

Title:

Compressed Air (CdA) System Energy Audit: A Case Study on Quantifying the CdA Leak with the SONAPHONE UT Technology

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Abstract:

Compressed air (CdA) has become one of the most costly utilities in a manufacturing facility. Numerous tactics are utilised to minimise energy loss and consumption when creating energy-efficient CdA systems. The systems require a multidimensional approach to energy conservation through the use of efficient compressed air generation, distribution, and application equipment. The research's initial objective is to quantify lost CdA in terms of dollars and cents. The second objective is to examine the compressed air system's performance using the SONAPHONE ultrasonic testing (UT) technology based on its auto-leak analysis. The annual cost and leakage cost of CdA were calculated using data collected from the SONAPHONE equipment.