

ABSTRACT

This project examines the development of an inventory model for the long-lead-time raw materials of Siam Patkol Co., Ltd.

Siam Patkol Co., Ltd. was established in 1990, with a registered capital of 250 million bahts. Its production facility is located on Onnuch-Ladkrabang Rd., Bangkok. At present, the company has a production capacity of 20,000 commercial freezers per year.

Generally known, reasonable inventory of raw materials is essential for a smooth operation and competitiveness. In current economic crisis, our executives are seriously concerned about the excessive raw material inventory levels. There are a large number of raw materials used in the production. If we stock all items, inventory costs will be extremely high. After the executives' considerations, some of the raw materials, which have long lead time, will be stocked. The others will not be stocked and will be acquired only after potential customer order.

In this project, the inventory model for the long-lead-time inventory was developed. All steps of developing the inventory model are as follows:

- (1) To collect the related information of all raw materials.
- (2) To define the long-lead-time criticality of the raw materials.
- (3) To develop inventory model for the defined long-lead-time raw materials.

After the inventory model had been developed, the inventory items of raw materials and also cost of inventory were reduced. Moreover, further recommendations for maintaining the good inventory and improving the inventory related business process was introduced.