



# Integrated Sorting Solutions

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Dried Fruit

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## Every Dried Fruit Counts™

In order to meet the contemporary food quality standards it has become crucial to invest in reliable food sorting solutions. TOMRA Food offers sorters for a multitude of applications, removing defects such as discolorations, (loose) pits and pit fragments, stems, foreign material, blemishes and aflatoxin.

### Roots of knowledge

With collective roots in the industry as farmers and entrepreneurs we have the expertise to transform the food industry.

### Advancing intelligence

With best-in-class sorting and grading solutions, and valuable intelligence, we transform technology into impact.

### Trusted togetherness

With local understanding, global know-how and long-term partnerships we optimize global food production and co-create sustainable value.



### Products

apricots,  
cherries,  
figs,  
prunes,  
raisins,  
and many more.



# Benefits

## food Safety

The production of contaminated produce can damage your reputation forever. With regards to the dried fruit industry we are referring to defects such as stems, stalks, glass, metal, plastic and stones. Other characteristic defects like aflatoxin, embedded stones and pits might not always be visible with the bare eye but always imply a high level of risk for the consumer. Together with TOMRA you can tackle the risk of contamination and deliver a constant output.

## Yield Optimisation

The Advanced Foreign Material Detector (AFMD) minimizes the false reject and drastically increases your sorting efficiency. Not only resulting in higher levels of yield, but of course also increasing your profitability.

## High throughput

Implementing sorting technology reduces the need for manual labour, allowing you to deploy your staff in other crucial positions while the output quantity and quality increases. These combined advantages lowers your costs and increases the level of customer satisfaction.



# Technology

## Laser

TOMRA's laser machines sort based on colour, structure, and biological characteristics. Laser scanning detects contaminants even when the product and the defects have the same colour or structure characteristics. In addition, the Advanced Foreign Material Detector (AFMD) module sorts on product specific features, like the moisture level in raisins.

## Camera

Recognition of materials based on colour, biological characteristics and shape is guaranteed thanks to the use of cameras. Their capabilities go beyond the visible spectrum and include infrared, ultraviolet and other spectra. TOMRA has developed exclusive high resolution cameras with an adapted spectrum, ideal for optical food sorting.

## BSI

Allows the examination of food products using light beyond the visible spectrum, into the near-infrared region. TOMRA's BSI technology inspects the characteristics of the product and can identify certain chemical and molecular differences and changes on the surface and within the objects being inspected.

## X-Ray

Detects on density, irrespective of size, moisture or pollution level.

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We obtain high-quality products that will satisfy our meticulous customers. In the tests we performed with TOMRA 5C, we observed that the machine delivered high performance sorting foreign materials, such as plastic and stone, that are traditionally a problem with grapes. What's more, by using this machine, no product gets wasted. Thanks to the sorting accuracy, we don't have to discard low-quality outputs, but can sell them for alternative uses such as molasses, vinegar and alcohol.”

Emre Tuğrul,  
General Manager of Tuğrul Tarım



“

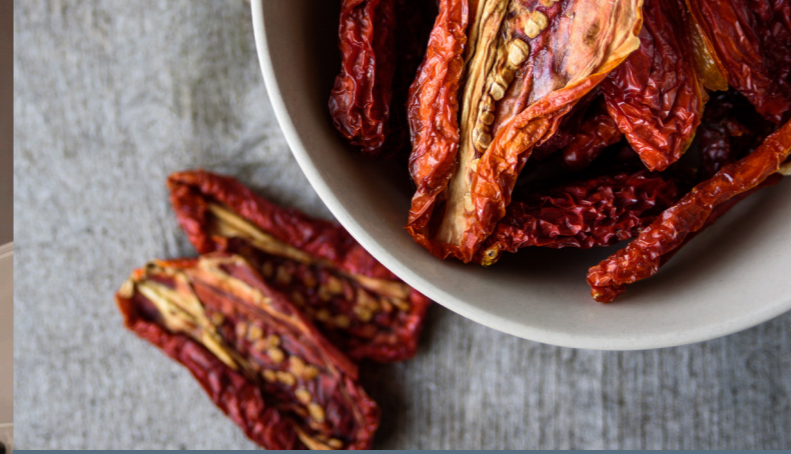
Depending on the harvest, we produce about 3,000 tons of semi-dried frozen tomatoes annually, and between 500 and 700 tons of sun-dried tomatoes. The Turkish domestic market seldom buys dried tomatoes and never buys semi-dried frozen tomatoes dried in ovens. Therefore, we export all of our production. All the countries we export to expect the highest food safety and quality standards. This is why we rely on TOMRA's sorting technology, to achieve standards not possible with hand-sorting.

