

tenías



**ALMOND AND
PISTACHIO
HARVESTER**
Catalog

2025

WHO WE ARE



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OUR STORY

The Tenías Harvester almond and pistachio harvester was developed in 2000 as a mechanized harvesting system for the Tenias Family almond farms, in the province of Zaragoza, Spain.

After a number of years working on a variety of farms across Spain, in 2015 we decided to enter the US market, specifically California, which accounts for more than 80% of world almond production.

Since then, it has become a **project in constant development** working together with our clients improving the system to achieve the fastest and most efficient process.

At present, the Tenías Harvester is working in many of the almond and pistachio producing countries, such as the **United States, Australia, Spain, Portugal, South Africa, Azerbaijan, and Georgia.**

MISSION

The mission of **Tenías Harvester** is to offer its clients **an efficient harvesting system** focused on total mechanization of the harvesting process to reduce costs and optimize efficiency.

VISION

Tenías Harvester aims to reach an ever-growing number of farms through grower education of Best Practice Solutions in nut harvesting allowing farmers to benefit **from the most advanced technology** in almond and pistachio harvesting.

VALUES

Mutual trust between us and our clients, cultivated over more than 65 years of history.
Constant innovation in all of our projects, courtesy of a clear philosophy of ongoing improvement.
Professionalism in all departments, from design to after-sales service.



OUR FACILITIES

With our firm commitment to constant improvement in processes, we have the most advanced technology for the design and manufacturing our products, which are subject to strict quality controls before they leave the production plant.

Grupo Tenías has almost 50,000 m² of useful floor space. This space is divided between:

- ✓ Production plant
- ✓ Tenías Harvester assembly plant
- ✓ Spare parts store
- ✓ Distribution center
- ✓ Logistics warehouse
- ✓ Office space

Discover our facilities



OUR TEAM

One very important source of support for our project is the **more than 80 employees** who make up the Grupo Tenías team, individuals who are highly qualified and with the determination needed to meet the challenges that arise in our day-to-day operations.



OUR

TECHNOLOGY

Learn about the dimensions of the harvester

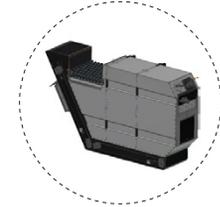


SHAKER HEAD + GROUND SUPPORT

Thanks to our shaker head with ground support, we have developed a quality **shaking process**, the vibration generated is sent directly to the tree and not lost through tires or the structure of the machine itself.

Shaker clamp height is crucial to a quality vibration focusing **only on the fruit-producing part of the tree, not the tree or the roots.**

The shaker also has an automatic lubrication system, which is used to avoid damage to the trunk of the tree.



HYDRAULIC FOLDING

Agile and quick hydraulic folding facilitating movement between properties.

CONTINUOUS UNLOADING

Whether it is fruit on the floor or using our hoppers with their **Continuous Unloading System**, there is no need to stop the harvester in order to offload the product, thus optimizing the orchard area harvested per day.



CABIN

Make any adjustments required for the harvest from the comfort of the **climate-controlled cabin**, with all controls easy to reach. All shaking parameters can be adjusted according to the state of the fruit and production load.

ENGINE

The machine has a single **CATERPILLAR C3.6 ACERT COMBUSTION ENGINE 12 V Tier 4**, which has been configured to ensure full integration with the machine, which is compliant with the latest emissions regulations.



ADVANTAGES

OF OUR SYSTEM



The **Tenías Harvester** almond and pistachio harvester is a system for non-stop harvesting that, with its fully automated shaking system, optimises the harvesting process.

EFFICIENCY THROUGH DESIGN

- ✓ Smooth and efficient harvest up to **9 trees per minute**. (Contact your Sales Representative for details)
- ✓ Superior shaking with a grounded shaker head **allows continuous harvesting**.
- ✓ **Easy operation** thanks to the automated tree sensing and shaking system.
- ✓ **Unique one-piece machine** makes for faster turns, less fruit loss, and easier movement around the field.
- ✓ Increased harvesting time between unloads due to **twin nut storage hoppers**, one mounted to each side of the harvester.
- ✓ Unload the hopper **without stopping the harvester**.
- ✓ Comfortable operator station with an ergonomic design, air conditioning, suspension seat, cup holders, and rearview camera.
- ✓ **Harvest day or night** with confidence and comfort.

