



# Deltaport Third Berth Expansion

Delta, British Columbia



With tall rows of gleaming racks spanning far as the eye can see across the Strait of Georgia in Delta, British Columbia, the Deltaport Third Berth Expansion is a response to rapidly increasing industry demand. With projections indicating a doubling container traffic in the next ten years, and a tripling in traffic in the next 25 years, Deltaport is planning for the future by both expanding its container handling capacity and by utilizing durable, maintenance-free hot-dip galvanized steel for corrosion protection.

This outstanding durability will ensure these hot-dip galvanized steel structures will last 50+ years with little or no maintenance, a factor critical to the ongoing operation of the facility. No time or money will be wasted with costly, ineffective touch-ups and repairs. Instead, the galvanized racks will stand strong and corrosion free, enhancing the functionality of the facility.



Sharing a location with the “Westshore Terminal” coal port, the Third Berth Expansion is subjected to some of the harshest environmental factors possible. Perched in the chilly, saltwater environment of the North Pacific shore, the container racks of the port must withstand the highly corrosive effects of rain, snow, and salty sea air. As the metallurgically bonded zinc coating protects edges and flat surfaces alike with no weak spots, seeping water will have nowhere to take hold – stopping rust and corrosion before it starts.

With more than 690 tons of structural steel for container storage, fasteners, and gratings hot-dip galvanized, the owners of Deltaport are planning for a long life of durable, maintenance-free corrosion protection that will support the port’s expanding operations long into the future.



The durable zinc coating is more difficult to penetrate than the substrate steel itself with zinc-iron alloy layers of up to 250 DPN hardness protecting the steel beneath. Such strength is important for container racks that will continually be exposed to rough handling in day-to-day operations. In addition to protection from abrasion, hot-dip galvanizing also provides cathodic protection, which means the zinc will sacrificially corrode to protect the areas around small scratches ionically – preventing rust from spreading like wildfire across a structure.

**Galvanizer**  
Silver City Galvanizing, Inc.

**Specifier**  
Kay-Son Steel

**Engineer**  
Vancouver Port Authority

**Engineer**  
Brymark Installations

most distinguished