

## **SESSION 14**

### **CASE STUDY**

#### **Conversion Cycle-1**

General Auto, Inc., manufactures automotive water pumps. Since 2001 it has supplied the Big Four (Toyota, Honda, Daihatsu, and Suzuki) Indonesian auto manufacturers. General Auto has recently broken into the American-made Japanese car market. The company now supplies Toyota, Nissan, Mitsubishi, and Honda with automotive water pumps for their assembly operations in Indonesia.

**Conversion Cycle** At the start of the year each automobile manufacturer provides General Auto with an order that is based on budgeted sales predictions. However, this order is guaranteed for only the first month; after that each automobile manufacturer can revise orders on a monthly basis. General Auto's current system requires orders for raw material to be placed with suppliers on a quarterly basis. Although the order provides a general idea of what is to be expected, orders from the automobile manufacturers can increase or decrease dramatically after the initial month. Under the current batch production process in the conversion cycle, the auto manufacturer sends the blanket order to the Materials and Operations Requirements Department. In this phase production documents (bills of materials, route sheets) are created and combined with inventory status reports from inventory control and the required engineering specifications from the engineering department to create a purchase requisition. Currently, the production-scheduling phase falls under the responsibility of the work center.

At the work center, the supervisor in charge prepares work orders, move tickets, and materials requisitions. These documents are sent to the cost accounting department and are also used to create an open work order file. The work center also retains copies of these documents so they can be used to initiate production activities. Under the current system, once production is initiated, any excess material is immediately scrapped. The work center also prepares the necessary timekeeping documents (payroll time card and job tickets) and sends this information to the cost accounting department as well. Upon completion of the production cycle, the production schedule and move tickets are used to close the open work order file, while one copy of the work order is sent to the finished goods warehouse and another is sent to inventory control. At the start of the production phase, a copy of the materials requisition is sent to storekeeping so that the necessary raw materials can be issued to the work center. A copy of the materials requisition is kept on file in storekeeping. Inventory control is involved in the batch production

process throughout the entire operation. It releases the inventory status document to production, planning, and control so that materials and operations requirements can be determined. A copy of the materials requisition document is received from storekeeping so that inventory files can be updated. Once files are updated, the materials requisition is sent to cost accounting, while the updated files are also used to prepare a journal voucher that is sent to the general ledger department. A copy of the materials requisition, purchase requisition, and work order documents are kept on file in inventory control.

Once the cost accounting department has received all the necessary information from the other departments, the work-in-process file is updated. All work center documents (move tickets, job tickets, materials requisitions, excess materials, and materials returns), along with a copy of the work order, are filed in the cost accounting department. At the end of the phase, the cost accounting department prepares a journal voucher and sends it to the general ledger department. This journal voucher, along with the one sent by inventory control, is used to update the general ledger. Both journal vouchers are kept on file in the general ledger department.

Required:

1. Create a system flowchart of the existing system.
2. Create documents layout of the existing system.