

ABSTRAK

Kecacatan produk yang terdapat pada PT. Metal Hitech Engineering selama proses produksi terdapat dua jenis cacat yaitu berupa cacat *porosity* dan cacat *slag*. Hasil perolehan data cacat *porosity* dan cacat *slag* diperoleh dari departemen *quality control* yang didasarkan pada *radiography test report*. Permasalahan yang terdapat pada PT. Metal Hitech Engineering berupa cacatan produk dapat dilakukan upaya pencegahan dengan cara pengendalian kualitas dan melakukan analisis menggunakan metode *Statistical Process Control (SPC)* dengan alat bantu *seven tools* berupa *control chart*, diagram *fishbone*, dan *checksheet*. Metode *Statistical Process Control (SPC)* dalam pengendalian kualitas dipakai untuk memonitor suatu produk, melakukan perbaikan pada produk dan melakukan pengelolaan. Hasil dari penelitian dengan menggunakan metode *Statistical Process Control (SPC)* yaitu terdapat tiga faktor yang mempengaruhi penyebab terjadinya cacat *porosity* dan cacat *slag* pada produk *transport tank* 15 Ton diantaranya faktor *man*, *method*, dan *environment* dengan faktor utama yaitu berupa faktor *man*. Perbaikan dari hasil penelitian menggunakan metode *Statistical Process Control (SPC)* yaitu dilakukan pembuatan standar operasional prosesur (SOP) dan perancangan *checksheet* dengan tujuan untuk meminimalisir terjadinya cacat dan mempermudah pencatatan apabila terdapat cacat selama proses produksi di perusahaan.

Kata Kunci: Kecacatan, Faktor, *Statistical Process Control (SPC)*

ABSTRACT

Product defects found in PT. Metal Hitech Engineering during the production process there are two types of defects, namely in the form of porosity defects and slag defects. The results of obtaining porosity defect and slag defect data were obtained from the quality control department based on the radiography test report. Problems found at PT. Metal Hitech Engineering in the form of product defects can be prevented by quality control and analysis using the Statistical Process Control (SPC) method with seven tools in the form of control charts, fishbone diagrams, and checksheets. The Statistical Process Control (SPC) method in quality control is used to monitor a product, make improvements to the product and carry out management. The results of the study using the Statistical Process Control (SPC) method are that there are three factors that affect the cause of porosity defects and slag defects in 15 Ton transport tank products including man, method, and environment factors with the main factor being the man factor. Improvement of the research results using the Statistical Process Control (SPC) method, namely making standard operational processes (SOP) and designing checksheet with the aim of minimizing the occurrence of defects and facilitating recording if there are defects during the production process in the company.

Keywords: Defect, Factor, Statistical Process Control (SPC)