

## Abstract

VICO Indonesia is a Production Sharing Contract (PSC) company in the oil and gas industry. To support its operations in Indonesia, the company has to maintain an adequate spareparts for maintenance of drilling and production facilities and maintenance of other plant and equipment such as power plant, gas plant, water treatment plant, heavy and light vehicles/equipment, etc.

Currently the total value of its inventory is about US\$ 78 millions consists of more than 57,000 line items. The majority of the stock items have a regular demand pattern which allow a high degree of automation for stock replenishment.

To maintain all the stock item VICO installed an automated VICO Integrated Material Control System (VIMACS) in 1985 that consist of 8 modules; namely, Cataloguing, Customer Order Processing, Inventory Transaction Recording, Inventory Planning and Purchasing, Forecasting, Physical Warehousing, Bill of Material and System Maintenance.

One of the feature in the Inventory Planning and Purchasing module is the periodic generation of the Recommended Re-

Order Report (ROR) for stock items reach or below reorder-point. The generation of the reports can be initiated by manufacturer or by class and sub-class of the stock items. The ROR has a serious problem due to the lack of understanding on the part of the users of the system has led to frustration, mistrust and even fear of ROR system. Instead of analyzing the causes resulting to inconsistent or incorrect recommendations by the ROR and correcting them, the ROR has been treated as totally unreliable because the useful and the relevant information is not reported.

The author, in this the recommendations has suggested to redefine items to be controlled by ROR method, maintain the database, comply to inventory control procedure, redefine and standardize calculation of the estimated monthly usage (EMU), redefine calculation of lead time stock, review service objective, revise and improve the ROR report format.

By redefining or regrouping items to be controlled by ROR method and reformulating the lead time stock using standard lead time, the item reorder point will also be lowered. In the implementation it will eventually lower the current stock level of about US\$ 31.5 millions of General Materials, General Spareparts and Drilling spareparts without affecting

the current service objectives. At the same time, it will also improve the turn over ratio.