

ABSTRACT

PT. X is a company engaged in the manufacture of plywood. The company is required to produce quality plywood because the products used by the majority of its markets are export. From the observations made, it was found that there are still any products that have defect and make the quality of the product drops. To reduce defects that occur in the product, a DMAI approach is carried out by identifying company processes, identifying CTQ, determining potential CTQ, calculating DPMO and sigma values, making cause and effect diagrams to determine the causes of defects, and FMEA analysis to find recommendations for improvement. It was found that the most influential defects were C. Overlap, F. Putty Stain, B. Putty Stain, F. Over Sanding, B. Over Sanding, F. Pressmark, B. Ripping, F. Corner Damage, C. Less Width (Parallelism), and B. Pressmark. Whereas the proposed improvement is giving written warnings, giving verbal warnings, adjusting turning pressure with material, providing generator and coordination with PLN, briefing at the beginning of shift, adjusting material temperature, and selecting material at rotary output.

Keyword : DMAI, Critical To Quality, Defect PerMillion Oppurtunity, Sigma values, cause and effect diagram, failure mode and effect analysis