

**MANUFACTURING SIMULATION
OF GOLF BALL PLANT USING WITNESS**

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ABSTRACT

This project simulates the manufacturing of a golf ball plant using an interactive computer simulation software, WITNESS by AT & T Istel's Ltd. scope of the project has been to look in various aspects on problems and issues facing manufacturing companies and analyse the systems to achieve better production performance such as high throughput (output), short lead-time, low work-in-progress and high labour utilization.

A particular attention was made to Bridgestone Sporting Goods Mfg. Sdn. Bhd. where a golf ball manufacturing plant has been focused in order to study the potential problems occurs in the manufacturing plant that affect the system where preventive measures are taken to evaluate improvements and furthermore to increase productivity.

A simulation model is build based on the data analysis of the manufacturing plant. Different scenarios or modifications are being made to achieve the objective of the project. The aim is to reduce work in progress, reduce idle time reduce bottlenecks and increase production output in order to meet the demand requirement.

Finally, conclusion and suggestion were made based on the optimization from the basic model layout.

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