Hami Özer, DFS co-founder

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Dried fig is the most difficult dried fruit to process and package. The size and softness of the fruit's grain volume cause the fig's shape to change constantly. But optical sorting machines enable us to overcome such difficulties. TOMRA's sorters also help us a lot by detecting and removing foreign materials and mycotoxin fractions.”

Alper Aksüt,  
General Coordinator at Kral Incir.



“

To assist in our global growth we decided to partner with TOMRA. This will help us to provide high volumes of high-quality raisins.”

Türkan Orhan, general manager at Orka Tarım



# Our Sorting Solutions

## TOMRA 3C

With a strategic combination of multi-spectral NIR technology and RGB full camera, the TOMRA 3C presents an innovative and cost-effective solution to inshell almond processing ensuring your products meet the highest standard.

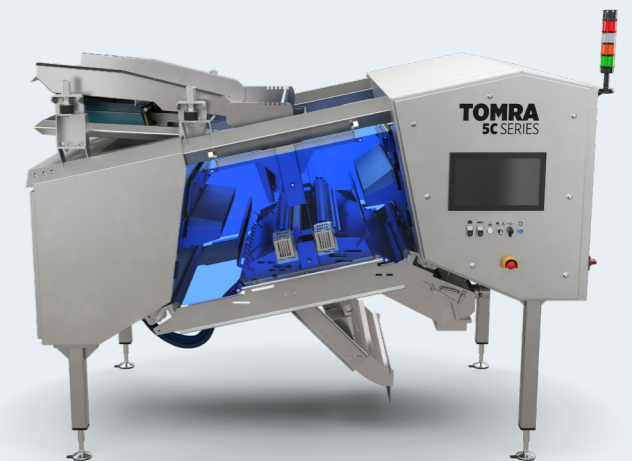
The widest sorter for inshell almonds on the market, the TOMRA 3C offers the highest yield for your product while multi-spectral NIR technology elevates the TOMRA 3C above conventional sorting to deliver up to 99% purity against incoming defect loads. An extremely low false reject rate also reduces the need for rework of the reject stream which boosts productivity and optimizes yield.



