

## ALCOA - Trinidad Transfer Terminal -SHIPLOADER UPGRADE

Enco was contracted to provide design and detail engineering services and new transfer conveyor for upgrade of existing ship loader. This project posed unique challenges due to limitations of existing pier conveyor, gantry, ship size and the requirement for material containment with boom in stored (vertical) position. Enco's responsibilities included supply of new transfer conveyor to elevate material and design of new telescoping air slide boom. The boom included box truss design and 36" wide air slides to handle 1200 TPH of alumina.



The box truss, constructed of 6061-T6 aluminum, provided 70 feet total reach from pier fender line with 40 feet of shuttle travel. Enco's fabrication facility manufactured the 54" wide transfer conveyor and reclaim hopper and shop assembled all to verify proper field interface. The aluminum boom was outsourced and inspections were conducted routinely to verify all design requirements were met.



### Design engineering for ship loader upgrade

- Analysis of existing structure
- New boom providing extended reach
- Light weight aluminum construction (boom)
- Telescoping airslide

### Equipment Supplied

- Transfer conveyor
- Modification to existing tripper conveyor
- Reclaim hopper