Abstract:

To describe feelings of discomfort while sitting, many experiments have been conducted to find a link between interface pressure on the seat and the feelings of discomfort of test subjects. Most of these experiments found no relation or correlation between discomfort and pressure while others actually found a relation. A question which arose was how sensitive the human body is to pressure differences during sitting. The attempt of this study was to determine the sensitivity to pressure for an area of the thigh. Therefore a test stand was designed allowing the variation of pressure on an area of a thigh during sitting. In parallel, the subjects were asked to judge the pressure sensation. By analyzing the frequencies of answers given by the test subjects, a curve could be derived which describes the sensitivity of pressure sensation. In this paper the test stand, the test procedure, the results and further experiments will be discussed.