

## SUMMARY

Work title: Variability of respiratory parameters as a consequence of postural segmental differentiation

Aim of the thesis:

To detect changes in breathing parameters depending on the position of body segments. Study is focusing on sitting and standing position, a research methodology a their measurements. The first part is focused on literature base of the thesis. In the second, special section, is making a research, where we panned respiratory parameters in the sitting and standing position. The aim is to compare the measured values between these 2 positions and make a conclusion.

Methods:

- Spirometry
- Qualisys technology

Results:

Changes in respiratory parameters between sitting and standing were individual. Objectively, we found that in standing position against the sitting position increased on average values of vital lung capacity. Expansion of the chest in the sagittal plane measured by the distance of 2 points average declined in standing. Chest expansion measured by the area in the transverse plane in standing on average decreased. Conversely, increased chest expansion measured by the area in the sagittal plane.

Key words: respiration, sitting, standing, breathing, objectivisation, spirometry, Qualisys