ABSTRACT

In every industry the quality control process plays a major role in maintaining the quality standards and customer satisfaction. And it is same for the ceramic tile industry. Even though almost every industry is being automated still quality control on ceramic tile industry is done manually. Manual inspection is labour intensive and in ceramic tile industry the inspection process has to be done under harsh industrial environment so the tendency of leading toward a wrong detection is high in manual inspection systems. To overcome such drawbacks in manual inspection this project proposes an automated inspection system based on image processing techniques.

Keywords

Machine vision; Image processing; Edge detection; Canny edge detector; Morphological operations; Image filtering; Ceramic tiles; Defects detection; Automated qaulity inspection; Matlab.