

**RACKING SYSTEM SELECTION FOR THE COLD STORAGE OF
PT. BERNOFARM**

A THESIS

**Submitted in Partial Fulfillment of the Requirement for the Bachelor Degree
of Engineering in Industrial Engineering**



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IDENTIFICATION PAGE

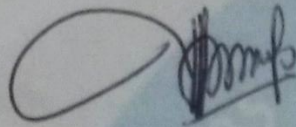
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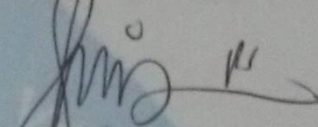
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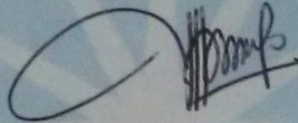
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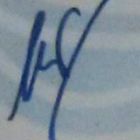
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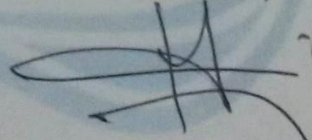
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DECLARATION OF ORIGINALITY OF RESEARCH

I certify that the research entitled "Racking System Selection for the Cold Storage of PT. Bernofarm" in this thesis has not already been submitted for any other degree.

I certify that to the best of my knowledge and belief, this thesis which I wrote does not contain the works of parts of the works of other people, except those cited in the quotations and bibliography, as a scientific paper should.

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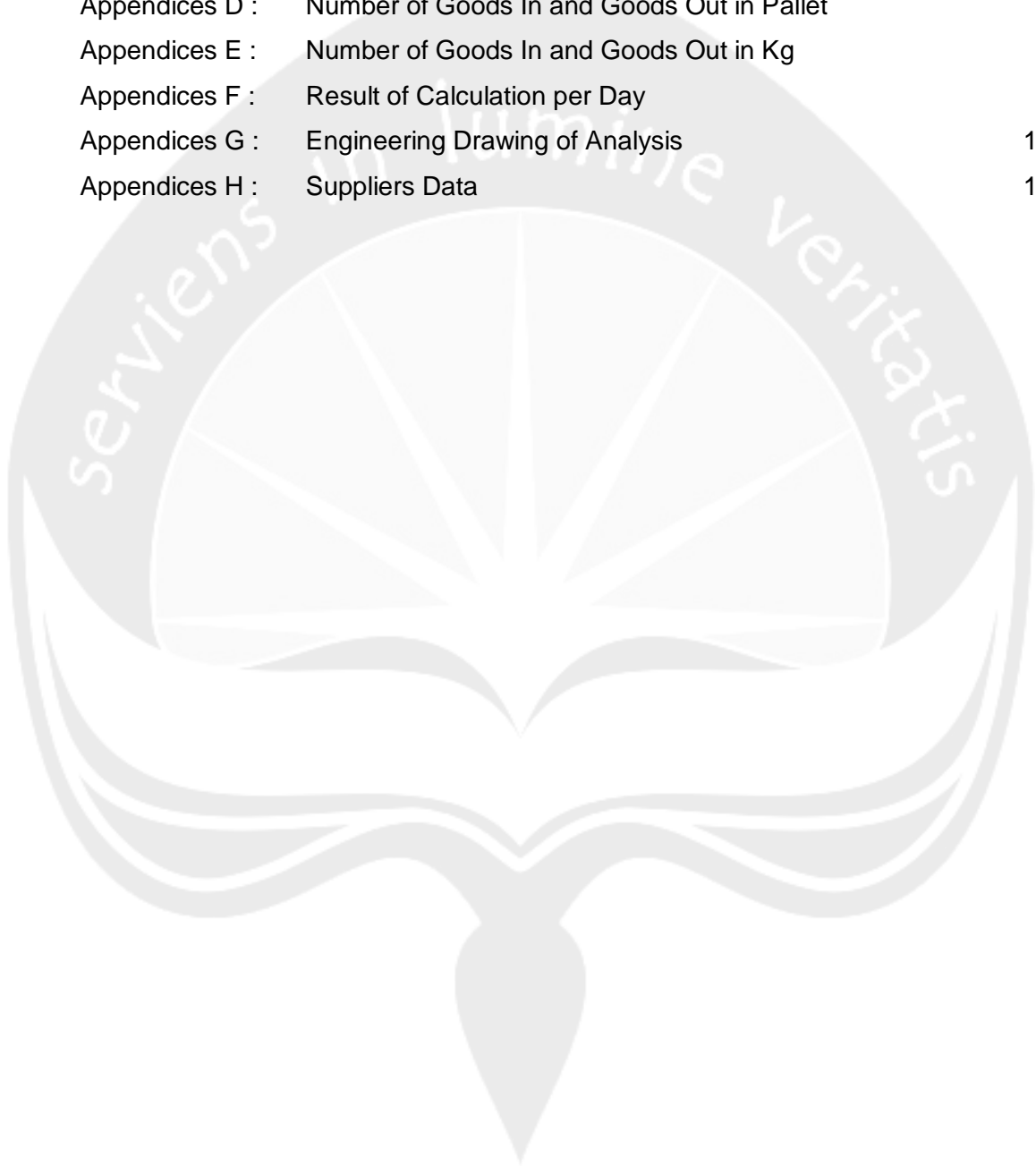
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ABSTRACT

The final project entitled “Racking Selection for the Cold Storage of PT. Bernofarm” began with the problem existing in company’s cold storage. The main problem of the cold storage is the lack of capacity which requires new racking and handling method to store all the goods on demand. The new layout with new system is targeted by the company to store 600 pallets. On the other hand, the company also needs a good low investment of money for the new proposed system. This final project begins with taking data required from the company such as company profile, building size and location, and the number of moving goods.

Some racking alternatives are then compared and evaluated to fit the cold storage after getting the maximum number of goods stored in a day. Three best alternatives suitable for the company’s current needs are evaluated based on the layout and the calculation of cost needed to install each of the alternatives, furthermore one best racking suitable for the cold storage is chosen to maximize the capacity of the cold storage with a minimum cost to invest. The chosen racking is drive-in rack with capacity of 756 pallets. The investment of this racking is also the lowest from all other alternative with cost of US\$10,135.45.