COST SAVING FEATURES

- ✓ 3 harvest operations with **only 1 person and 1 machine**.
- ✓ Improved productivity through **nonstop harvesting**.
- ✓ Harvest with **less machines and less passes** compared to conventional practices.
- ✓ Improved fuel efficiency per harvested acre completing the shaking, sweeping, and pick-up operations with a **single engine**.

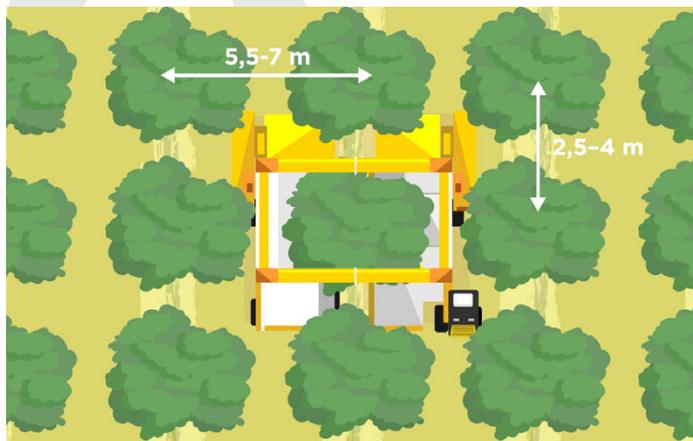
IMPROVED NUT QUALITY

- ✓ **Exceeding current food safety standards** for the nut industry with superior shaking, catching, and cleaning systems.
- ✓ **Leaf cleaning fans** eliminate leaves and other debris from the nut material.
- ✓ **Fallen branches removed and discharged** infield by the Stick Rake System. (only available on Continuous Unloading Hopper models).
- ✓ **Pre-cleaning system** removes foreign material improving delivered product quality (contact your sales representative for more details).
- ✓ **Shaker frequency optimized** by the proprietary grounding leg system, better vibration with less force preventing damage to next year's buds.

ORCHARD REQUIREMENTS



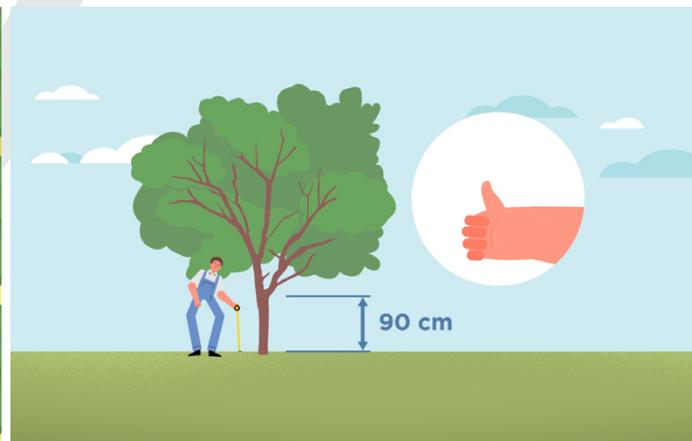
Recommended planting spacings



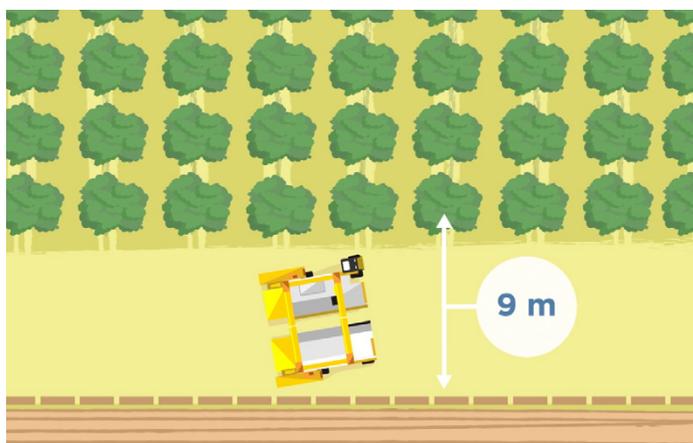
- ✓ The valid planting patterns are between 5,5 x 2,5 y 7 x 4 m. (for other patterns, please enquire). The most recommendable planting pattern is 6 x 3 m.



