What You Need to Hear

As manufacturing, construction and other industrial endeavours are on the rise in Europe, so are the number of people exposed to harmful levels of noise in the workplace. Over 29% of all workers are exposed to hazardous levels of noise in at least one-quarter of their time in the workplace, and 11% are exposed at all times – and these trends are increasing.

While noise-induced hearing loss is permanent and irreversible, it is completely preventable. The new European Union Directive 2003/10/EC, which goes into effect on 15 February 2006, aims to prevent worker exposure to harmful noise, while promoting a healthier and more productive workforce.

Changes in Directive

In 2003, the European Parliament adopted Directive 2003/10/EC, which establishes new threshold values for the noise exposure measures of its earlier Directive 86/188/EEC. These new threshold values are lower, and more protective than the previous values. In addition, a new exposure limit of 87 dBA is defined as the maximum allowable daily noise exposure level at the worker's ear, taking all protective measures into consideration. The measures of the new Directive are to be enacted in Member States by 15 February 2006.

Comparison of Old Directive (86/188/EEC) to New (2003/10/EC)

Hearing Protective Measure	Old Directive Noise Level	New Directive Noise Level
Warning Signs Posted in Work Areas	90 dBA	85 dBA
Hearing Protectors Available	85 dBA	80 dBA
Hearing Protection Required	90 dBA	85 dBA
Training of Exposed Workers	85 dBA	80 dBA
Noise Reduction Program	90 dBA	85 dBA
Protected Exposure Limit	N/A	87 dBA

What is the difference between the 80/85 dBA Action Levels and the 87 dBA Limit Level?

The 80 and 85 dBA Action Levels are based on unprotected noise measurements that do not include the attenuation provided by hearing protectors. Preventive measures are taken when noise exceeds these levels. The 87dBA Exposure Limit is based on protected noise measurements – that is, an estimate of noise levels at the ear under hearing protectors. To prevent noise-induced hearing loss, protected noise exposures may not exceed this limit.

Glossary

A-Weighting - A filter applied by noise measurement devices, intended to replicate the frequency sensitivity of the human ear. Sound level meters set to the A weighting will filter out much of the low-frequency noise they measure, similar to the response of the human ear. In contrast, the C-weighting is a "flatter" filter, allowing more low frequencies to be measured.

Single Number Rating (SNR) - This is a general form of rating a products performance. In short the higher the SNR the better performance of that specific product across a range of noise frequencies. If a product performs with an SNR rating of 33 it may not give 33decibel reduction of noise at all frequencies. The performance data associated with H, M and L give the user an indication of noise reduction at the High, Medium and Low frequencies.

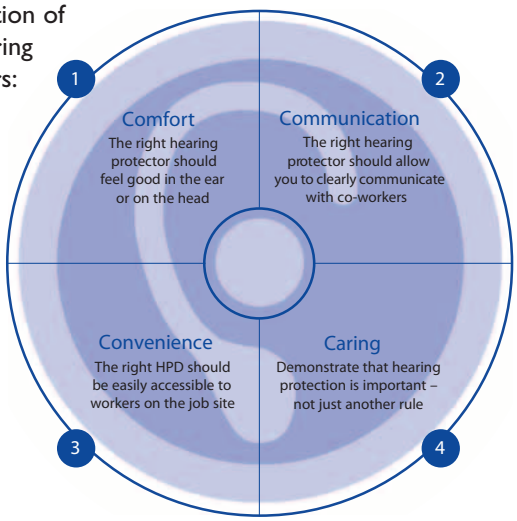
European Standards

All listed Hearing Protection is tested and marked to the relevant European Standards and CE Marked

EN352 Part 1 - Ear Muffs
EN352 Part 2 - Ear Plugs
EN352 Part 3 - Helmet Mounted Ear Muffs
EN352 Part 4 - Level Dependant Ear Muffs
EN352 Part 5 - Active Noise Reduction Ear Muffs
EN 352 Part 6 - Ear Muffs With Electrical Audio Input
EN 352 Part 7 - Level Dependant Ear Plugs

The 4cs of hearing protection

In developing an 2003/10/EC Directive-compliant hearing conservation program in your workplace, it is ideal to apply the 4Cs in the selection of your hearing protectors:



For further guidance please contact your EUROSAFE *Member who will be pleased to assist with product selection*

Hearing Protection