

## ABSTRAK

Studi ini untuk mengkategorikan kesalahan, mengidentifikasi akar penyebab kesalahan, menganalisa potensi, frekuensi dan dampak dari kesalahan proses pengelasan di Unit WP PT Mega Andalan Kalasan dengan diagram pareto, diagram ishikawa dan FMEA. Penelitian dilakukan pada produk *mildsteel* dengan sampel FMEA *bed 73006*. Waktu penelitian adalah Januari-Desember 2016.

Penelitian ini dengan metode *Total Quality Management (TQM)*, dimulai dari mengkategorikan kesalahan, mengidentifikasi akar penyebab kemudian menganalisa potensi, frekuensi dan dampak kesalahan pengelasan untuk mendapatkan *Risk Priority Number (RPN)*. Nilai RPN tersebut kita analisa termasuk *intolerable*, *tolerable* atau *acceptable risk*. Selanjutnya dilakukan pengelolaan nilai RPN agar menjadi *tolerable* atau *acceptable risk*.

Hasil penelitian menunjukkan kesalahan terbesar adalah berlubang (67%) dengan akar penyebab kesalahan didominasi *man* (62%). FMEA produk 73006 terdapat 4 *intolerable risk*, 34 *tolerable risk* dan 36 *acceptable risk*. Nilai RPN tertinggi adalah 378 pada pengelasan pipa pengungkit matras *backrest* karena berlubang dan 210 pada pengelasan kaki dan rangka samping karena berlubang. Nilai *intolerable risk* menjadi perhatian peneliti untuk melakukan perbaikan.

*Kata kunci:* kualitas, TQM, FMEA

## **ABSTRACT**

*This study is focused in categorized to any faults, identified causal factor fault, analyzed the potential, frequency, and further the effect of process fault in PT Mega Andalan Kalasan WP Unit as well, using both parento, ishikawa diagram, and FMEA indeed. Here research take base on mildsteel product according to Bed 73006's FMEA. Those research is doing on January - December 2016.*

*This research using Total Quality Management (TQM) method, by categorized any faults, identified causal factor fault then analyzing the potential, frequency, and further the effect of welding process in order to find out Risk Priority Number (RPN). Base on RPN value be analyzed including the both intolerable, tolerable or acceptable risk. Next from these analyze consideration doing RPN evaluation to achieve the tolerable or acceptable risk.*

*Base on the research result, be cognizant that the major fault is cavity (67%) and all identified causal factor dominated by man (62%). From Bed 73006's FMEA there are 4 intolerable risk, 34 tolerable risk , and 36 acceptable risk. Highest RPN value is 378 occurred on backrest mattress platform welding process-causes failure is hollow, and 210 on both leg and side frame welding process-causes failure is any hollow as well*

*From those intolerable risk value as a researcher concern doing any amelioration.*

*Key Words : Quality, TQM, FMEA*