

First the processing times for each machine and the arrival times of the workpieces belonging to the workshop were determined. Then the distributions were found by the Statt: fit program in the Promodel program. Following the identification of locations, resources, paths and entities, distributions are defined in the Promodel program. After calculating the monthly working time, the simulation was run and the data were analyzed. Then, the reliability of the simulation was verified by applying SPSS program with chi-square and t-test between actual production data and simulation data. Later, loss times in the production line were determined. To improve these lost times, suggestions on the basis of labor power and the machine locations are presented. As a result of these proposals, the system has been simulated with various scenarios with Promodel program. Promodel outputs of the first system and the improved system were compared. As a result of the study, 5% improvement for lathe, 56% for milling machine and 7% improvement for drill were calculated.

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