## TOMRA 5C

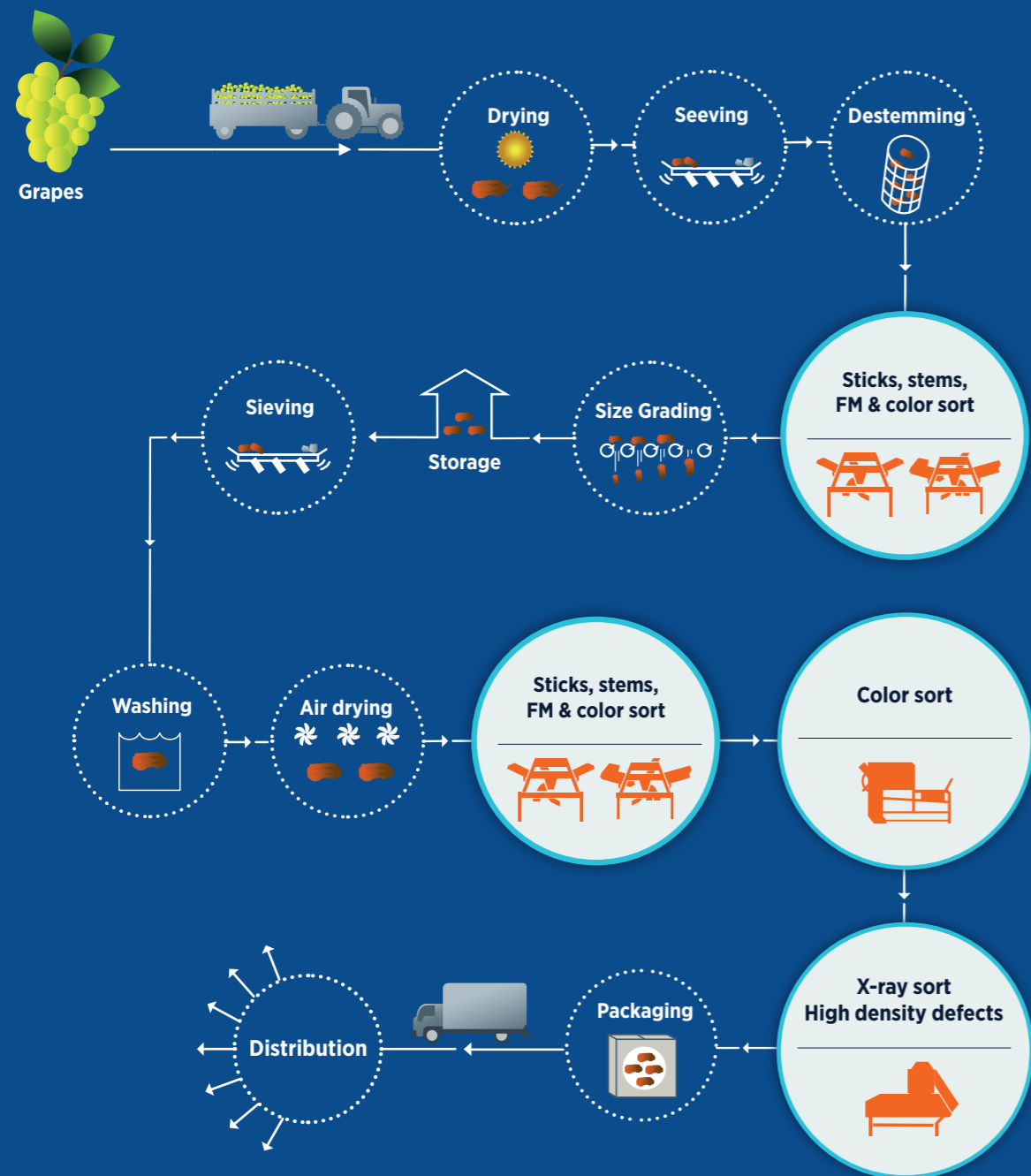
The TOMRA 5C is a premium optical sorter in the next generation of best-in-class solutions for the nut and dried fruit industry. The TOMRA 5C's upgraded system and industry-leading sensors seamlessly and immediately future-proof your operation's efficiency, safety, and yields through elevated sorting driven by data and more accurate removal of foreign material.

The TOMRA 5C is the next generation of expectation-defying technology from TOMRA Food, built with the processor and operator in mind. Industry-leading sensors combined with big-data analysis deliver a clear picture of each and every nut and all foreign material; setting your team up to make real-time decisions to boost your chances of a better profit, higher quality yield and expeditious equipment pay-back.



# Processing Line Example

Depending on the production environment, throughput and other specific needs, we design the most efficient line lay-out. The actual machine configuration is defined based on TOMRA's experience with similar processors and after extensive testing.



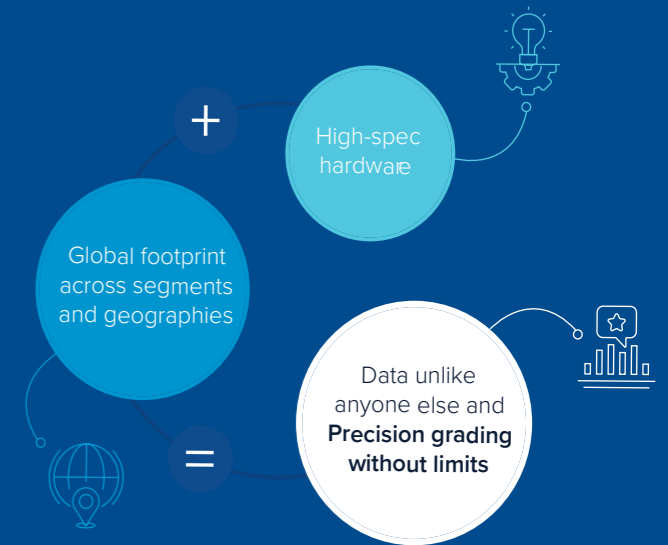
## Food Solutions

Our vision is to be the **innovative, world leader in sorting, packing, and optimization** of citrus fruit. TOMRA Food solutions are equipped with the **latest technologies** and designed to **process a variety** of products based on your **unique requirements**. Our solutions can help you **quickly sort, grade and pack quality product for your customers, maximize your own profit** and support you with your **growth aspirations**.

