SIMULATION ON LINE BALANCING IN MANUFACTURING OF CAR HEADREST PIECE

Reddy Ahemed K[a], P. Venkataramaiah[b]

[a]*PG Student, Department of Mechanical Engineering, SVUCE, Tirupati, 517502, India*
[b]*Professor, Department of Mechanical Engineering, SVUCE, Tirupati, 517502, India*

Abstract

The presented work has been done with the purpose of optimizing and balancing a manufacturing line as well as choosing suitable probability distributions of a cycle time for each machine of a typical car headrest piece layout using Delmia QUEST Software. Probability distributions for cycle time, inter-arrival time, process times, recovery time, and failure time are chosen from the available options in the simulation software for this work to represent the input process. The simulation on the model Car headrest support work piece has been done to determine bottleneck locations and to offer an alternative for improving the manufacturing line.