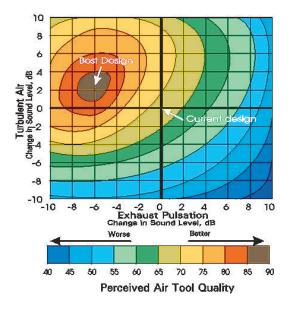


## **Product Sound Quality**

Sound can contribute to a consumer's overall evaluation of a product in terms of its acceptability, function and perceived quality or workmanship. Sound may enhance, as well as detract from the pleasure in using a product. Sound may also indicate how well the product is working. Manufacturers are often faced with negative reactions to the sound of their products and may be uncertain as to how to improve the sound. All of these issues, coupled with the need for manufacturers to develop high-end and international markets have made product sound quality an important product attribute.



Acentech's Product Noise Group specializes in quiet product design and sound quality improvement. Our unique methods for Sound Quality optimization result in specific, quantifiable design changes that enable product planners, managers, and engineers to define, design, and bring to market products that sound better and lead to higher product acceptance and satisfaction, all in the most cost effective manner possible.

## **AREAS OF EXPERTISE**

- > Product sound perception
- > Sound source identification
- > Jury studies
- > Statistical analysis
- > Sound modification
- > Design intervention



## **PRACTICE LEADER**

## David L. Bowen, Principal

David Bowen's career as a noise and vibration engineer spans nearly four decades in consulting leadership and project management, performing sound and vibration analyses associated with product noise mitigation, building vibration analysis, and signal processing. These studies have involved sound quality evaluations and source/ path identification efforts that lead to effective modifications for improving product sound, and development, implementation and evaluation of various signal processing procedures for use in sound and vibration analyses, remote sensing, active noise/vibration control, and machinery diagnostics.