

BEFORE



AFTER



Trotec Case Study

Customer:

MareDeus Food Solutions,
(Spain, Portugal, Norway)
www.maredeus.com

Sector:

Seafood / Maritime specialties

Benefits:

Optimum humidity level, even at low temperatures of 5 -8°C. For perfect climate conditions during the entire production process.

Trotec product:

Desiccant dehumidifier TTR 3700

Reliable dehumidification against condensation

Trotec's dehumidifiers, developed and produced in Germany, eliminate condensation water on ceilings and fog in production areas

MareDeus Food Solutions was founded by the family of Eugenio Martínez de Ubago Escuredo and his business partners in 2011. For four generations, they have dedicated themselves to the production and packing of fish.

This success story starts in O Grove, where MareDeus Food Solutions set itself the goal of meeting the quality requirements of the customers of the Spanish supermarket chain Mercadona for all food products related to cod. The business model is based on efficiency, trust and transparency of the daily work as well as on new technologies with the aim of always being the best option on the market. MareDeus has its headquarters in Málaga (Spain), its production facilities south of Lisbon (Portugal) and its purchasing and export centre in Aalesund (Norway).

Trotec is a German company operating internationally, which has specialised in the development, production and marketing of dehumidification systems, air humidification and temperature control.

Trotec provides versatile solutions for a wide range of processes in the food industry, in this case for the production of cod. Every day, the food industry is faced with increased hygiene and quality inspections resulting from different national and European regulations. All food companies are obliged to comply with the HACCP requirements (Hazard Analysis and Critical Control Points). These requirements regulate the food production to protect the consumers' health in accordance with RD 109/2010.

Trotec helps in meeting strict hygiene requirements and guarantees high quality standards

Condensation water on ceilings and cold spots in the production areas can lead to a multiplication of germs and bacteria. Condensate dripping down could finally come into contact with the product and cause a contamination. This is why condensation must be avoided at all costs according to HACCP.

Case Study: MareDeus, Spain

Trotec's industrial desiccant dehumidifier TTR 3700



MareDeus was also faced with this problem and turned to the experts at Trotec in order to be able to continue producing food of the highest quality. Only this way has MareDeus been able to obtain the most prestigious certifications of the food industry, e.g. IFS (International Food Standard), BRC (Global Standard for Food Safety) and ISO 14001.

Every day, food companies are faced with the challenge of increasing their production to maintain market prices, while also fulfilling the highest hygiene standards with regard to their production facilities. This also includes a cleaning break that is as short as possible. After the cleaning process, which is usually done with high-pressure steam and disinfectants, the production areas are full of water and moisture.

The dehumidification capacity of conventional cooling systems is generally not sufficient to prevent the formation of fog. Consequently, condensate is formed at the coldest spots in the production chain and on the ceilings. In addition, the fog often limits visibility to five metres and thus poses additional risks. MareDeus keeps its entire cod production and processing area at 5 °C and 8 °C respectively. For humidity and condensation control at such low temperatures, desiccant dehumidification technology using a silica gel sorption rotor is recommended.

On-site analysis – for a perfectly tailored drying solution without production downtimes

Trotec's team of engineers has analysed MareDeus' moisture problem on site, calculated the need for dehumidifiers, and delivered a turnkey solution. To avoid any restrictions in production, the delivery and installation of the Trotec solution were carried out during a planned maintenance interruption. A great success, as you can see from the before-and-after photos.

Improvements thanks to Trotec's solution:

- Elimination of the fog and condensation problem
- Less maintenance and repair work on production and packaging machines
- Fewer defrost phases of the cooling systems and therefore also significant energy savings
- More safety in hygiene
- Indirect increase in production and employee performance
- Elimination of bacteria, as they cannot survive in dry surroundings

This solution can be applied to all companies of the food sector confronted with the same problem every day, e.g. **slaughterhouses, cutting plants, meat processing plants, packaging companies, etc.** Controlled humidity and temperature conditions help to achieve a higher quality and longer shelf life of food products.

Condensation dehumidifier TTR 3700

- Dehumidification performance: 492 kg / 24 hours (depending on the room temperature)
- Air volume: 4,300 m³/h
- Offers a very high dehumidification performance even at low temperatures of -20 °C and above
- Robust stainless steel housing
- Reliable silica gel sorption rotor
- Configurable air direction reversal (conversion requires minimal effort)
- Duoventic control – the performance of each fan can be set individually via a potentiometer
- TTR Trisorp Dual principle with separate air flow ducts for process and regeneration air for pressure-neutral recirculation operation
- Electric regeneration heating
- Filter monitoring (per air current and collective warning light)
- Can be configured individually for any application due to a wide range of equipment options
- Professional quality "made in Germany" – originally produced by Trotec



Detailed information on the TTR 3700 is available at: www.uk.trotec.com/ttr3700