

A STUDY ON THE DEMAND OF CONTAINER UNLOAD EQUIPMENTS IN SEMARANG CONTAINER TERMINAL

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ABSTRACT

A study or evaluation for facilities and equipments related to public service is absolute. The purpose is to ensure that the quality and quantity of the service is maintained. The objective of this study is to evaluate container unloading equipments that include Trailer, Rubber Tyred Gantry (RTG), Top Loader and Side Loader as well as their facilities such as container yard and dock that serve the container unload flow and to review their service up to the year 2006.

The analysis was carried out by reviewing the monthly container flow in average based on the Container Crane (CC) performance as the container unload facility from and into the ships. By calculating one cycle of travel and process duration of each equipment and by reviewing the container flow based on their destination movement in the Container Yard (CY), the level of demand for equipment could then be identified. The container yard capacity (CY1) was determined based on the time length of the containers to stay in the yard. Capacity of the dock was based on the Container Crane (CC) performance.

Results of the study showed that up to 2016, the demand for equipments would be 30 units of Trailers, 10 units of RTG, 5 units of Top Loader and 4 units of Side Loader. The capacity of container yard (CY1) would be 71.57% with averagely five containers to stay in the container yard. The capacity of the dock would serve 55.81% of the containers based on the performance of five units of Container Crane (CC) and 15 hours averagely of daily operational time.

Keywords: Containers, unload

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