## **ABSTRACT**

PT Kurnia Persada Mitra Mandiri on the division of springbed, there are 5 pieces of line where no one has a quilting line that only owned 1 machine. Foam fabric used on this machine, will be used to coat the finger on the springbed. In a day, quilting machine can produce as many as 8 roll with profit Rp 450.000,- per roll. If this machine does not produce within a day, then the company will issue a loss of Rp 3.600.000, -. For most looper and needle components in the past year, looper is 12 times with 10 minute repair time and needle 17 times with 30 minute repair time. From that point, it is necessary to calculate the replacement component interval with the Replacement Age method for the cost per component of seepage. Then the optimal time for each component replacement is 15 days at a cost of Rp 683.943,- or 75.45%, and the looper component is 16 days at a cost of Rp 1,592,275 or 78.66%.

Keywords: Age Replacement, quilting machine, optimal time, critical components.