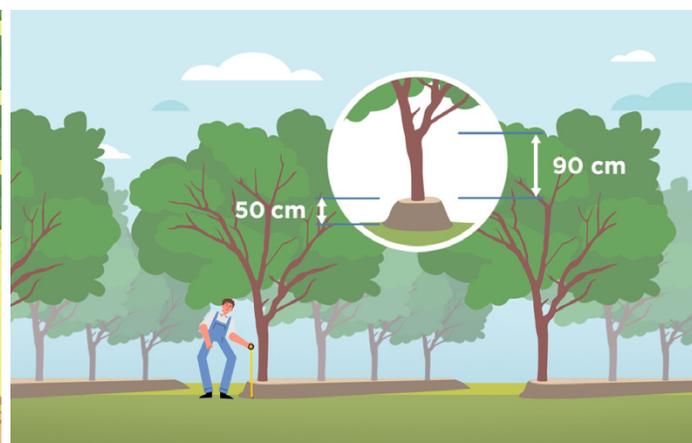
Trunk and berm dimensions



- ✓ The free height of the trunk must be at least 90 cm. To this end, it is recommended that the cross be cut at 1 to 1,10 m.



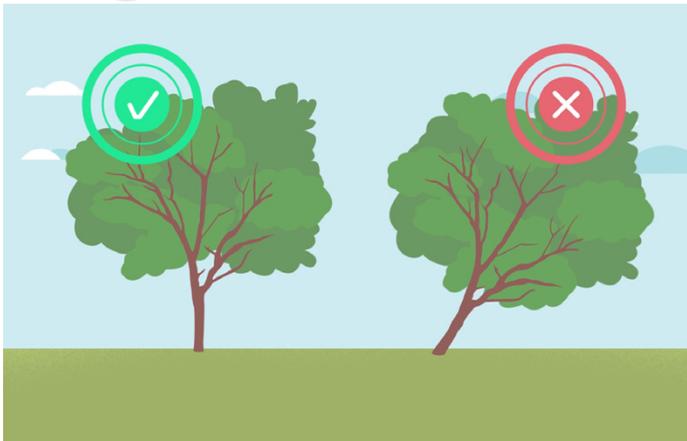
- ✓ At the end of the row there must be a space of at least 9 m., so that the harvester can turn around.



- ✓ The maximum permitted height of the berm is 50 cm.



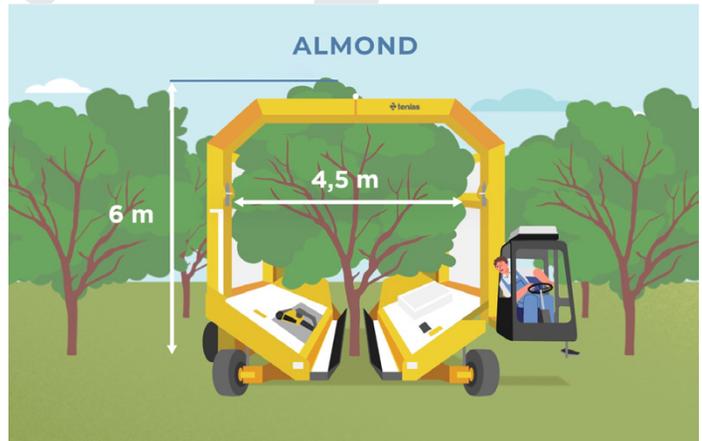
Alignment of the orchard



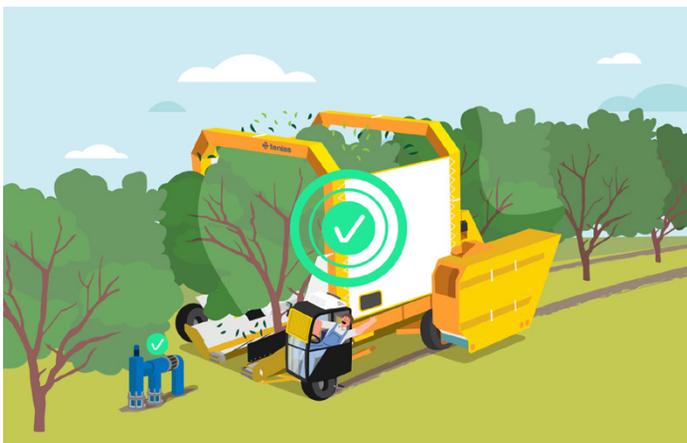
- ✓ Trees must be in full alignment.



