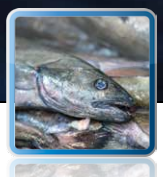
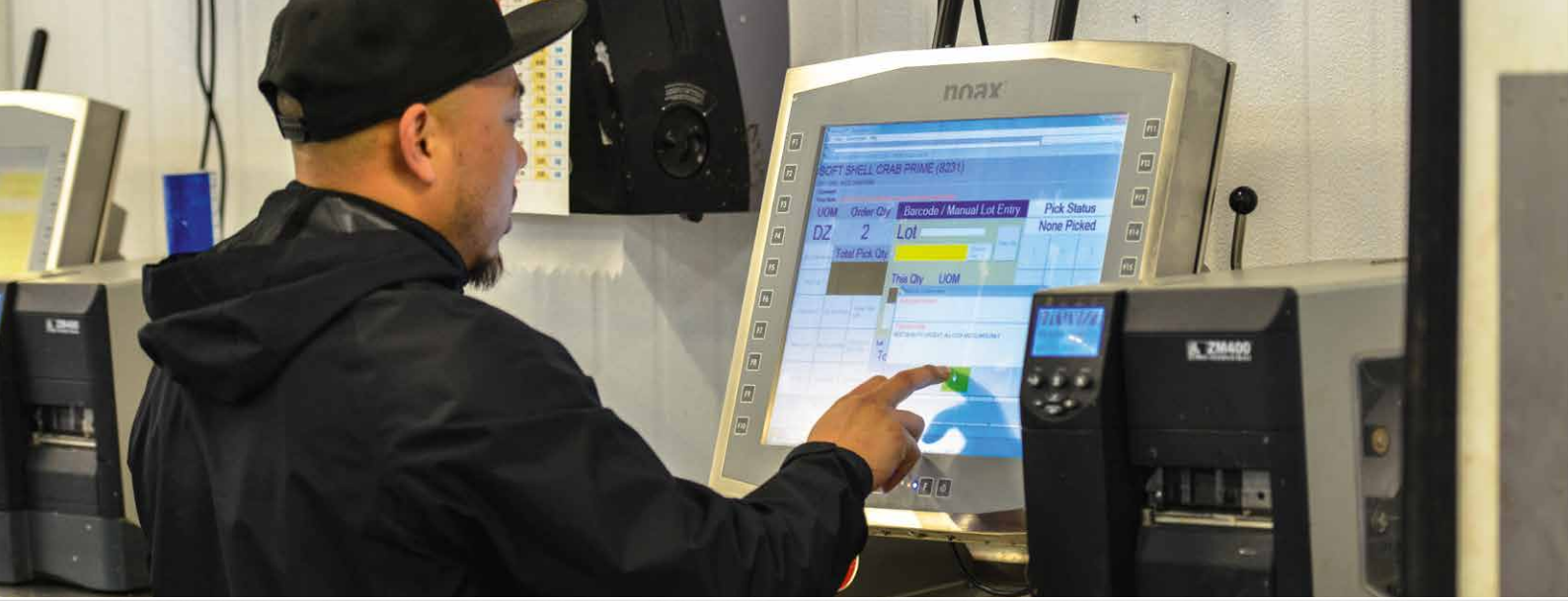
noax® Technologies



Case Study

Royal Hawaiian Seafood

IPCs Withstand
Corrosive Seafood
Processing Environments



noax industrial PC at Royal Hawaiian Seafood's processing facility

Industrial PCs Survive Corrosive Seafood Processing Environment

In the early morning hours, box trucks from Royal Hawaiian Seafood roam the fog-laden docks of South San Francisco, efficiently collecting fresh fish and seafood from their trusted suppliers. By the time the morning sun crests the horizon, the trucks have already unloaded most of the fresh catch from their climate-controlled stores, prompting Royal Hawaiian Seafood's 18,000 sq. ft. processing facility to buzz with activity. With over 30 years of experience, Royal Hawaiian Seafood has been the preferred seafood purveyor of fine dining restaurants and establishments in the greater San Francisco area. The roots of the company began in the early 1980s when the owner began taking an interest in the relatively new and unknown world of aquaculture. From research into various sustainable aquaculture practices programs, he stumbled upon a very viable business opportunity to raise and market Hawaiian blue prawns to the greater San Francisco area. His idea was well received, and as the demand for his products grew, local chefs began requesting a larger variety of seafood options. Recognizing another opportunity, he expanded his offering to include seafood products from all over the world, paving the way for the company that exists today.

> "All of our workstations were rusting except the noax computer."

