

& PROJECT IN SORTING EQUIPMENT

Over 20 years old, Italian sorting equipment company Protec has made its mark worldwide. With Its research and development department at its core, the company continues to innovate, by his President & Owner Mr. Luigi Sandei

bsolute safety Protec Sorting Equipment's technological commitment is imbued in efficient machines offering many advantages.

The company Protec was founded in 1990 and has become a leader in the design and production of dual-vision sorting machines for the food industry.

Protec has always invested in ideas and resources and the over 3000 plants installed worldwide are evidence of the company's thorough and targeted managerial policy, which aims to have a team of professional people whose main target is offering their customers reliable, accurate and efficient solutions.

The company's technological commitment can be found in a machine called Duett, which is the first dualvision sorting machine for fresh salads proposed by Protec; it enables examining produce on either sides, indicating defects or foreign

bodies. In addition to this, some cameras and an exclusive visual and fluorescent lighting system allows identifying the chlorophyll that all vegetables usually have.

Polluting agents, such as plastic, paper, cardboard and insects as well, can be easily kept apart. The particular configuration of the inclined conveyor belt enables separating defective produce by means of air jets. The visual system makes use of the most up-to-date electro-



nic technology and exclusive software for processing images.

Duett can be easily put in production lines because not only is it waterproof but also resistant to the usual cleansing sanification products. Protec has always focused on technological innovation and the investments of the past years have enabled the company's team of engineers and designers to perfect this new technology at one of the most important European producers of IV range produce.

To this regard, it is worth of special mention the fact that in addition to being a leading company on the market, Protec is also leader in tomato sorting, and in the past years it has developed high technology for IV range products, such as ready salads, corn, peas, and more.

In addition to tomatoes, it is now possible to sort whole fruit, tomato and fruit pulp, extrusions, purees, jams, leaf vegetables (fresh or dehydrated), legumes, diced fruit and potatoes (in almost every form). As a result, a simple product such as a tin of peas or a pot of jam, which people buy everyday, embodies a high-level technology aimed at achieving the highest quality, the one that Protec has always targeted UVA.

Protec is happy to present the X-TRI line, optical ari-jet sorter for wine-making grapes.

The development is the result of efficient investment. Protec, a company which has been active since



1990 in the sector for optically sensing sorters. The x-tri line consists of a destemmer, a vibrating mat for even distribution and an optical unit. Belt elevators may be needed to connect between different levels.

How x-tri functions: the fruit exiting the destemmer is distributed on the vibrating mat, in preparation for feeding the optical unit.

The optical sensor recognises the different defects (stalks, leaves, leaf stems, insects and foreign matter) and expels them using a jet of air. The good produce is discharged directly for subsequent processing

into the pressing unit. The optical system also makes it possible to recognise less ripe fruit (having a different colour), which can also be expelled along with the other defects. The defects to be rejected can be programmed using a touch screen. The x-tri line can handle up to approximately 15 t/hr of grapes. The capacity depends on a number of factors, such as the type of grape, the degree of ripeness, the number of defects, etc. For more information, please to contact: Mr. Rocco Sandei (sales manager) r.sandei@ protec-italy.com



Sorter for whole tomatoes, fruit, potatoes and vegetables.



Air ejection sorter with 2 or 4 vision cameras system for fresh vegetables, fresh-cut and fruit dices. Inspects the product on both sides.



Suction ejection sorter with 1 to 4 cameras for pulps, compotes, liquids, for tomatoes and fruits.

Special citrus version.

