Vibrotactile Perception Threshold Measurement - medaSENS

In neural impulse conduction from the skin to the brain, information transfer dysfunctions can occur at various points and, thus, lead to a decrease in the vibration sensibility of the skin. These inflammatory or degenerative nervous diseases are called „polyneuropathies". With adults, diseases such as diabetes (diabetes mellitus) can cause a decrease in the vibration sensibility depending on the extent of neuropathy. However, a higher vibration perception threshold is also observed with patients who have been occupationally exposed to vibrations for many years (e.g. in working with power saws).

Exact and early diagnostics could permit to recognise a diabetic polyneuropathy at an early stage and to take corresponding measures. Along with the tuning fork, it is also possible to apply electrodynamic vibration exciters – so-called pallaesthesiometers - in determining the vibrations sensibility.

In comparison to the vibration fork, the advantages of the pallaesthesiometer are:

- the higher measurement resolution
- the reproducible measurement results
- the low number of measurement errors (no reading errors)
- the exact definition of the contact point and the pressing force

With the pallaesthesiometer medaSENS-S by ergonomie.experten, a simple and standardised[1] performance of the vibration sensibility measurement is now possible.

[1] ISO 13091-1 (2001): Mechanical vibration - Vibrotactile perception thresholds for the assessment of nerve dysfunction. Part 1. Methods of measurements at the fingertips.

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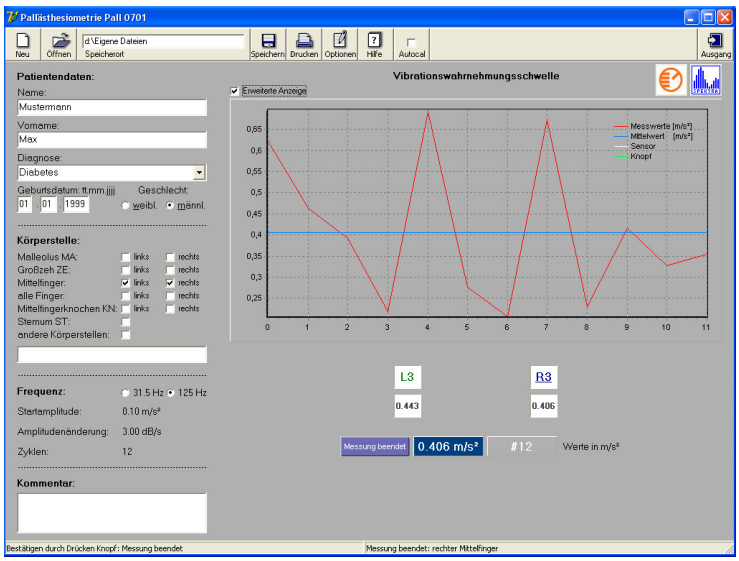
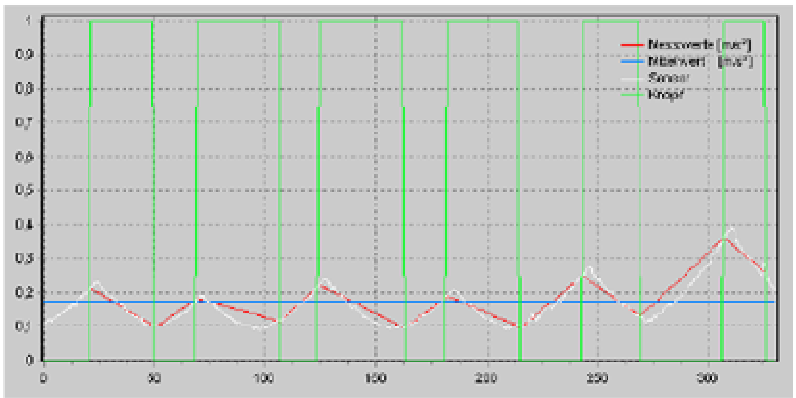
Scope of Delivery:

- control device with push-button[2]
- vibration exciter
- table stand
- user-friendly software

User Interface

- user-friendly measurement software (in English)
- entry of the patients' data (name, age, sex)
- an additional comment can be entered
- selection of the body measuring points
- display of the perception threshold value in m/s² or dB
- extendable representation of the measured threshold values
- printing, saving and exporting the data
- older examinations can be loaded at any time
- optional: software-supported anamnesis (Vibration White Finger VWF)





[2] measurement device complies with the Medical Devices Act (EN 60601 / VDE 0750)

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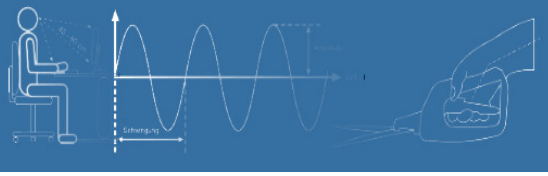

further information at: www.medasens.de and www.pallaesthesiometrie.de

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