



# Human response to vibration — Measuring instrumentation

## TECHNICAL CORRIGENDUM 1

*Réponse des individus aux vibrations — Appareillage de mesure*

*RECTIFICATIF TECHNIQUE 1*

Technical corrigendum 1 to International Standard ISO 8041:1990 was prepared by Technical Committee ISO/TC 108, *Mechanical vibration and shock*, Sub-Committee SC 3, *Use and calibration of vibration and shock measuring instruments*.

*Page ii*

### Foreword

Change last sentence to read:

"Annexes A to D of this International Standard are for information only."

*Page 2*

**Subclause 3.3.2**, equation (2).

Add the unit "dB" at the end of the equation.

*Page 3*

**Subclause 4.3.2**

Add "and/or" after item a).

*Page 16*

**Subclause 9.2**

Change item 25) to read:

"The electrical impedance which for testing purposes shall be substituted for the transducer."

Page 24

## Annex D

### Clause D.1

In the definition of  $a_0$ , add "if power is measured" at the end of the phrase in parentheses.

### Clauses D.1 and D.2

Change " $t_0$ " to " $t_0$ " in eight places.

### Clause D.2

Replace the first formula with:

$$a_{\text{rms}, \tau}(t_0) = \left[ \frac{1}{\tau} \int_0^{t_0} a^2(t) \exp\left(\frac{t-t_0}{\tau}\right) dt \right]^{1/2}$$

Replace the second formula with:

$$L_{\text{rms}, \tau}(t_0) = 10 \lg \left[ \frac{1}{\tau} \int_0^{t_0} \frac{a^2(t)}{a_0^2} \exp\left(\frac{t-t_0}{\tau}\right) dt \right] \text{ dB}$$

Replace the third formula with:

$$a_{\text{eq}, \tau} = a_0 \left[ \sum_{i=1}^n \frac{L_i}{T} 10^{0.1 L_i} \right]^{1/2}$$

Replace the fifth formula with:

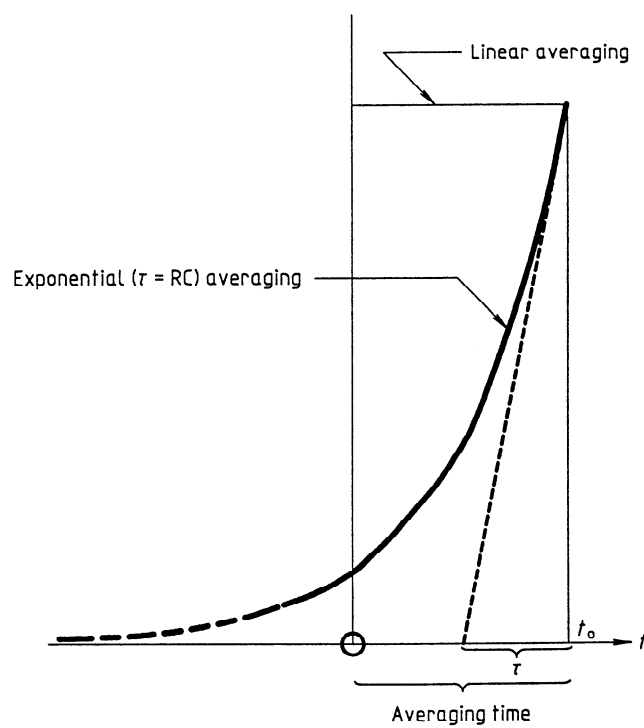
$$a_{\text{eq}, \tau} = a_0 \left[ \sum_{i=1}^n \frac{P_i}{100 \% } 10^{0.1 L_i} \right]^{1/2}$$

Replace the sixth formula with:

$$\sum_{i=1}^n P_i = 100 \%$$

**Figure D.1**

Replace the existing figure with:



This page intentionally left blank