

ABSTRAK

Perusahaan manufaktur harus bisa membuat para pelanggannya puas dan loyal atas produk yang digunakannya. Salah satu faktor yang berpengaruh terhadap kepuasan dan loyalitas pelanggan adalah kualitas yang baik. Untuk mewujudkan kualitas yang baik diperlukan metode penanganan proses yang dapat menekan jumlah NG. Sumber data jumlah NG yang diperoleh di PT. Toyotomo Indonesia menunjukkan pada proses pengelasan sebesar 67% dimana 34% nya merupakan NG proses terlewat. Dalam menentukan prioritas penanggulangan NG proses lewat agar lebih efektif, PT. Toyotomo Indonesia menerapkan *Taguchi method* dan *Analysis of Variance (ANOVA)* sebagai *tools* untuk memutuskan kontribusi penyebab dominannya, dimana 16.03% disebabkan oleh kemampuan kerja operator yang masih kurang dan 12.89% karena kondisi lingkungan kerja yang saling bersinggungan. Setelah semua penyebab masalah NG dilakukan perbaikan didapatkan hasil yang menunjukkan penurunan NG proses lewat dari 29.9% menjadi 11.2%. Untuk mengetahui penyebab terjadinya NG proses terlewat digunakan diagram tulang ikan (*fishbone*) dengan mengidentifikasi faktor *4MIE* (manusia, mesin/alat kerja, metode, material dan lingkungan kerja). Dari hasil analisis tersebut ditetapkan ada 3 faktor utama yang menyebabkan NG yaitu : Manusia (kemampuan kerja), Lingkungan (area kerja yang bersinggungan) dan Alat kerja (lampu penerangan yang kurang memadai).

Kata kunci : kualitas, ng proses lewat, metode taguchi dan analisis varian



ABSTRACT

Manufacturing companies must be able to make their customers satisfied and loyal for the products they use. One of the factors that influence customer satisfaction and loyalty is good quality. To realize good quality, a process handling method is needed that can reduce the amount of NG. Data sources on the amount of NG obtained at PT. Toyotomo Indonesia shows that the welding process is 67%, where 34% is the NG process that has been missed. In determining the priority of NG countermeasures to pass the process to make it more effective, PT. Toyotomo Indonesia applies the Taguchi method and Analysis of Variance (ANOVA) as a tool to decide on the contribution of its dominant cause, where 16.03% is caused by the operator's work ability which is still lacking and 12.89% due to the conditions of working environment that intersect. After all the causes of the NG problem were corrected, the results showed a decrease in the passing process NG from 29.9% to 11.2%. To find out the causes of missed NG processes, fishbone diagrams are used by identifying 4M1E factors (humans, machines / work tools, methods, materials and work environment). From the results of the analysis it is determined that there are 3 main factors that cause NG, namely: Human (work ability), Environment (working area that intersects) and Work tools (inadequate lighting).

Keywords : quality, ng missed process, taguchi method and analysis of variance

