

Small Vessel / Salmon Farm Pontoons with Various Enclosures



About the Project:

Chile is one of the largest salmon producers in the world. There are over 500 pontoons related to the open sea salmon business. Recently, our team visited one of the salmon farms in the southern region of Patagonia.

This specific pontoon is managing several fish cages, each roughly 120 feet x 120 feet x 75 feet deep. It handles about 1.5 million salmon every 14 months. The pontoon is a complex operation including quarters for the crew, laboratories, power generator rooms producing the required energy for the pontoon, oxygen systems to maintain the quality of the sea water, robots to remove dead fish, natural gas storage (to power the outboard engines from the support boats), salt water to fresh water converting equipment, waste treatment facility, oil tanks for the diesel generators, and an entire feeding system for the fish.

The large cages are controlled by multiple closed-circuit television (CCTV) systems, including some infrared (IR) cameras above and below the waterline. Internal nets keep the salmon contained. External nets prevent sea predators from entering the cages. Above each water cage there are nets to prevent birds from hunting the fish.

This floating pontoon is built with reinforced concrete, including the main deck. The over deck is mainly constructed with metal structure.

The Challenge:

Suppressing fire in remote locations, such as the open seas, is challenging. When fires do occur, it can be difficult to get help from safety authorities on a timely basis.

The Solution:

Stat-X® fire suppression was chosen because of the variety of enclosures the product can protect. We used the electrical, thermal, and the portable device options based on the enclosure, hazard classification, and application. The reliability, low maintenance, and easy installation features of the Stat-X product line secured the business.

Causes of fire on pontoons:

There are multiple electrical motors on the pontoon as well as electrical cabinets which could become a



potential source of fire. The fire protection system includes a control system that covers the entire pontoon.

This image shows the Stat-X electrical generators protecting the power generator

room. This installation of electrical units is connected to an alarm and detection system installed throughout the pontoon.



A single thermal unit protects each electrical cabinet.

Moving forward, Stat-X will be the standard fire protection system on the new generation of pontoons that are currently being built at the shipyards. We plan to recommend protecting additional enclosures like their larger power generator rooms.



The Stat-X First Responder is our hand deployed device for use as a personal protection tool providing suppression and emergency egress.



From the left: Hector del Rio, naval engineer; Gonzalo Lopez-Davila, Stat-X sales consultant (our former CEO); and Alex Waghorn, retired admiral currently with WLP Partners

A pair of Stat-X First Responder® units are visible in multiple strategic areas of the pontoon and are mounted inside plastic wall mounted boxes with clear instructions posted above. The deployment of the Stat-X First Responder unit requires advance training. The risk manager conducts frequent training sessions to ensure proper handling and use of these portable devices.

These projects were customized, installed, and maintained by our distributor, WLP Partners in Chile.