Maximum tree size



- ✓ The maximum permitted dimensions of almond trees are a height of 6 m. and a width of 4,5 m.



- ✓ Elements such as irrigation systems and other obstacles must be aligned with the rest of the row.



- ✓ In the case of pistachio trees, these dimensions are a height of 5 m. and a width of 4 m.

CONFIGURATIONS

AVAILABLE ON THE MACHINE



Pre-peeling

Fitted with a **pre-peeling mechanism** on each side of the machine, this cleaning system helps reduce foreign material in the nut product delivered out of the field for improved grading.

To a large extent, the cleanliness of the almond will depend on external factors such as the condition of the fruit, humidity, temperature, and diseases in the plant.

This configuration is only compatible with varieties of almond with a **hard shell**.

Conveyor belt system with dumping on the floor

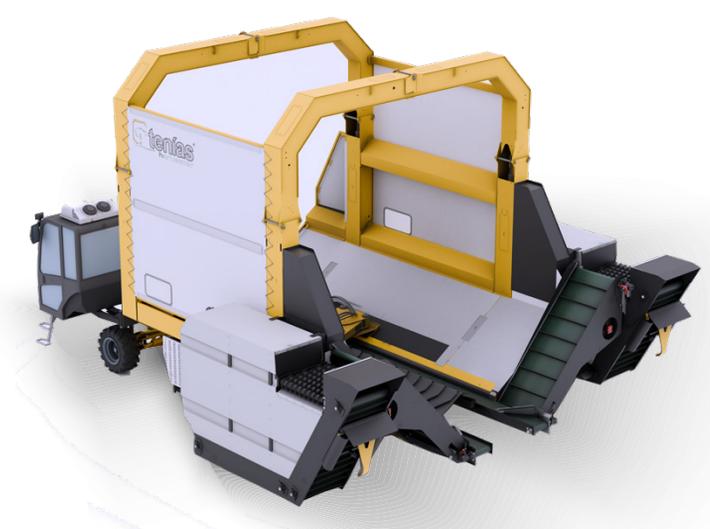


In the conveyor belt system with row discharge (the American system), the machine harvests the almonds and aligns them in the **middle of the road** for drying and subsequent collection, thus avoiding the use of sweepers and other ground-preparation machinery.

This configuration is intended for farms where the harvest is dried on the floor **due to insufficient space or an absence of drying plants**.



innovations



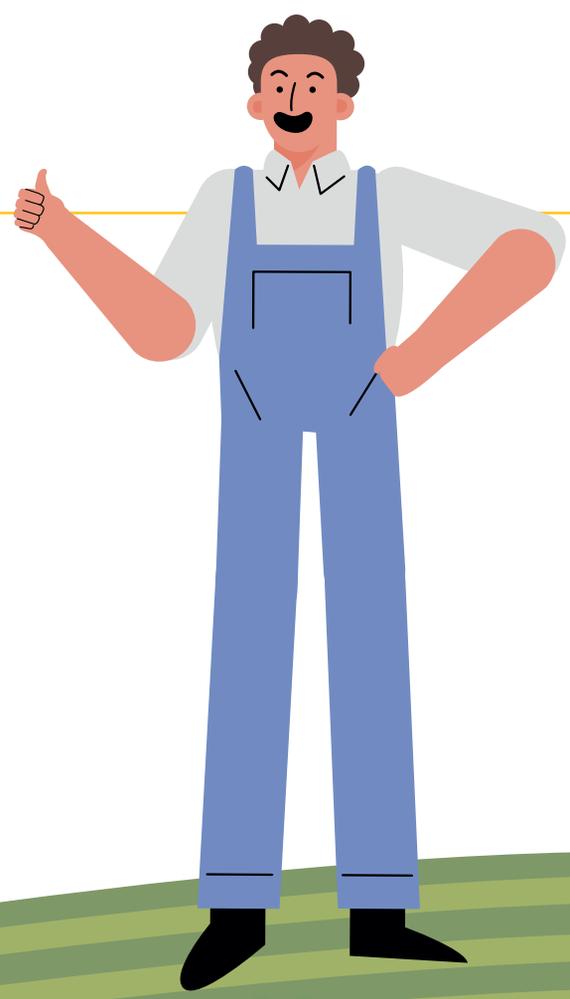
Conveyor belt system with dumping into hopper



