

C816883 : MAJOR INDUSTRIAL ENGINEERING
KEY WORD: CAPACITY PLANNING

SONGWUT PRAKAWICHIEH : CAPACITY PLANNING IN STAINLESS STEEL FURNITURE
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The objective of this thesis is to study the improvement of the capacity planning system of the selected company in stainless steel furniture manufacturing industry. The major problems of this company were failure to meet production planning targets while a large quantity of work in process still remained to be done. The main factors which cause these problems were the lack of capacity planning system together with related factors, for example, shortage of raw materials and parts in the production process, ineffective communication on production information and confusing on the job description of production planning and control department and production department.

In order to solve the above problems, this thesis was emphasized on the creation of the capacity planning system and control involved factor by providing the information system to implement in the production and inventory control, organizing the planning department, improving inventory control system and differentiating the responsibility of production and control department from production department.

The results revealed that the real production capacity of each department comparing with whole production capacity were as follows : Cutting Division were 57.3 percent , Layout Division 59.3 percent , Bending Division 65.1 percent, Assembly Division 78.2 percent , Polishing Division 68.7 percent and Technical Division were 63.8 percent more products were manufactured in time due to production plan since the percentage of finishing products according to the plan increased from 70 percent to 96 percent and work in process decreased from 3,200 square meters to 2,800 square meters. In addition , the quantity of work measured by stainless sheet use as the beginning and the finish products increased from 0.13 square meters per production man-hour to 0.22 square meters per production man-hour. As a result , the overdue products were decreased from approximately 70 pieces per month to 17 piece per month.

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