

Image compression of Surface defects of the hot-rolled steelstrip using discrete Cosine Transform and Discrete Wavelet Transform

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Abstract : Automatic quality control of surface of hot rolled steel using computer vision systems is a real time application, which requires highly efficient Image compression techniques in order to improve the data transmission and storage capacity. In this work, two image compression methods are simulated. They are Discrete Cosine Transform (DCT) and Discrete Wavelet Transform (DWT). The results of simulation are shown that The Discrete Wavelet Transform (DWT) technique given improved result compared with Discrete Cosine Transform (DCT).

Keywords : Automatic quality control, Computer vision, image compression, Cosine transform, wavelets transform