

## ABSTRACT

*PT Nichias Rockwool Indonesia is a company that produces a spiral wound gaskets. For the sake of the continuity of the production process, the planning of the preparation of the raw material is one of the important factors because it is so influential to finance companies, if the amount of inventory too large resulting in the emergence of the Fund incurred is too large, the rising cost of storage and the risk of damage to the goods. Whereas if too little inventory risk resulting in shortages of supplies because often the goods cannot be imported supplies suddenly declaring a cessation of production process, recent gains, even loss of customers. In addition, also need to be aware of is the issue of warehousing of raw materials, the limited capacity of the warehouse company owned raw materials not in accordance with the plan of production desired by the company. This impacted against the shortage of raw materials, because the warehouse is not able to store the number of ordered goods by the part of the purchase.*

*Thus to fix the issue then final assignment will discuss how knowing the needs of spiral wound gaskets raw materials using MRP with Lotting method Algorithm Wagner Within having regard to the capacity of the warehouse. In order to suppress the risk of deficiency or excess inventory and also find out if the company's raw materials warehouse can hold or not raw materials are ordered per period features.*

*After data processing done by the method of Spiral Wound Gaskets, 102,329 units with as many as 28 times reservations, stainless Plate 1 6,783.61 unit with as many as six times a booking, stainless Plate 2 16,183.22 unit with as many as 12 times a booking, gaskets 103,158 unit with as many as 29 times the booking, as many filler 3,407.32 unit with 5-time booking, and hoop 4,453.90 unit with as many as 5 times. For the raw material warehouse capacity is available i.e. of 12,946 Kg, while the capacity for stainless steel plate 1 of 3,224 Kg, stainless plate 2 of 4,428 Kg, filler of 2,590 Kg hoop of 2,706 Kg, thus the warehouse space that is allocated for the raw material products spiral wound gaskets can hold raw materials will be ordered for each period (weeks)*

**Keyword:** *inventory of raw materials, algorithm of wagner within, warehouse capacity*