

Industrial Noise

OTITIS MEDIA An inflammation and infection of the middle ear

OTOLOGIST A physician who has specialized in surgery and diseases of the ear

OTOSCLEROSIS Hardening of the ear caused by a growth of bony tissue about the foot plate of the stapes and the oval window of the inner ear. It results in a gradual loss of hearing. Surgery can often correct this

PARACUSIS WILLISII The sensation of a deafened person indicating that he can hear better in a noisy area

PITCH That attribute of auditory sensation in terms of which sounds may be ordered on a scale extending from low to high. Pitch depends primarily upon the frequency of the sound stimulus, but it also depends upon the sound pressure and wave form of the stimulus

POWER LEVEL The level, in decibels, is 10 times the logarithm to the base 10, of the ratio of a given power to a reference power. The reference power must be indicated

PRESBYCUSIS The hearing loss due to age. It is believed by some to be the degeneration of the nerve cells due to the ordinary wear and tear of the ageing process

PSYCHOGENIC DEAFNESS That originating in or produced by the mental reaction of an individual to his physical or social environment. It is sometimes called functional deafness or feigned deafness

RECRUITMENT The condition in which an individual perceives an abnormally rapid increase in loudness as the sound pressure goes up. It is usually characteristic of severe sensorineural deafness

RESPONSE The motion of a device or system (or other output) resulting from an excitation (stimulus) under specified conditions

REVERBERATION The persistence of sound in an enclosed space, as a result of multiple reflections after the sound source has stopped

SENSORINEURAL DEAFNESS Nerve deafness or the lack of sensitivity of the auditory mechanism in the cochlea or paralysis of the acoustic nerve. This was formerly called inner ear impairment or perceptive deafness

SEMICIRCULAR CANALS The special organs of balance that are closely associated with the hearing mechanism and the eighth cranial nerve

SIMPLE TONE (PURE TONE)—(a) A simple tone is a sound wave, the instantaneous sound pressure of which is a simple sinusoidal function of the time, (b) a simple tone is a sound sensation characterized by its singleness of pitch

SINGLE FREQUENCY SCREENING TEST A fast method of rechecking hearing acuity using the 4000 Hz frequency. The measured value of the threshold at 4000 Hz up to 50 dB can be considered an upper limit for any threshold shift that might have occurred at other lower frequencies

SONE A unit of loudness. By definition, a simple tone of frequency 1000 Hz, 40 dB above a listener's threshold, produces a loudness of 1 sone. The loudness of any sound that is judged by the listener to be n times that of the 1-sone tone is n sones

SOUND An oscillation in pressure, stress, particle displacement, particle velocity, etc., which is propagated in an elastic material, in a medium with internal forces (e.g., elastic, viscous), or the super-position of such propagated oscillations. Sound is also the sensation produced through the organs of hearing—usually by vibrations transmitted in a material medium, commonly air

SOUND ABSORPTION The change of sound energy into some other form, usually heat, in passing through a medium or on striking a surface. In addition, sound absorption is the property possessed by materials and objects, including air, of absorbing sound energy

SOUND ANALYZER A device for measuring the band-pressure level or pressure-spectrum level of a sound as a function of frequency

SOUND LEVEL A weighted sound pressure level, obtained by the use of metering characteristics and the weighting A, B, or C specified in ANSI S14-1961. The weighting employed must always be stated. The reference pressure is 0.0002 microbar

SOUND LEVEL METER AND OCTAVE BAND ANALYZER Instruments for measuring