



SDI Review Form 1.6

Journal Name:	Journal of Engineering Research and Reports
Manuscript Number:	Ms_JERR_41033
Title of the Manuscript:	OPTIMIZATION OF PACKAGING LINE PERFORMANCE: A CASE STUDY OF AB BREWERIES IN NIGERIA.
Type of the Article	

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	1. Add a nomenclature section; 2. The whole graph should be improved in terms of quality; 3. Can the simulation model include the quality of mechanical components (lifetime of components)? 4. The difference between the equations should be justified (eq 3 and 4); 5. Eq 5 should be checked; 6. Can the difference in Table 2, caused a problem in the production system (divergences of capacities)? 7. At tab 4, why line 3 of RPB is the lowest? 8. Increase the number of new references by comparing with older on.	1. I have added nomenclature section 2. I have improved the quality of the charts as requested. 3. No, it dealt only with optimizing the sensor speeds, although the sensor speed will always be within the speed design limit, which will also guarantee durability and reliability in terms of lifetime. 4. In equation 3, the actual production time is equivalent to net production time + Internal unplanned downtime (machine downtimes) Equation 4 is another way of solving equation 3 depending on the parameter given. 5. As the net production time is equal to the output in production units divided by the nominal line capacity, the Line Efficiency specified in production units as in equation 5, Again, Nominal capacity of the core machine is equivalent to Actual Production time* line nominal capacity) 6. No, the reason for divergence of capacities is to cope with failure, that is why brewery industries have long conveyor systems as a buffer and there is increase in capacities upstream and downstream from the core machines. This enable machine proceeding and succeeding failed machine not to be starved or blocked, because the speed automatically increased as well as capacity when buffer reached a critical point to avoid starvation or blockage before the failed machine starts operation again. 7. The reason for line 4 lowest OPI is because the line is not regulated. That is either the machine runs at maximum speed or the machine is down (100% or 0%), while other lines have regulated lines which machine can automatically adjust its speed to maintenance continuous flow. When machine runs at its maximum speed, it is prone to high internal failures. This resulted in low OPI for the line. 8. I really did a thorough search for relevant literature for comparison. Thank you so much for your review, guide and advice.
aMinor REVISION comments		
Optional/General comments		