THE PERFORMANCES IN ACOUSTICS AND VIBRATION ENGINEERING

The evolution of the fields of industry, construction and energy has imposed performance requirements at a predictable and measurable level according to the normative reference documents or the technical specifications of the manufacturer.

In essence, it is noted that the industrial technological diversity at a high level of performance has led to conceptual reconsiderations by users in construction, energy, urbanism, etc. Thus, the increase in performance at high processing speeds has made that the relative movements of the contact components to facilitate the emergence of vibration excitatory sources and wave processes where a rigorous control of the parameters is necessary.

In this way, numerical calculation models, experimental evaluation methods and parametric classification in favorable assessment classes constitute only some of the engineering evaluation activities specialized in acoustics and vibrations.

As a result, in the field of vibrations regarding the detection of defects in structures, the identification of resonant regimes for turbulent flow of fluids through transport pipes, the establishment of optimal speeds for gear systems, the highlighting of technological vibrations in industry and construction, there are plenary engineering research for performance analysis.

Engineering acoustics is emerging as an extremely current and useful discipline through applied research that highlights concerns for sound-absorbing panels in homes, schools, hospitals, urban areas and highways. Also, top research is noted for the parametric identification of sound-absorbing and sound-insulating materials and products with passive control of structural damping for composite plates, membranes or housings.

This number of the journal includes scientific articles belonging to authors with a lot of experience and exceptional results in research.

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