

Leakage Measurement System

Idea, objective:

With standard systems it is today almost impossible to detect an impending leakage coming up on valves. With the exhaust temperature only big leakage's can be detect. Mostly a recondition is not possible, so that new expensive valves must be installed. It is necessary to detect small leakage's, so that a recondition is possible with minor cost.

Result:

- Development of a simple and robust magnetic sensor based on ultrasonic principle
- Development of a special principle to digitize ultrasonic signals
- Development of a hand-held system including amplification, digitalisation
- Development of an analysing method
- Test of the system aboard ships with different 2- and 4- stroke engines