Abstract-Automatic defect classification methods are important to increase the productivity of the forest industry. In this respect, classification is also an important component of a pattern recognition system. Well designated classification algorithm will make recognition process more efficient and productive. Quality control is one of the most important steps among the applications that use classification. There are various techniques which are available in order to check quality of wooden material. However, display based quality control of wooden materials is still stands as a hard process. Although there are quality control methods, there are quality control problems because of the classification depending on the person’s eyestrain. We aim the reduction of labor costs. Also, we aim to achieve a more accurate and reliable way to make automatic quality classification. In this article, we proposed a method for quality control of wood material. In order to determine quality control of wooden material, knot detection algorithm which is developed using image processing techniques. This knot detection algorithm consists of several steps. These steps are morphological preprocesses in the knot preprocessing step, knot features obtained from Wavelet Moment (WM) in the feature extraction step, k nearest neighbor method (KNN) classification technique in the classification step.