Fresh, frozen, and live seafood

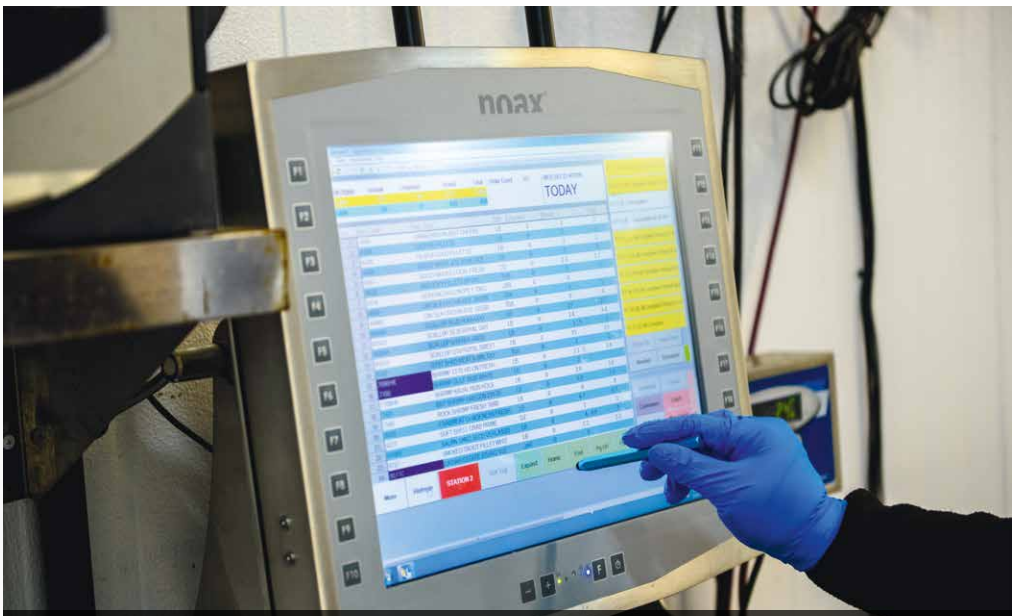
Once the fresh seafood arrives at the Royal Hawaiian Seafood facility, it is transported to the weighing area, where all fresh, frozen, and live seafood products are weighed and inventoried via noax industrial computers. Following weighing, the seafood moves to different areas of the facility for either storage, further processing, or packaging. After being rinsed and re-iced, products that need to remain frozen are sent to the large walk-in freezer. Non-frozen, whole-fish products are sent to the refrigeration area to be processed at one of their two filleting stations. To ensure proper handling of live seafood, the Royal Hawaiian Seafood facility is equipped with noax industrial PCs which help to manage the proprietary-designed salt water tank system as well as an advanced refrigeration system to ensure top quality seafood. All Royal Hawaiian Seafood products are monitored throughout all stages of production, processing, and distribution to ensure the complete traceability that their customers demand.

Standard PCs fall short of expectations

Due to their many years of hard work, and their commitment to providing sustainable, high-quality products and services, Royal Hawaiian Seafood has developed an excellent reputation in the market. When it came time to choose an industrial PC (IPC) to support their data collection processes, it comes as no surprise that they chose noax Technologies.

Prior to noax Technologies, Royal Hawaiian Seafood was using consumer-grade monitors in their processing, refrigeration, and live seafood areas. The live seafood room is considered to be the most environmentally challenging area of the facility due to the high humidity and the corrosive nature of the salt water stored in the tanks.

In 2010, Royal Hawaiian Seafood realized that to be able to collect data in this area, standard PC technology would not be sufficient and asked their software vendor for a recommendation. After their vendor recommended noax, Royal Hawaiian Seafood researched their V2A stainless steel, IP69K rated, noax S19 IPC. Despite being hesitant about the higher price than they



A Royal Hawaiian Seafood employee inputs data into the noax PC via a touch pen

Royal Hawaiian Seafood is committed to providing safe, high-quality seafood as well as going above and beyond to promote sustainable fishing. noax Technologies is thrilled to have a role in supporting Royal Hawaiian Seafood to help their business create a positive change.

noax industrial PCs assist Royal Hawaiian Seafood in their weighing and printing operations

had become accustomed to with the standard PCs, Royal Hawaiian Seafood decided to source a noax S19 industrial computer.

In their refrigeration and processing areas, Royal Hawaiian Seafood decided to work with standard touchscreen monitors and desktop PCs in NEMA 4, wall-mounted enclosures. Due to the constant exposure to water, cold, and general wear and tear these areas provide, it did not take too long before Royal Hawaiian Seafood began to experience problems after rolling the equipment out.

