ABSTRACT

Standardization for testing the ceramic's angle in Balai Besar Keramik done manually, whether is on calculating the angle or record the measurement result. The process of angle measurement doing repeatedly, in one day between 78 ceramics been tested with different size and it cause fatigue for the operator based on the interview. The cycle time of angle measurement is 104 second per ceramic. to solve the problem it needs good automation system and did not cause fatigue for operator so it can save the cycle time. The system will be designed using digital image processing, for the method using Curvature Scale Space, this method have advantage in handling the image which have high noise. The focus in this study is time efficiency when measurement the angle. Using this system time efficiency raising compare with existing time which is 69,33% and also level of error in the angle measurement is 38,322%. If using scanner for taking the image this system get smaller error rates for normal ceramics which is 0,958%, defect ceramic are 2,17%, and calibrator plate are 4,126%.

Key Words: Curvature Scale Space, Balai Besar Keramik, image processing, automation