

## **ABSTRACT**

*Newspapers are one of the print media that provide actual information, which contains information on various topics. The printing process PT. Mind the web Goss Universal printing machine with a speed of 50,000 copies per hour, can produce print configuration 16 full color pages or 20 pages with 7 face full color print in each session.*

*In the execution of maintenance activities, not infrequently there are components that in case of failure or damage can not be repaired, but must be replaced (replace). Therefore, requires the replacement or spare parts (spare parts), so that these components can be replaced and the system can continue running as it should. Methods of Reliability Centered Spares (RCS) is one of the methods of analysis spare part management by considering aspects such as maintenance needs what is required by the machine, due happens if spare parts are not available, anticipating the needs of spare parts, the amount of stock holding of spare parts required, and maintenance requirements what not to do. One method is a method of maintenance decision making Reliability Centered Maintenance (RCM). RCM is defined as a process that is done to determine what should be done to ensure all physical assets can do the things that users want to do in the context of the actual operation.*

*Based on the results of measurements using the method of Risk Priority Number (RPN), the system becomes a critical system on a Goss Universal printing machine unit is inking system with 7 severity grades (high), occurrence 9 (high), and detection 7 (high). The total value of the Risk Priority Number of inking system is 189. Based on the measurement results using Reliability Centered Maintenance (RCM) obtained maintenance policy for critical subsystems to the unit Goss Universal printing machine is scheduled on-condition. The subsystems are included in the maintenance policy is the ink fountain roller, transfer roller, ink form roller, and a wash-up device. Based on the results obtained quantitative measurement interval maintenance of critical subsystems respectively. Ink fountain roller for its maintenance interval is 25,19 hours, transfer roller its maintenance interval is 96,42 hours, ink form roller its maintenance interval is 27,16 hours, and wash-up device its maintenance interval is 38,47 hours. For spare parts inventory strategies using RCS, obtained holding spare no strategy required for the ink fountain roller, and hold parts for the transfer roller, ink form roller, and a wash-up device. As for the spare part requirements within one year is needed for the transfer roller 104 units, 316 units for the ink form roller, and 124 units for the wash-up devices.*

**Key Words : RPN, RCM, RCS, Probabilistic Inventory Model**