



Acoustics and Industry

From the dawn of history, the noise protection - industrial acoustics – concerned the scientists to extend the research into the behavior of sound in enclosed space, where the people work with machines or engines, and the noise level leads to lack of concentration and loss of performance of the workers.

In *Collected Papers on Acoustics* (1921) Sabine highlighted the inability to communicate between the acoustics and industry, which is one of the strong obstacles to wider acceptance of acoustics in industry, even in the present. Sabine included special issues on noise and vibration control in factories and workshops, establishing certain innovative long-term requirements for protection concepts in industrial spaces.

Machines and engines increase– the noise pollution, but noise-reflecting surfaces also contribute to pollution and people's acoustic exhaustion.

Entirely new acoustic concepts in those years have influenced the architectural acoustics in industry for improvement of the quality of life of people and of the long-term working climate by significantly reducing of the noise level.

Coming the acoustics from industry, the understanding of the noise protection from both sides is vital not only for design of noise absorbers, protection walls, but also for improvement of the working conditions.

The noise reflections generate a harmful noise due to the sound-hard materials on the walls and ceilings. These sound reflections can be canceled by reducing reverberation in order to prevent the noise from scattering in the industrial halls.

By collaborating seriously to overcome the difficulties in industrial acoustics, we can optimize the qualities of noise in industrial spaces to attain the most value for each of acoustic requirements for the life of workers.

The first step is the extensive research in industrial acoustics and the adjacent disciplines, and the collaboration with the people who actually build. This may be a high aspiration, but when there is no other alternative, it seems worth the effort.

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