Abstract

In this paper, a contact less testing and calibration system is developed for temperature gauges. The system captures the images of temperature gauge at a regular interval, detects the desired region of interest using algorithms and segments the needle for further processing. The segmented image properties are calculated and matched with the standard data to indentify the indicated value. The system is capable enough to generate alarm and emboss 'defective' on the gauge under test. In the field manufacturing, non invasive visual inspection systems are replacing the need of human inspector to prevent the inclusion of incorrect parts or to check the quality of goods.

**Index Terms**

Computer Science  
Image Processing

**Keywords**

AVIS  Image Acquisition  NITCS  ROI  Threshold.