

## **ABSTRACT**

*PT. XYZ was a Indonesia private company which produced spare parts of rotating equipment machine such as gas turbine, steam turbine, centrifugal pump, and centrifugal compressor. Raw material warehouse handling of PT. XYZ had not been optimal and resulted delays in delivery raw material to production floor. Storage policy in PT. XYZ warehouse had been done randomly and caused raw material locations were not fixed and effected the process of material searching became longer.*

*Research was done by made a solution for fixed material storage allocation to easier of identification material locations and searching time in order picking activity became decrease. First step of research was done by identified root cause of delivery delay in warehouse and continued with classified materials using FSN analysis. Next step is to calculate the capacity and distance of each slot to find out the slot requirements of each material and get the location between the slots starting from the gateway. The result of the calculation is combined with the result of classification of FSN analysis, then codefication or labeling on material storage aimed to each SKU has a fixed storage location. Last step was sampling calculation using pick list from observation. The result of the sampling calculation is assumed as the proposed condition and the observation result assumed the actual condition.*

*Comparing result from actual and proposed condition was obtained searching material time was decrease 177,35 seconds or 30% lower than the actual condition. Based on the comparison, then delay in raw material deliveries to production floor was decrease.*

*Keywords : Warehouse, FSN (Fast moving, Slow moving, Non-moving) Analysis, Warehouse Slotting*