



## Application

- Software module of the PC based vibration measurement system VibroMetra
- Measurement and evaluation of whole-body vibrations to EN ISO 2631
- Health evaluation of vibrations in vehicles, construction machinery, forklift trucks etc. to ISO 2631-1
- Measurements for the implementation of EU guideline 2002/44/EC
- Measurement of vibrations in buildings to ISO 2631-2
- Comfort evaluation of vehicles
- Vibrations in fixed-guideway transport systems to ISO 2631-4

## Properties

- Measurement of the RMS of weighted acceleration in three orthogonal directions
- Vibration total value (Ahv)
- Vibration dose value (VDV)
- Various weighting filters to ISO 8041-1
- User guidance corresponding to the standard
- Offline processing of stored measurement data
- FFT analysis of vibration events with VM-BODY+
- Calculation of daily vibration exposure A(8)
- Generation of individualized reports
- Available as kit including hardware and sensor

## Technical Data

	VM-BODY	VM-BODY+
Event analysis	no	FFT
Measurands	Interval RMS; maximum RMS (MTVV) Vibration dose value (VDV); crest factor	
Frequency weightings	Wb; Wc; Wd; Wj; Wk; Wm	

**Optional accessories** M312B USB sensor interface (2 units needed)  
Triaxial seat pad accelerometer KS963B100-S/01

**Notice** A free trial version of VibroMetra including VM-BODY can be downloaded from our website [www.MMF.de](http://www.MMF.de).

Measurement mode | Measurement | Data storage | Analysis | Evaluation | Annunciator

**Measurement can be started.**

Measurement according to **LärmVibrationsArbSchV from 06.03.2007**

Measurement of whole-body vibrations  
health assessment  
in seated position  
sensor on supporting seat surface

frequency weighting of axes:  
X: Wd Y: Wd Z: Wk  
k-factors for total-value-calculation:  
X: 1.400 Y: 1.400 Z: 1.000

Assessment  
A(8) = 0.50 m/s<sup>2</sup> Action value  
A(8) = 0.80 m/s<sup>2</sup> Limit value Z  
A(8) = 1.15 m/s<sup>2</sup> Limit value X, Y

Aimed measuring time: 00:03:47 h:mm:ss [SD]  
Integration time of running r.m.s.: 1.000 Seconds [SD]  
Daily exposure time: 08:00:00 h:mm:ss  
Delay to start: 2 Seconds

Show all measurement modes  
Show only standards  
Clone

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Measurement mode	X[m/s <sup>2</sup> ]	Y[m/s <sup>2</sup> ]	Z[m/s <sup>2</sup> ]	Total	Assessment
1. ISO 2631-1 comfort/perception seated seat (no backrest me	0.200	0.220	0.629	0.696	acceptable
2. ISO 2631-1 health seated seat	0.097	0.350	0.019	0.350	good
3. ISO 2631-1 health seated seat	0.046	0.220	0.156	0.220	good
4. ISO 2631-1 health seated seat	0.387	9.824	0.330	9.824	bad

Overall assessment  
1. ISO 2631-1 health seated seat

Measurement performed on: 9/18/2008 at 4:09:21 PM  
Meas time / MTVV Int.time: 00:01:10 / 1.000 s  
Dose A(8)/Duration: 0.350 m/s<sup>2</sup> / 9h  
Assessment: no increased health risk  
Allowed daily exposure: 16:18:11 / 1d

% of limit  
Limit value (m/s<sup>2</sup>): X: 8.408 Y: 30.457 Z: 2.337  
Crest Factor: X: 1.150 Y: 1.150 Z: 0.800  
MTVV (m/s<sup>2</sup>): X: 19.297 Y: 7.938 Z: 11.738  
MTVV (m/s<sup>2</sup>): X: 0.655 Y: 1.670 Z: 0.087

Your remarks  
Crest factor too large. MTVV value too large. VDV value too large. Duration too short.

**Warning! MTVV is larger than 1.4 times the RMS value. Duration is shorter than the recommended minimum (00:03:47).**

Data folder  
Current folder: C:\Users\Public\Documents\VibroMetra\Data\

Read data file  
Copy to...  
Save

Load recently used data folder:  
WBV Measurement 22-05-2013 11:35:20 75

Print overall assessment  
First report example

Manfred Weber

**Metra Mess- und Frequenztechnik in Radebeul e.K.**

Meissner Str. 58

01445 Radebeul

Tel. +49 (0)351 836 2191

Internet: [www.MMF.de](http://www.MMF.de)

Email: [Info@MMF.de](mailto:Info@MMF.de)

Fax: +49 (0)351 836 2940

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