

MODELLING OF NOISE THREAT ASSESSMENT IN SMALL INDUSTRIAL ROOMS

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Abstract: The research done in the area of analysis and assessment of noise threatened working place concentrate on identification of sources of sound. In order to perform the assessment of noise threat in the examined space, there is a need to gather additional information, among others about the construction features of the place, its equipment, etc. The process of selection of used ways and methods is highly determined by the acoustic parameters of the sources of sound, their characteristics and localizations. The information related to geometric models of the places as well as material features of the barriers create a set of complimentary parameters – necessary for proper selection of noise reducing methods. Due to variety of application of methods of modeling the acoustic fields it was stated, that each of them has limited applicability in the research because of the shape of the place and characteristics of the field. Its main simplification is related to the assumption of stability of acoustic parameters of the field in the domain of time simultaneously excluding the wave phenomena. This article is an attempt to identify the sources of sound as the emitters of acoustic energy in the working place. In this approach, the sources are treated as either points emitting acoustic energy.

Keywords: noise threat, model, source sound, assessment of noise.