



INTERNATIONAL STANDARD ISO 18431-2:2004
TECHNICAL CORRIGENDUM 1

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Mechanical vibration and shock — Signal processing —
Part 2:
Time domain windows for Fourier Transform analysis

TECHNICAL CORRIGENDUM 1

Vibrations et chocs mécaniques — Traitement du signal —

Partie 2: Fenêtres des domaines temporels pour analyse par transformation de Fourier

RECTIFICATIF TECHNIQUE 1

Technical Corrigendum 1 to ISO 18431-2:2004 was prepared by Technical Committee ISO/TC 108,
Mechanical vibration, shock and condition monitoring

Page 2, Table 1, column 2

The values are now expressed to one place of decimals. A corrected version of Table 1 appears overleaf.

Table 1 — Window properties

Window type	Highest sidelobe	Sidelobe rolloff	Noise bandwidth	Maximum amplitude error
	dB	dB/decade	No. of lines ^a	dB
Hanning	-31,5	-60	1,50	1,4
Flat-top	-93,0	~0	3,77	< 0,01
Rectangular	-13,3	-20	1,00	3,9

^a Relative to line spacing.

Page 3, Equation (2) and definition of its first variable

Delete “ ω ” (omega), insert “ w ”; delete “ ν ” (nu), insert “ n ”. The new version then reads:

$$w(n) = 1 - \cos(2\pi n/N) \quad (2)$$

where

$$n = 0, 1, \dots, N - 1$$

Page 3, Equation (3) and definitions of its coefficients

Modify the format of the figures associated with the a coefficients as follows:

$$w(n) = 1 + a_1 \cos(2\pi n/N) + a_2 \cos(4\pi n/N) + a_3 \cos(6\pi n/N) + a_4 \cos(8\pi n/N) \quad (3)$$

$$a_1 = -1,932\ 617\ 19$$

$$a_2 = +1,286\ 132\ 81$$

$$a_3 = -0,387\ 695\ 31$$

$$a_4 = +0,032\ 226\ 56$$