Reliability Centered Maintenance and Reliability Centered Spares for Maintenance and Spare Parts Policies: Case Study Goss Universal Printing Machine in Printing Company

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Abstract

PT. XYZ is one of the largest printing company in Bandung and distribute newspapers almost for all regions in West Java. Printing machine reliability in a production line holds a very important role for the sustainability of production, but often the machine still damage which will inhibit the process of production. To maintain optimum performance it is necessary to make a good maintenance and spares parts policies. Maintenance policy is made with Reliability Centered Maintenance (RCM) and spareparts policy using Reliability Centered Spares (RCS). To find critical system in Goss Universal printing machine conducted Risk Priority Number (RPN) and the result are transfer roller, ink fountain roller, ink form roller, and a wash-up device subsystems. Based on RCM analysis for each subsystems obtained interval preventive maintenance are, transfer roller 127.60 hours, Ink fountain roller 24.45 hours, ink form roller 29.23 hours respectively, and wash-up device is no schedule maintenance. For spare parts inventory strategies the result using RCS method are: transfer roller 104 units, ink fountain roller requires 32 units, ink form roller 36 units and are holding spare strategy required, and a wash-up device no holding spare parts.

Keywords
Printing Machine, Reliability, RCM, RCS

Biography
Judi Alhilman is currently a fulltime professional lecturer, today he is a head of maintenance management professionalism and former a head of Statistics and Operations Research Laboratory in Industrial Engineering Department at Telkom University, Bandung, Indonesia. Mr. Alhilman earned Bachelor of Science degree in Statistics from Pajajaran University, Bandung, Indonesia and a Master of Industrial Engineering from New Mexico State University, NM, USA. He is a lecturer in Industrial Statistics, Statistical Quality Control, Operations Research and Maintenance Management subjects. His research interests include data mining and Maintenance Management.