

EKKAZIN LOHASOMBOON : PRODUCTIVITY IMPROVEMENT OF A SMALL-SCALE ALUMINIUM WARE FACTORY IN THAILAND. THESIS ADVISOR : ASSO. PROF. VANCHAI RIJIRAVANICH, Ph.D., ASSO. PROF. CHAROON MAHITTAFONGKUL, 457 PP.

The objective of this research was to study problems and apply the knowledge of industrial engineering and management in productivity improvement of a small-scale aluminium ware factory in Thailand. And follow industrial policy of the sixth national economic and social development plan (1987-1991). By survey problems of sample factory production and study the special problems of this factory in detail for use in method to improve productivity of the same factory.

From the research, It was found that most of this type of factories have chronic problems on production and management. Major problems are operation management, plant layout, production process, working environment, storage space of production equipment, and production planning and control. All of these cause low productivity and make it very difficult for this type of industry to expand into the future. In this research was designed organization to balance work load between management team, new plant layout of aluminium sheet factory based on systematic layout planning (SLP) and aluminium ware factory based on group technology (GT), new material handling system by belt conveyor, local exhaust ventilation system to eliminate unsafe condition, classification and coding system of product and production equipment to improve data collection and analysis capability, new storage space of production equipment, and new production planning and control concept.

After the implementation of the project and evaluation of qualitative and quantitative analysis were found that the productivity is improved that can reduce production cost and get advantage from investment which make the company more competitive in marketplace. And was to be the way in development of aluminium ware industry which contribute to national economic development.