

## ***ABSTRACT***

*PT. Adetex Filament I produce patterned fabrics using 3 pieces of printing machines named: Ichinose 7000 flat printing machine, Reggiani flat Printing machine and Pegasus rotary printing machine. Maintenance activities undertaken by the company so far is Corrective Replacement which can cause long downtime. The downtime can lead to loss of production opportunities which is a indirect loss for the company. The average machine age has reached 20 years old causing damage more frequent and unexpected and greater possibility of downtime occur. There needs to be a preventive activities that can minimize losses caused by downtime. Age Replacement method used to determine the replacement interval and as a reference for preventive replacement policy to minimize the damage caused by component failure. Replacement intervals obtained in this study will be a reference for preventive maintenance policy in accordance with the policy of age replacement model. The use of age replacement intervals obtained expected can reduce replacement costs (including opportunity costs) on average by 50% each component.*

*Keywords: scheduling, maintenance, age replacement*