

Timothy Ward

Principal Consultant



BSc(Hons) MIOA

Expertise

Noise:

- Occupational Risk Assessment and Control.
- Machinery Safety & Conformity.

Vibration (Hand-arm Vibration, Whole Body Vibration):

- Occupational Risk Assessment and Control.
- Machinery Safety & Conformity.

Experience

A Consultant with over 25 years of experience in the field of noise and vibration, mostly in the investigation and prevention of occupational exposures associated with ill health.

With HSE as HM Principal Specialist Inspector (Noise & Vibration), developed HSE's technical policies on noise, hand-arm vibration and whole-body vibration, with lead responsibility for the topic of noise. Developed HSE guidance, Regulations, and benchmarks for good practice on control of risks. Supported HSE inspection, investigation and enforcement as a specialist investigator and expert witness.

Earlier experience in HSE's research division, providing research and scientific/technical support, measurement / analysis of occupational exposures and development of measurement / analysis techniques. Further experience across a range of architectural, environmental and occupational acoustics projects.

Experience of International (ISO) and European (CEN) Standards making as UK-nominated expert to various working groups dealing with occupational noise.

Professional Qualifications and Memberships

BSc(Hons) Physics, Leicester University, 1989.

Certificate of Competence in Workplace Noise Assessment, Institute of Acoustics, 1990.

Corporate Member of the Institute of Acoustics (MIOA), elected 1993.

Diploma in Acoustics and Noise Control, Institute of Acoustics, 1997.

Chairman, British Standards Institution (BSI) committee EH/1/4 Machinery Noise.

Member, BSI committees EH/1 Acoustics, PH/7 Hearing Protectors.

Selection of Experience

Occupational Disease

Engineering Evidence

Acts as an Expert Witness providing engineering evidence in relation to occupational disease claims for noise-induced hearing loss, hand-arm vibration syndrome and whole-body vibration injuries.

Author of several hundred reports for the Court, advising on level of exposure and risk, common law and statutory duties, risk control, expected standards and compliance.

Reported on a wide range of sectors including agriculture, armed forces, ceramics, chemical products, construction, education, energy/extraction (mining), engineering, food and drink, grounds maintenance, hospitality, joinery, manufacturing, minerals, motor vehicle repair, ports, power generation, printing, services, textiles, transport, woodworking.

Experience of conducting site inspections, and preparing joint statements.

Acceptable to all parties, with 95% of instructions on a single joint basis, and the remainder split between instructions on behalf of Claimants, and Defendants.

Risk Management

Noise and Vibration

Consultancy on the management of risks from occupational exposure to noise, hand-arm and whole-body vibration.

Advises on the level of risk and exposure in occupational settings, including conducting measurements to assess personal exposure.

Identifies failings in systems for risk assessment and control, and risk gaps; analyses control and management of risk against expected standards of legal compliance and good practice.

Advises on practical steps for control of risks and compliance with legal requirements, including on management strategies, technical/organisational control, personal protection, instruction and training and health surveillance systems.

Machinery Safety and Compliance

Noise and Vibration

Advises on the safety and conformity of machinery and equipment with respect to noise and vibration emissions.

Essential requirements for the design, and construction of machinery, instructions for safe use and declaration of emissions, against legal requirements based on Directives 2006/42/EC Machinery and 2000/14/EC Outdoor Equipment.

Standards and methods for the design, and construction of machinery for minimal noise and vibration emission.

Standards and methods for the measurement and declaration of noise and vibration emissions.

Employment History



Finch Consulting Limited

Principal Consultant

2012 - Present

Health and Safety Executive

HM Specialist Inspector (Noise & Vibration)

1999 - 2012

Noise & Vibration Scientist

1989 - 1999

Selected Publications



Noise Levels at the Ear of Marksmen Wearing Conventional and Non-Linear Ear Muffs, I R Price, E J Walles, T Ward, Proceedings of InterNoise 90, edited by H G Johansson, Acoustic Society of Sweden, Gothenburg, Sweden, 1101-1104

Non-Linear Hearing Protector Attenuation Against Gun-Shot and Industrial Noise with Comments on the Requirements for a Standard Test Method, E J Walles, J A Lloyd, T Ward, S G Critchlow, Proceedings of InterNoise 92, edited by G A Daigle and M R Stinson, Noise Control Foundation, Poughkeepsie, NY, 283-288

Measuring the sound power of woodworking machines using sound intensity techniques, T Ward, Proceedings of the Institute of Acoustics 16(2), pp 553-562, 1994

Hand-tool Vibration Emission: Correlation between declared and in-use values. Part 1 - Grinders, T Ward, Proceedings of the 1996 UK Informal Group Meeting on Human Response to Vibration, MIRA, United Kingdom

Analysis of acceleration data for containment on fairground rides, J A Jackson and T Ward, CRR 132/1997, Health & Safety Executive

Vibration emission of road breakers: Comparison of emission test data with vibration in real use, T Ward, 8th International Conference on Hand-Arm Vibration, 9-12 June, Umea, Sweden, Editors: R Lundström, L Burström, T Nilsson, S H Bylund, Arbetslivsrapport 1998:14

The use of temporary threshold shifts in vibration perception as a model to assess the effectiveness of anti-vibration gloves, Stevenson A, Corbishley P,

Ward T, 8th International Conference on Hand-Arm Vibration, 9-12 June, Umea, Sweden, Editors: R Lundström, L Burström, T Nilsson, S H Bylund, Arbetslivsrapport 1998:14

Compliance with noise at work regulations - a targeted enforcement approach, T Ward, Proceedings of Internoise 2001, The 2001 International Congress and Exhibition on Noise Control Engineering, The Hague, The Netherlands, 2001 August 27-30

Targeted action to achieve low-noise machinery in the engineering industry, T Ward, Proceedings of Internoise 2004, The 33rd International Congress and Exhibition on Noise Control Engineering, Prague, Czech Republic, 2004 August 22-25

The UK approach to implementing the Physical Agents (Noise) Directive, T Ward, Proceedings of Internoise 2004, The 33rd International Congress and Exhibition on Noise Control Engineering, Prague, Czech Republic, 2004 August 22-25

Sound Advice, T Ward, Safety & Health Practitioner, October 2005, pp50-52

Implementation in Great Britain of Directive 2003/10/EC, T Ward, First European Forum on Efficient Solutions for Managing Occupational Noise Risks, Lille, France (3-5 July). Proceedings of Noise-At-Work 2007

Comparing high and low performers for noise control, N Bell, J Lunt, J Webster, T Ward, International Journal of Workplace Health Management, Vol. 8(1), pp 46-60, 2015