

**ORDERING TRAILER AREA PARKING SYSTEM ON MAKET  
OF SEAPORT CONTAINER BASED RADIO FREQUENCY  
IDENTIFICATION USING SIMULATION.  
(Case Study : PT. Terminal Petikemas Surabaya)**

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**Abstract**

*Radio Frequency Identification (RFID) is one of kinds autodetection technology. In this research we want to apply it on PT.Terminal Petikemas Surabaya (PT.TPS) to reduce unnecessary shifting that is caused by arrival of trailer random. During research knowing that application of RFID impact to business process at PT.TPS that it must provide parking area for trailer. This is used to manage arriving of trailer before entrance yard area. This parking area must first we decide how wide and how long trailer must be hold in there. Before this technology applying in real world, we need to try applying it on prototype model, in this research we use maket. This maket become our object to make some experiment of applying RFID technology, learn characteristics and behaviour of RFID more extensively, and all at once to communicate or discuss with any one related to this project. This maket model is designated using software Autocad 2005 and 3Ds Max 2009. On maket containing component that can moving such as trailer and Rubber Tyred Gantry Crane (RTGC). Before this maket doing run we must make some experiment to decide how fast trailer move on maket, how many trailer must be made, and how long it's hold in parking area. To answer this question we use simulation method. This simulation model is made using software arena 5.0. After running simulation we get some conclusion. There are more arrival trailer that unplanned more we need capacity of parking area, faster and faster trailer move on maket more we need capacity of parking area, and at last longer and longer we hold trailer at parking area we need more capacity of parking area.*

**Keywords** : *seaport container, maket, Radio Frequency Identification, simulation.*