

ABSTRACT

As a company that has the production process of raw material calculation is one of the things that must be considered. In the company in the production process of raw material procurement has not yet calculated or method of purchasing raw material inventory. This causes the problem of excess stock of raw materials or lack of raw materials. One of the methods to control raw material inventory is by using Material Requirement Planning (MRP) method. MRP is one method that aims to improve the productivity of the company, increase sales of customer orders by scheduling the production process based on customer order results Software development using object-oriented structured model and development of SDLC model and using PHP language and CodeIgniter framework. This application has the functionality of making a sales list of customer order results, producing Bill of Material (BOM), making Material Planning Schedule (MPS) based on customer order period, and generating table Material Requirement Planning (MRP), making transactions in the form of journal, ledger And the trial balance, Functionality runs 100% after being tested with blackbox testing and a comparison of manual testing successfully implemented in accordance with the application. Applications can help companies calculate raw material inventory according to the amount, need and time required.

Keywords: MRP, MPS, Inventory Management, Inventory Control