

RANCANG BANGUN ALAT OTOMASI PENGATURAN SUDUT TANGKAP SENSOR GAMBAR DAN JARAK LASER PADA SISTEM OPTIK METODE *LASER SPECKLE IMAGING*

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ABSTRACT

The image sensor and laser distance capture angle settings on the optical system LSI (Laser Speckle Imaging) method are designed automatically to obtain optimal speckle contrast data as desired. LSI Method System has been widely applied to determine the pattern, grain size, and contaminants in fruit. The angle of the scatter beam sensor is automated with a servo motor, and the distance setting uses the HC-SR04 Ultrasonic sensor which is placed on a conveyor as a drive. The system as a whole is controlled by Arduino. System testing shows the system works well with error percentages of 1.843445271% and 1.23% respectively for angles and distances.

Keywords: Method Of LSI, Servo Motor, Optical Systems, Ultrasonik HC-SR04