Royal Hawaiian Seafood dealt with a wide range of issues from water ingress and rust to general difficulties encountered trying to sanitize a facility with non-washdown touchscreen monitors. Troubleshooting the units and coordinating repairs and replacements with their hardware vendor also became a frequent occurrence.

After having to replace all workstations every 2-3 years and having to allocate additional capital to boost their inventory of spare units to protect against downtime, the frustration, aggravation, and lost productivity began to take its toll. Royal Hawaiian Seafood realized it was time for a change.

Sticking with noax

As they began to research alternatives in the marketplace, a Royal Hawaiian Seafood employee asked management why they weren't considering noax for the other areas in the plant. Despite the fact that the S19 unit was in the worst area of the facility, it had performed flawlessly for more than 6 years. Shortly thereafter, Royal Hawaiian Seafood attended the Seafood Processing Expo 2015 and while there, ran into another seafood processor that had worked with noax for several years and gave a glowing testimony of their experience with noax equipment at their facilities. As a result, Royal Hawaiian Seafood decided to stop researching the market, and

A Royal Hawaiian Seafood employee weighs and packages fresh scallops for a customer

to purchase additional noax S19 units to replace their standard PCs throughout the plant. According to Royal Hawaiian Seafoods' Operations Manager, "All of our workstation PCs were rusting except the noax computer. We realized that despite being over six years old, it will probably last longer... a lot longer." The noax S19 industrial computers can now be found in various locations of the facility including the filleting station and walk-in freezer which operates at 34° F. Issues related to water ingress, downtime, and damaged equipment have disappeared. Workers are no longer frustrated with the touchscreens because they can easily operate the screens even in wet conditions with gloves. Needless to say, Royal Hawaiian Seafood is pleased with the upgraded noax hardware.

Improved reliability for the future

Previously, Royal Hawaiian Seafood's computers could not handle their sanitation process. Sanitation crews had to be very careful in covering the PCs and had to take the time to carefully clean them by hand with disinfectant wipes. Now, the sanitation process goes a lot faster. "Now that the noax PCs can handle our sanitation process without bagging or covering, we can use the same cleaning agents and more thorough high-pressure washdown process throughout the entire facility," shared the Operations Manager. As for reliability, according to Royal Hawaiian Seafood's Purchasing and Service Manager, "Workers barely ask IT for help anymore. We haven't really had any issues since we began working with the noax computers." Thanks to noax industrial computers, Royal Hawaiian Seafood has been able to recapture the time and energy that was once wasted on maintaining their plant-floor computer equipment to focus on what is most important – sourcing the highest quality, safe and sustainable seafood products for their trusted customers.

> "Workers barely ask IT for help anymore. We haven't had any issues since we began working with noax IPCs."

Royal Hawaiian Seafood

Company Profile:

Prior to being launched in 1985, Royal Hawaiian Seafood found its roots through its owner who used to peddle Hawaiian Blue prawns to fine dining restaurants in the San Francisco Bay Area after researching developing aquaculture programs in Hawaii. Today, Royal Hawaiian Seafood imports, processes, and distributes fresh, frozen, and live seafood. Royal Hawaiian Seafood supports local and regional sources by purchasing directly from fishermen and fish farmers. Through partnerships with suppliers, consumers, and NGOs, Royal Hawaiian Seafood is able to offer a wide variety of sustainable seafood products.

For more information, please visit:
www.sfrhs.com

Requirements and Applications

Objectives:

- ✓ Automatic data collection
- ✓ Streamline work processes
- ✓ Capture traceability to ensure product safety
- ✓ Ability to perform order fulfillment activities
- ✓ On-site monitoring of operations

IPC Requirements:

- ✓ Completely sealed enclosure
- ✓ Survive daily sanitation process
- ✓ Simple, intuitive operation by user
- ✓ Withstand extreme temperatures
- ✓ Function in cold, wet environment
- ✓ Integrated, resistive touchscreen for use with gloves
- ✓ High-level of reliability to prevent downtime
- ✓ Withstand high-pressure washdown and corrosive environment

Overview of Components

Hardware:

- S19 Industrial PCs
- In-house developed all-in-one mainboard
- Input: robust touchscreen
- Bright, high-contrast TFT display
- IP69K protection rating
- Completely sealed, with internal fan

Software:

- Operating system: Windows 7
- Application program: SeaTouch™

Case Study arranged in 2017

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