

## ABSTRACT

Tool Manufacturing Services Department is one department of PT Dirgantara Indonesia, which is giving priority to quality of products. There are kind of proportion levels at each production periods which are according to target of defective tolerance or not. Bushing is a tool that gives some defectives at 12,74% with a fairly large proportion of defect about 7,621%. This condition must be evaluated and be improved to get tolerance target which is decided by company.

At this research, AFD is used as an analysis method of failure. This method] will be supported by other quality control tools to support the final result of analysis. The final result of AFD analysis is kind of improvement action to reduce the defect to the Bushing.

Based on research, performance of production process of Bushing which is covering the (1) stability of the process that has not been controlled and (2) process capability by sigma 3.315. Type of defect was identified is dimension defect and hardness defect. These results show a good performance but the process still needs to be improved continuously. Continuous improvement is done by reducing defects. Types of defects identified are handicapped and disabled Hardness dimension. The root causes of dimensions defects found in as many as 32 of the causes and Hardness defect as many as 7 causes. Improvement proposals which are given to dimensions defect, are using mandrel based on specification, support center and finishing at the beginning process. Improvement proposals which is given to Hardness defect, are using system labeling and adding material inspectorate operation before lathe process.

Key Words : quality, *Bushing*, *Anticipatory Failure Determination*