

ABSTRAK

Pendekatan Metode *Six Sigma (DMAIC)* dan Proses Audit (*CPPP*) untuk Peningkatan Kualitas di PT. IGP

PT. Toyota Motor *Manufacturing* Indonesia (TMMIN) sebagai perusahaan perakitan kendaraan roda empat sangat memperhatikan kualitas dari hasil produknya di internal proses maupun proses pembuatan komponen di supplier. Adanya *claim after market* pada tahun 2014, yang melibatkan *part Expansion Plug Sleeve Yoke* untuk model *IMV* yang dibuat oleh PT. IGP selaku salah satu *supplier* dari PT. TMMIN menunjukkan adanya penurunan kualitas dari salah satu komponen yang dibuat di PT. IGP. Hal ini menyebabkan *customer claim* ke beberapa *dealer* dengan ditandai adanya kebocoran oli transmisi pada *Expansion Plug Sleeve Yoke*. Problem ini terhitung terlibat 16 kasus, jika dihitung secara *Six Sigma* baru mencapai 5,02 *Sigma* dari total 74.426 kendaraan yang terjual selama tahun 2014. Pada dasarnya PT. IGP sudah melakukan langkah perbaikan untuk menanggulangi *claim after market* ini. Saat ini PT. TMMIN sedang menyiapkan generasi selanjutnya untuk model *IMV*, timbul kekhawatiran dari PT. TMMIN akan adanya potensi problem berulang membuat team *CPPP (Critical Process Problem Prevention)* melakukan proses audit sebagai tindakan preventif untuk mencegah problem berulang pada generasi *IMV* selanjutnya. Tujuan dari skripsi ini adalah mengkombinasikan metode penyelesaian masalah secara *Six Sigma (DMAIC)* dengan proses audit (*CPPP*). Setelah dilakukan pengecekan secara *cut check* dengan pengamatan menggunakan mikroskop ternyata ditemukan *crack* pada hasil *cut check Expansion Plug Sleeve Yoke*. Setelah ditelusuri ke proses, ternyata problem di internal PT. IGP terkait kebocoran masih tinggi yaitu terlibat 51 kasus. Team *CPPP* melakukan proses perbaikan untuk mengeliminasi *crack* dan secara proses produksi melalui proses audit menggunakan *checksheet QHB037*. Hasilnya setelah dilakukan proses perbaikan, *crack* sudah dinyatakan OK dan secara proses produksi sudah mencapai *score 100 AA*, sehingga PT. IGP dinyatakan telah memenuhi persyaratan standar Toyota global. Mulai dari *start* produksi per tanggal 21 Juni 2015 problem *leakage* pada *Expansion Plug Sleeve Yoke* sudah “0” nol, maka dengan pencapaian ini proses *improvement* dinyatakan berhasil.

Kata Kunci: *DMAIC, CPPP, Expansion Plug Sleeve Yoke, Projection Welding.*

ABSTRACT

Method Approach Six Sigma (DMAIC) and Process Audit (CPPP) for Quality Improvement at PT. IGP

PT. Toyota Motor Manufacturing Indonesia (TMMIN) as a four-wheeled vehicle assembly companies are very concerned about the quality of their products on the internal process and the process of making components supplier. Their claim after market in 2014, which involves part Expansion Plug Sleeve Yoke for IMV models made by PT. IGP as one of the suppliers of PT. TMMIN shows a decrease in the quality of one of the components made in PT. IGP. This causes the customer claim to some dealers with marked transmission oil leak on Expansion Plug Sleeve Yoke. This problem involved accounting for 16 cases, if calculated only reached 5.02 Six Sigma Sigma of total 74.426 vehicles sold during 2014. Basically PT. IGP is already doing remedial measures to solve this claim, Now, PT. TMMIN is preparing the next generation for IMV models, there is a concern of PT. TMMIN will be occurring again and making CPPP (Critical Process Problem Prevention) team conduct audits as a preventive action to prevent the problem recurring in the next generation of IMV. The purpose of this paper is to combine the methods of problem solving Six Sigma (DMAIC) with the audit process (CPPP). After checking it cut check with observations using the microscope was found to crack on the results of the check cut Expansion Plug Sleeve Yoke. After traced to the process, it turns out the internal problems in PT. IGP leakage still high, which involved 51 cases. Team CPPP perform the repair process to eliminate cracks and the production process through the audit process using checksheet QHB037. The result after the repair process, the crack has been declared OK and the production process has reached a score of 100 AA, so PT. IGP herewith complies with the requirements of the global Toyota standards. Starting from start production as of June 21, 2015 on the leakage problem Expansion Plug Sleeve Yoke already "0" zero, then with this achievement declared successful process improvement.

Kata Kunci: *DMAIC, CPPP, Expansion Plug Sleeve Yoke, Projection Welding.*