ABSTRACT

The significant objective of this project is the development of a personal computer-based Material Requirements Planning (MRP) software with Microsoft Access to assist the users in managing production schedules and orderino niirchased items.

The basic philosophy and mechanics of Material Requirements Planning software are simple. The software assumes that the end product is made up of a hierarchy of assemblies, subassemblies, components and raw materials. The schedule of end product requirements is developed outside the MRP software. Using these end product requirements (Master Production Schedule), product structure data, and inventory master file as the MRP software input. The primary output of the MRP software is planned order report, that is, a schedule of how much is needed and when is it needed. The steps to create the MRP software are described in this report.

According to the comparison of the results from using the MRP matrices and applying Material Requirements Planning (MRP) software, the results are the same. Therefore, software evaluation was accomplished to test the MRP software's verification and validation, and it also meets project specifications and requirements for its intended use and performance.

For the next development of MRP software version, the developer should consider the methods for determining lot size and applying 4 methods of lot size as the functions in the MRP software. The other important aspect that should be developed is display or user interface in the good designed and attractive forms.