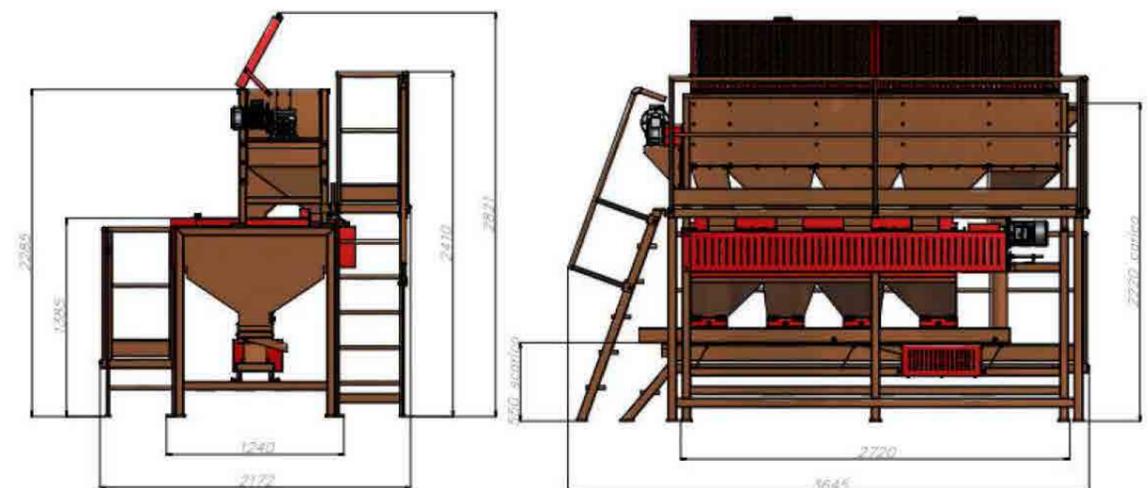
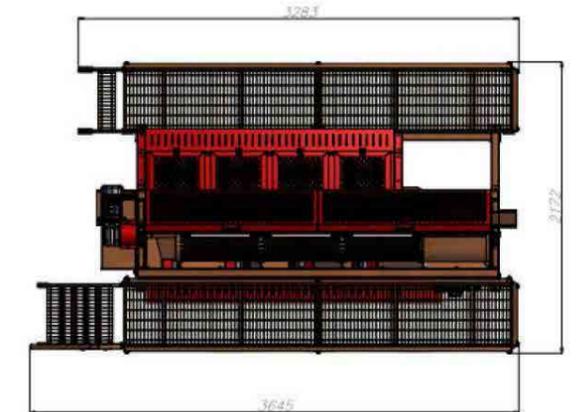
Model	STR2 with calibrator
Breckdown roller	1
Calibration format	2
Breckdown rollers	2
Maximum production	260 kg/h
Total electric power installed	1,87 kW
Lenght	1.616 mm
Width	1.655 mm
Maximum height	2.130 mm
Empty weight	707 kg
Empty noise level	83,9 dB(A)

Breaker STR4

Machine to **break the shell** of dried fruit, composed of 1 steel support structure, a **calibrating roller** with adjustable cage up to 3 sizes obtaining 4 products of different caliber, with **4 conical rollers** with adjustable hammers for the processing of different types of product and vibrating calibers for the discharge of the shelled product.



Model	STR4
Precalibrator cage	3
Calibrator format	4
Breckdown rollers	4
Maximum production	520 kg/h
Total electric power installed	3,5 kW
Lenght	3.645 mm
Widht	2.172 mm
Empty weight	2.821 mm
Empty noise level	83,9 dB(A)



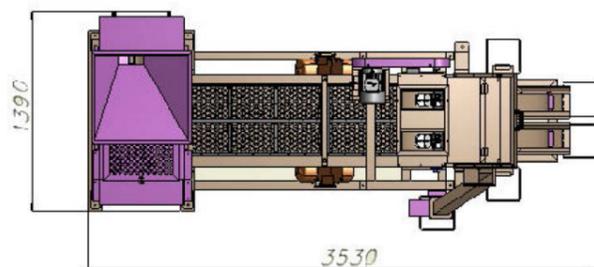
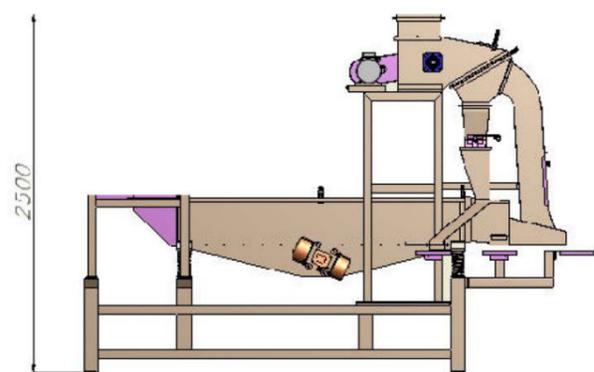
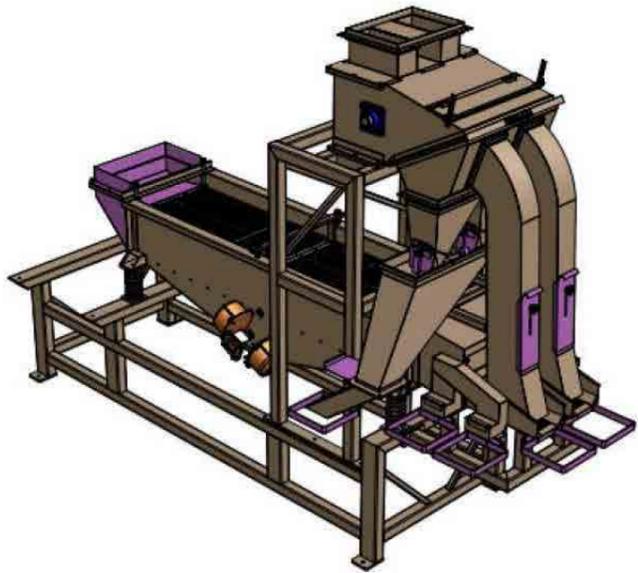
Sorting STR50

