ABSTRACT

Nusantara Turbin dan Propulsi (NTP) Co. is service company serving maintenance and overhaul service, parts production, and aeroplane engine component. The purpose of NTP Co is to become a maintenance of aeroplane turbin and industry turbin company that able to compete nationally and Asia-pasifik regional. NTP realize full that customer satisfaction represent especial capital to the continuity of life of company. But effort of NTP Co to earn to gratify customer practically still not yet optimal since NTP Co. still be given on a quality problem that is there still defect in process of maintenance service. One of maintenance service owning big enough defect storey level is Maintenance Service of Aircraft Gas Turbine Engine with defect percentage is above goals (> 0 %). In order to satisfaction customer and reached out company efficiency, NTP Co have to control and improve its quality produce.

Six Sigma is a systematic method in controlling quality where every decision making based on fact and data. The main principal of Six Sigma is Zero Defect equal to 3,4 part per million (3,4 DPMO). Steps of Six Sigma consists Define, Measure, Analyze, Improve, and Control (DMAIC). Define is done to identify factors that influence to quality product Maintenance Service of Aircraft Gas Turbine Engine and potential CTQ cause defect. Measure step done measurement of quality performance in output level. After quality performance measuring, we analyze potential defect CTQ caused use fishbone diagram. After that improvement suggestion is given to minimize critical defect at Maintenance Service of Aircraft Gas Turbine Engine

Based on measurement by using quality data of Maintenance Service of Aircraft Gas Turbine Engine from 2003 until 2005, knowable that potential defect are low power defect, high temperature defect , engine stuck defect , oil leak defect, low oil pressure defect , vibration defect , air leak defect , and smoke defect. Performance existing of production process Maintenance Service of Aircraft Gas Turbine Engine is 3,26 Sigma at output level with DPMO value 38671. This sigma level still stay in industrial average value in Indonesia so that NTP Co. need to do continuous improvement in order to reach value of Six Sigma.

Keywords : Maintenance Service of Aircraft Gas Turbin Engine, Defect, Sigma, DPMO