

1.11.5. ACOUSTIC EYE TECHNOLOGY INTENDED FOR TESTING PIPES AND PIPE SYSTEMS

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Acoustic Eye is a testing technology for pipes and pipe systems by acoustic method, which is used now systematically for pipe testing in Europe and USA mainly at electric power plants, oil-refining enterprises and in other branches of industry. This technology makes it possible to save significant financial funds and time in the process of detection of standard defects in pipes, which (if presented) reduce operability of equipment. This technology is unique and stands out favorably as compared with currently existed testing methods.

System based on the reflection of acoustic signals (Acoustic Pulse Reflectometry – APR) was developed for inspection of internal diameter of pipes in condensers, heat-exchangers and boilers. It detects leaks, partial/complete blockages, dents, cracks, internal strains, corrosion and erosion. No long-term training of personnel is required. Testing is carried out within the shortest time and does not require termination of the equipment operation in the event of leak detection. Testing time is minimal, which provides saving of expensive power and time. There is no need in scanning along the whole length of a pipe, thus avoiding possibility of finder to be lost in a pipe.

This technology does not depend on pipe material and shape.