

SCHEDULE

Regulation 5

Definitions

1. In this schedule—

“acceleration” means the quantity used to represent vibration magnitude in units of metres per second per second (m/s^2);

“frequency weighted acceleration” means vibration magnitude corrected for varying human sensitivity to vibration at different frequencies;

“BS EN ISO standard 5349-1” means the British Standard publication “Mechanical vibration - Measurement and evaluation of human exposure to hand-transmitted vibration Part I: General Requirements” first edition dated 10th May 2001;

“BS EN ISO standard 5349-2” means the British Standard publication “Mechanical vibration - Measurement and evaluation of human exposure to hand-transmitted vibration - Part 2: Practical guidance for measurement at the workplace” first edition dated 23 August 2001;

“ISO 2631-1” means the International Organisation for Standardisation publication “Mechanical vibration and shock - Evaluation of human exposure to whole-body vibration - Part 1: General requirements” second edition dated 15 July 1997; and

“orthogonal axes” means the three directions of vibration which are at right angles to one another.

Assessment of Exposure

2. Assessment of the level of exposure to hand-arm vibration is to be based on the calculation of the daily exposure value normalised to an eight hour reference period $A(8)$, expressed as the square root of the sum of the squares (rms) (total value) of the frequency weighted acceleration values, determined on the orthogonal axes a_{hwX} , a_{hwY} , and a_{hwZ} , as defined in Chapters 4 and 5 and Annex A to BS EN ISO standard 5349-1.

3. Assessment of the level of exposure to whole body vibration is to be based on the calculation of daily exposure expressed as equivalent continuous acceleration over an eight hour period, calculated as the highest (rms) value, determined on three orthogonal axes ($1,4a_{wX}$, $1,4a_{wY}$, a_{wZ} , for a seated or standing worker) in accordance with Chapters 5, 6 and 7, Annex A and Annex B to ISO standard 2631-1.

4. Assessment of whole body vibration need only include vibrations of a frequency exceeding 1 hz.

5. If the assessment is based on measurement in accordance with regulation 6(3)(c)—

(1) the methods used—

(a) may include sampling, which must be representative of the personal exposure of a worker to the mechanical vibration in question; and

(b) must be adopted to—

(i) the particular characteristics of the mechanical vibration to be measured;

(ii) to ambient factors; and

(iii) to the characteristics of the measuring apparatus;

(c) in the case of whole body vibration, must be carried out in accordance with BS EN ISO standard 5349-2;

(2) in the case of hand-arm vibration for devices which need to be held with both hands—

Changes to legislation: *There are currently no known outstanding effects for the The Merchant Shipping and Fishing Vessels (Control of Vibration at Work) Regulations 2007. (See end of Document for details)*

- (i) measurements must be made for each hand;
- (ii) the exposure is determined by reference to the higher of the two values; and
- (iii) information for the other hand must also be provided.

Interference and indirect risks

6. Regulation 6(4)(d) shall apply in particular where mechanical vibration interferes with—

- (1) the proper handling of controls or reading indicators; and
- (2) the stability of structures or the security of joints.

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