

ABSTRACT

An improvement process is generally corrective action based on the products become more effective and efficient. This action is related with continuous improvement which always done by people or team who found about problem occur during the machining process of product. When the problem is found, the corrective action is should be done to solve the problems exactly.

The research in Indonesian Aerospace (IAe) a.k.a PT.Dirgantara Indonesia, has taken place on Production Department and machining shop area where is the main product is AIRBUS A380 family. This AIRBUS A380 component has a name Spreader Plate and processed by 3 axis machine. The main factor which caused a deformation defect in machining process will analyze using fishbone diagram and FMEA method. From FMEA method, they calculate some RPN value analysis and make a rank to know which one is becoming the major factor of defect. There are some major factor of deformation consist of unstandardization checking process by the machining concept had changeable everytime (RPN value = 210), inaccuracy calculation of workpiece load by Planner had caused incommensurate different load on the material facing process (RPN value = 192), and unstandardization of cutting tool for machining process (RPN value = 126). Refer to the most third highest RPN's value, this is the most reason where is the improvement process has been made. As the result, an improvement process are made with new conditions such as making a new step operation with involve all result of input data calculation to make 'connecting technic' more effective as 60 % to reduce mistakes when machining concept are made, then works instruction sheet modification of MME (Manufacturing Method Evaluation) to decrease unprocedural process as 30 % so it is more specific and more easy to understand by people, and making cutter list catalogue for 3 axis machine by tool crib to reduce mistakes caused by cutting tool as 10% so that it will avoid cutting tool use mistakenly. The equation before and after improvement condition are successfully impact to the decrease result of Spreader Plate deformation based on actual trial on the shop.

Key Point : TQM, FMEA, PDCA, QC 7 Tools

