From the result, we can conclude that the highest total average number of waiting time for the production of fifty headboard take so many time in process three as it added up to 2 minutes and the shortest waiting time for the headboard assembly is on process one at 1 minutes for the production of 50 headboards. The highest numbers of waiting time was on the third process which is 9 times and the lowest is on the first process which is 4 times.

5.2 Conclusion

As the conclusion this study was a study on the cycle time of an assembly workstation using application of ARENA simulation software in a furniture industry. From the study, we can conclude that the Cycle time in manufacturing a headboard unit in AX Furniture is 17.81 minutes from starts to finish and the way to increase the time cycle efficiency is by altering the production line, in this case by adding workers on the critical long part of the process or stations.

Acknowledgements

This article is supported and sponsored by Registrar Office and Office for Research, Innovation, Commercialization and Consultancy Management (ORICC), Universiti Tun Hussein Onn Malaysia.

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