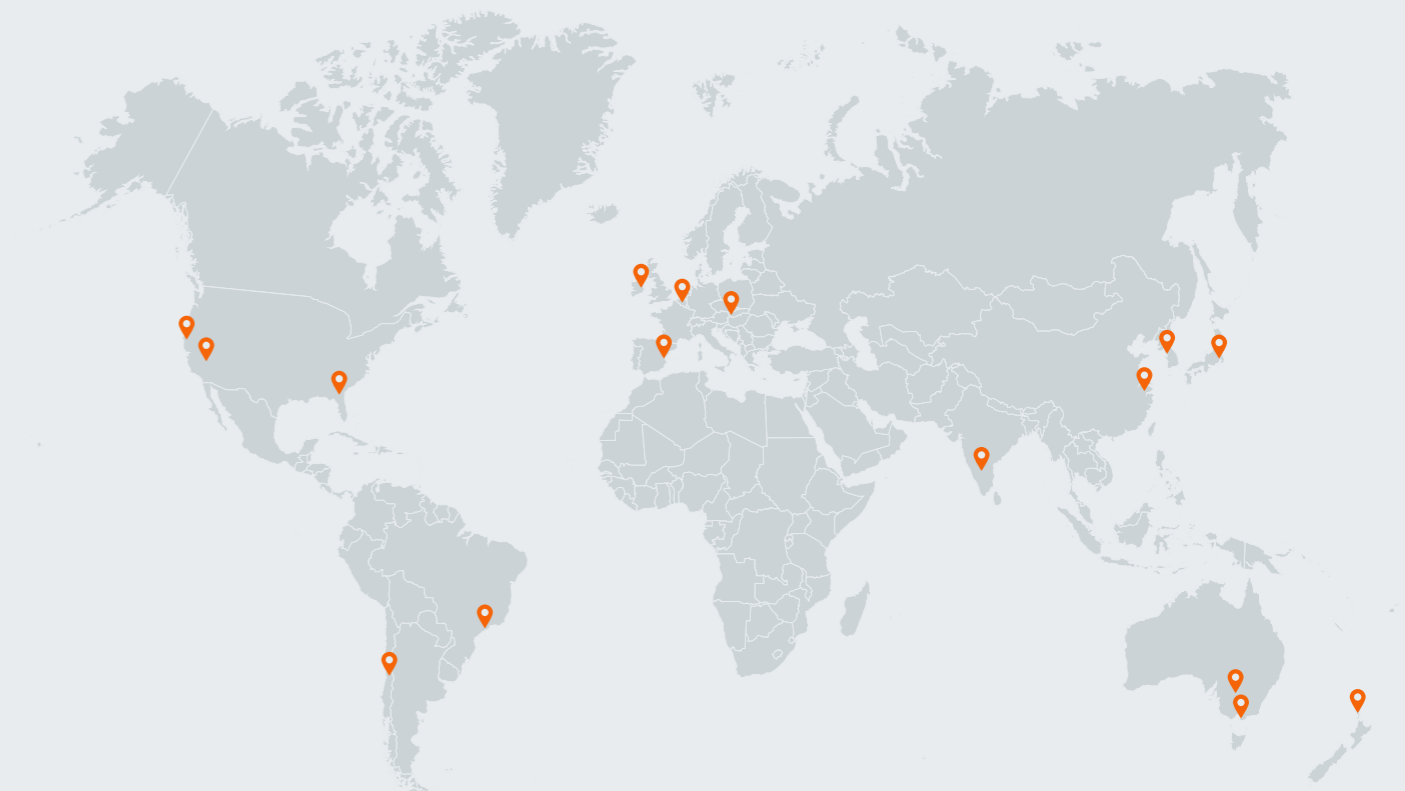


## Why TOMRA?

We lead the industry because:



## TOMRA Food Locations



● TOMRA Food Offices



**TOMRA**

Interested in a free demonstration with your own product or require more information?

**Please contact us directly**

[www.tomra.com/food](http://www.tomra.com/food)



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