



**172**  
EAR PLUGS

**175**  
EAR DEFENDERS

Hearing problems caused by noise at work are far too common. The Health & Safety Executive estimates that 170,000 people in the UK suffer deafness, tinnitus or other ear conditions as a result of exposure to excessive noise at work. Once your hearing is gone, it will not come back – however, it is easily preventable simply by removing or reducing the exposure to noise.

As employers, your general duties are to reduce risks to lowest level reasonably practical of all noise level, keep records and make available all noise results and 'Buy Quiet' policy to minimise risks from all equipment and machinery.

SMI has developed a comprehensive product suite to meet your Hearing Protection needs, in compliance with all required national legislation and best practice guidelines.

## REGULATIONS FOR HEARING PROTECTION

The Personal Protective Equipment at Work Regulations require hearing protection to be supplied when an individual is exposed to noise that will damage hearing. The Noise at Work Regulations 2005 sets two noise level parameters:

- **80dBA** – hearing protection must be provided over this level
- **85dBA** – hearing protection must be worn within designated hearing protection zones over this level.

EN 352 distinguishes between different types of hearing protectors and each type must comply with the respective requirements that have been drawn up. SMI offers three types, all of which conform to the EN352:

- **EN352-1** – for ear defenders
- **EN352-2** – for earplugs and band protectors
- **EN352-3** – for helmet mounted ear defenders.

## SNR:

SNR (Single Number Rating) is a system which uses numbers to allow comparison on the level of noise reduction provided by hearing protectors.

You subtract the SNR value from the noise you are measuring (average). For example the level of noise is 90dB and the person wearing Ear Plugs with an SNR of 32, then the exposure level is:  $90 - 27 = 63\text{dB}$ .

SNR	NOISE LEVEL
20 SNR or less	85dB-90dB
20-30 SNR	90dB-95dB
25-35 SNR	95dB-100dB
30 SNR	100dB-105dB

## NOISE LEVEL EXAMPLES

**60 dB** TALKING

**90 dB** HAIR DRYER

**80 dB** CAR REVIVER

**105 dB** MUSIC CONCERT

**110 dB** CHAINSAW

**120 dB** ROAD BREAKER

**140 dB** FIGHTER JET ENGINE

**200 dB** SONIC BOOM