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

Adel BOUDIAF, Kadri Oussama, Rachid Zaghdoudi, SlimaneZiani, Dehimi Said

Abstract : Automatic quality control of surface of hot rolled steel using computer vision systems is a real timeapplication, which requires highly efficient Image compression techniques in order to improve the data transmissionand 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 WaveletTransform (DWT) technique given improved result compared with Discrete Cosine Transform (DCT).

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