

## **Application of continuous improvement in furniture manufacturing industry**

### **Abstract**

This thesis documents a research on continuously improvement of process in EUROSPAN Furniture Sdn Bhd. The process improvement focused on dining table's assembly line. High product variety and flexibility become the main challenges of the production floor. As to improve the productivity, there are few factors have been considered in this thesis; redesign of workflow layout, labor utilization and continuous flow. Line balancing had been used to analyze the utilization of the current state pull system. Several techniques have been suggested such as 5Why's analysis, line balancing and Single Minute Exchange of Die (SMED) in order to eliminate and minimize non-value added activities and to enhance the new work cell production. Results indicated manpower has been effectively reduced by 30% in the new production system and the productivity has increased successfully by 45%. The effectiveness of the new system in this study gave positive impact on productivity, flexibility and production utilization.

**Keywords:** Assembly Line; Products Variety; Pull System; Non Value Added; Work Cell Production.