Harvest Pistachios and Almonds with this configuration. Improve harvest efficiency with the ability to catch the nuts and continuously unload the product to reduce additional harvest passes. Reduce labor needs by only requiring one operator.

As is the case with the pre-peeling system, the machine includes the hoppers for continuous harvest.

More than 65 years serving farmers



TECHNICAL DATA SHEET

COMMERCIAL NAME ALMOND AND PISTACHIO HARVESTER

BRAND TENÍAS HARVESTER

VARIANT	PRE-PEELING	CONVEYOR BELT SYSTEM WITH DUMPING INTO HOPPER	CONVEYOR BELT SYSTEM WITH DUMPING ON THE FLOOR
Type	v.24	v.24	v.24
Weight when empty, without hoppers (kg.)	10.268	10.108	10.136
Weight of hopper when empty (kg/ ud.)	446	446	-
Gross weight with hoppers (kg.)	11.160	11.000	-
DIMENSIONS OF THE MACHINE WHEN FOLDED, WITHOUT HOPPERS			
Maximum length (m.)	6,95	7,60	7,60
Maximum height (m.)	3,45	3,45	3,45
Maximum width (m.)	3,46	3,40	3,40
DIMENSIONS OF THE MACHINE WHEN FOLDED, WITH HOPPERS			
Maximum length (m.)	7,90	7,90	7,60
Maximum height (m.)	5,10	5,10	5,10
Maximum width (m.)	6,85	6,85	5,30
SUSPENSION			
Maximum height (mm.)	180	180	180
Maximum width (mm.)	550	550	550
TYRES			
Front	11.5/80-15.3	11.5/80-15.3	11.5/80-15.3
Rear	4.00/70-20	4.00/70-20	4.00/70-20
TRANSMISSION			
Traction	4WD	4WD	4WD
Turn radius (m.)	7,8	7,8	7,8
ENGINE			
Brand	CATERPILLAR	CATERPILLAR	CATERPILLAR
Model	C3.6 ACERT	C3.6 ACERT	C3.6 ACERT
Type	COMBUSTION ENGINE 12 V	COMBUSTION ENGINE 12 V	COMBUSTION ENGINE 12 V
Nº. of cylinders	IN LINE 4	IN LINE 4	IN LINE 4
Power	100 KW/ 2200 RPM	100 KW/ 2200 RPM	100 KW/ 2200 RPM
Certifications	USA EPA 40 CFR Part 1039 Tier 4 Final EU NRM 97/68/EC Stage 5 CARB 13CCR Section 2423 Tier 4 Final JAPAN MOC/MLIT NONROAD STEP 4 FINAL	USA EPA 40 CFR Part 1039 Tier 4 Final EU NRM 97/68/EC Stage 5 CARB 13CCR Section 2423 Tier 4 Final JAPAN MOC/MLIT NONROAD STEP 4 FINAL	USA EPA 40 CFR Part 1039 Tier 4 Final EU NRM 97/68/EC Stage 5 CARB 13CCR Section 2423 Tier 4 Final JAPAN MOC/MLIT NONROAD STEP 4 FINAL
MAXIMUM RECOMMENDED SPEED			
In transport (km/h)	10	10	10
In operation (km/h)	1,8	1,8	1,8
DUMPING SYSTEM			
Dumping	NON-STOP DUMPING	NON-STOP DUMPING	NON-STOP DUMPING
Hopper volume (m³)	3,8	3,8	-

OUR PARTNERS

KUKA **motofil** **TRUMPF**

LEKU-ONA
GRUPO Global Solutions

PROYTEC FLUIDOS **rexroth**

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La importancia de elegir un buen fabricante
The relevance of choosing a good manufacturer

Parker



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