

ABSTRAK

Pada Perusahaan Otomotif terdapat material yang bernama Terotek. Terotek berfungsi sebagai anti karat, peredam getaran dan untuk mempercantik pada bagian bawah mobil. Permasalahannya adalah terdapat banyak defect/cacat pada Perusahaan Otomotif yang berupa tidak terpasangnya terotek disebabkan karena pengecekan terotek masih menggunakan cara manual ditambah bagian pengecekan yang terlampaui banyak sehingga pengecekan berpotensi terlewat. Oleh karena itu penting dibangunnya suatu sistem otomatis yang mampu membantu pengecekan terotek agar tidak terlewat lagi. Sistem ini meliputi proses akuisisi data citra, pemrosesan citra, ekstraksi ciri, dan klasifikasi. Ekstraksi ciri menggunakan tekstur *Gray Level Co-occurrence Matrix* (GLCM) sedangkan pengklasifikasi menggunakan jarak *Euclidean*. Hasil pengujian Aplikasi Deteksi Produk Cacat Terotek Menggunakan Metode *Gray Level Co-occurrence Matrix* (GLCM) dengan klasifikasi jarak *Euclidean* memiliki tingkat akurasi sebesar 86,66% untuk pengujian sampel plat berlapis terotek dan 83,33% untuk sampel plat *body* mobil dengan posisi Tengah dan jarak ideal 160 mm antara kamera dan Sampel plat.

Kata Kunci: Terotek, *Gray Level Co-occurrence Matrix* (GLCM), *Euclidean*



In the Automotive Company, there is a material called Terotek. Terotek functions as an anti-rust, vibration damper and to beautify the bottom of the car. The problem is that there are many defects / defects in Automotive Companies in the form of not installing the terotek because the terotek checks are still using the manual method plus too many checking parts so that the checking has the potential to be missed. Therefore it is important to build an automatic system that is able to help check the terotek so that you don't miss it. This system includes the process of image data acquisition, image processing, feature extraction, and classification. Feature extraction uses the Gray Level Co-occurrence Matrix (GLCM) texture while the classifier uses Euclidean distance. The test results of Terotek Defective Product Detection Application Using the Gray Level Co-occurrence Matrix (GLCM) method with Euclidean distance classification have an accuracy rate of 86.66% for Testing of coated plate samples and 83.33% for car body plate samples with the center position and an ideal distance of 160 mm between the camera and plate samples.

Keywords: Terotek, Gray Level Co-occurrence Matrix (GLCM), Euclidean