The **STR50 Sorter** is designed for the classification of the whole fruit from the mixture of the different sizes of broken shell from the breaker.

It consists of a vibrating casing with **4 calibrated frames** with perforated blades of different shapes and sizes in a tubular bearing structure and with an eccentric shaft that transmits the movement to the vibrating casing supported by the cross bars.

There are two parts to the sorter:

- 1) Sifting: Using the special frames
- 2) **2 Suction channels**: at the exit of the fruit that, through the air flow adjustment blades, allow the rest of the small peels and dust to be removed.



Model	STR50
Vibrant frames	4
Outputs of discharge	2
Discharge outlet of the shell	4
Separation typology	Motor vibrator of the box supported by spring
Maximum production	130 kg/h
Total electric power installed	3,7 kW
Lenght	3.530 mm
Widht	1.390 mm
Maximum height	2.500 mm
Empty weight	700 kg
Empty noise level	83,9 dB(A)

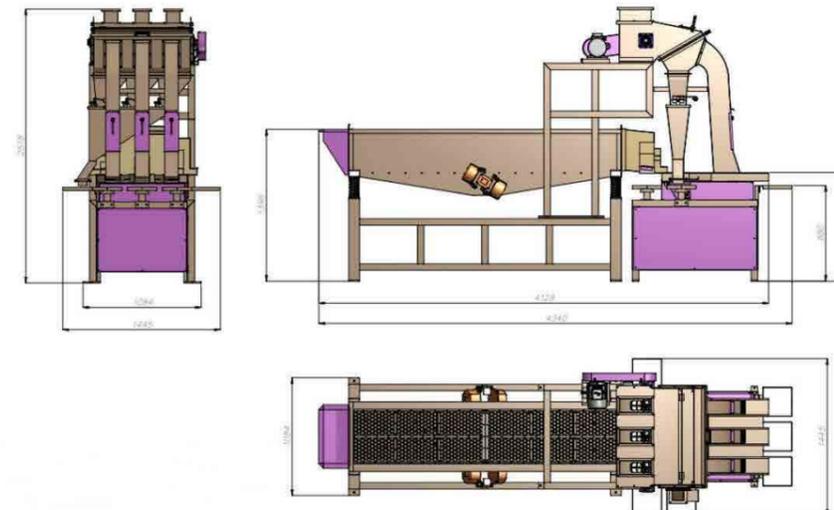
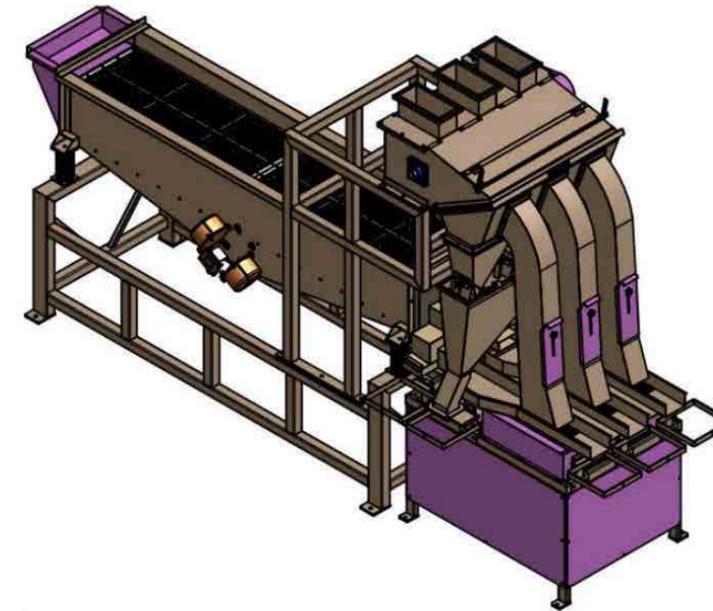
Sorting STR50/2

The STR50 / 2 Sorter is designed for the classification of the whole fruit from the mixture of the different sizes of broken shell from the breaker.

It consists of a vibrating casing with **5 calibrated frames** with perforated sheets of different shapes and sizes in a tubular bearing structure and a vibrator that transmits the movement to the vibrating box actuated by springs.

There are two parts to the sorter:

- 1) Sifting: Using the special frames
- 2) **3 Suction channels**: at the fruit outlet that, through the air flow adjustment blades, allow the rest of the small peels and dust to be removed.



Model	STR50/2
Vibrant frames	5
Output of discharge	3
Discharge outlet of the shell	4
Separation typology	Motor vibrator of the box supported by springs
Maximum production	400 kg/h
Total electric power installed	3,74 kW
Lenght	4.340 mm
Widht	1.445 mm
Maximum height	2.518 mm
Empty weight	777 kg
Empty noise level	83,9 dB(A)