

Note 1

This paper presents a method to detect air leakage of an air conditioning compressor using image processing techniques. ~~Quality of air conditioning compressor should not have air leakage.~~ To detect an air conditioning

compressor leak, ~~air is pumped into a compressor and then submerged into the water tank.~~ If ~~air bubble occurs at~~ bubbles are observed from the

surface of the ~~air conditioning compressor,~~ that ~~leakage compressor must be returned for~~ repair ~~maintenance.~~ In this work a

Note 2

new method to detect ~~leakage and search leakage point with high accuracy,~~ fast, and ~~precise processes was~~ precision is

Note 3

proposed. In ~~a preprocessing procedure to detect the air bubbles,~~ threshold and median filter techniques ~~have been~~ are

used. ~~The connected-component~~ ~~Connected-component~~ labeling technique is used to detect ~~the air bubbles~~ while blob analysis is ~~searching~~ employed as the

technique to analyze ~~a group of the air bubbles in sequential images.~~ The ~~experiments are tested with proposed~~ proposed algorithm was tested in

~~algorithm~~ ~~conducted~~ to determine the leakage point of an air conditioning compressor. The location of the leakage point was

~~represented as a~~ ~~the proposed method could accurately detect the estimated~~ ~~leakage point during process could be accurately~~ detected.

The ~~estimation point had error~~ error in the estimated leakage point compared to the actual leakage point was ~~the~~ the detected. The ~~estimation point had error~~ less than 5% ~~compared to the real leakage point.~~

Source: [Air Conditioning Compressor Air Leak Detection by Image Processing Techniques for Industrial](#)

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