

# LOADING AND UNLOADING OF CONTAINER FROM SHIPS BY MOVING CRANES AND PULLEYS SYSTEMS OVERHANGING FROM RUGGED STRUCTURES

Prepared by: Yee Cheng Hann, Leow Choon Seng, Yap Tze Hsien, Aaron Oon Chye Len

## ABSTRACT

---

At the wharf, one finds the huge cranes are at work. They were busy at loading and unloading big container from ship to the stand by trucks or vice versa from the trucks to the ships. The intended purpose of this title is to design a way how a container are gripped, lift and moved to a different location and the released.

From the structural aspect, the model of quayside container crane is divided into three different parts which are roller track, operating system and structure design. The operating system of quayside crane container is control by manually with a PLC device. The PLC device will control the movement of hoist, spreader and emergency precautions. Next, the roller track will perform movable left right position of whole structure container crane. A structure design with a structural system to wind stand the lifting mechanism carrying a full container loads.

The expected outcome of this report comprises of a full lifting mechanism, the pulley moving system and control system for logistic movement.