

## **ABSTRACT**

*Spark plug is one of the very important components in the ignition process in the performance of the motor vehicle. The function of the spark plug itself is as burning fuel of motor vehicle who will be driving the motor vehicle energy. Without spark plug of the motor vehicle will not be turned on. There are several brands and types of plugs are used to improve performance on motor vehicles. Starting from the year 1904 plugs created and controlled the world market, and has conducted trials and improvements to the performance of the spark plug. Until finally emerging companies engaged in the field of automotive components industry that produces spark plugs.*

*PT DNS which is one company making automotive components to improve the effectiveness and efficiency of activities of its production so that demand to be met every day the accomplished well. By using multiple production machines, companies should always check and prepare the readiness of its engines by doing preventive maintenance and corrective maintenance in order to make production smoothly. Then obtained the largest damage frequency data and huge maintenance costs that must be incurred to Caulking machine production line to 6. By using the Risk Priority Number (RPN) companies determine of critical systems that present on the 6th line of Caulking machine is hydraulic systems. So to rate how much the costs generated by the issue of unreliability the system required a method of Cost of Unreliability and also to find out how big the consequences and risks resulting from damage to the 6th line of Caulking machine the required methods of Risk Based Maintenance.*

*From the results of the data processing is carried out, for the calculation of the Cost of Unreliability is obtained the cost caused by unreliability Rp. 2.612.857.012 system based on active repair time and Rp. 2.906.982.097 based on downtime. Whereas the calculation of Risk Based Maintenance brings about consequences and risk value of Rp. 788.679.691,-with a percentage of 2,270%. This risk had passed the risk acceptance criteria already determined the company is 1% on the 6th line of Caulking machine.*

*Keywords: Preventive maintenance, Corrective maintenance, Cost of Unreliability, Risk Based Maintenance, Risk Priority Number*