



# What's **mobee fit**?

mobee fit is an innovative system for human mobility assessment – and even more!

The use of extremely precise sensor technology allows you to determine your clients' mobility status in an exact and reproducible way. While you focus on the client, your measuring results will be transferred to your computer via radio communication. A simultaneous live animation of the course of motion will be shown on your display screen to visualize the client's movements. This not only enlivens the client's experience but also creates understanding and acceptability towards the measurement.

Time is money – that's why the developers of mobee fit have considered technical innovation as well as financial aspects of the application. The measuring process is characterized by its quickness and its high operability. The necessary integration time within your institution will be limited to a minimum as the interactive teach-in function enables a prompt usage without intensive and time-consuming schooling.

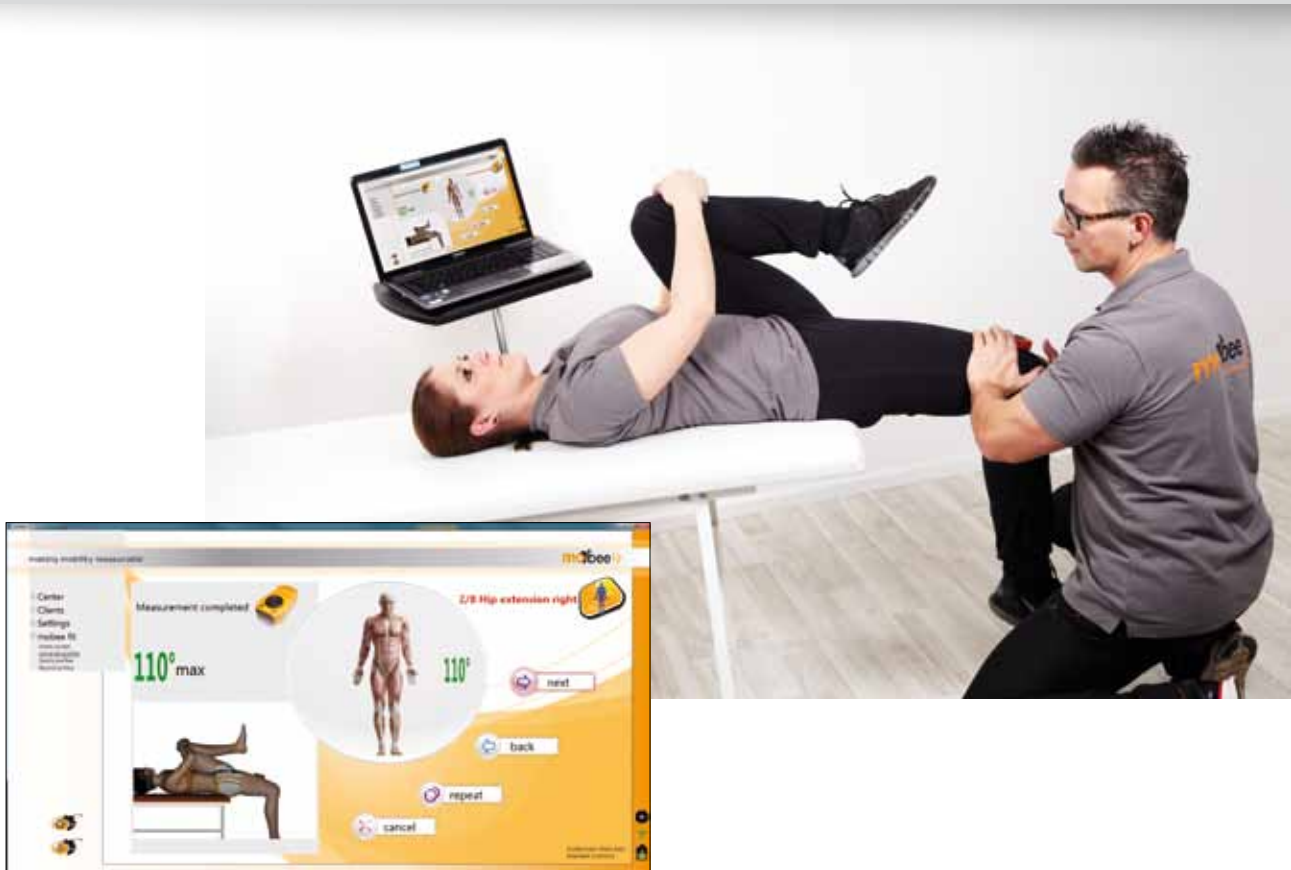


# Which tests can be carried out with mobee fit?

## Shoulder/neck muscles

Tension often occurs in this muscle area, in particular in persons who often sit and do not do enough exercise. This also leads to reduced mobility capacity which will be detected through a comparison of rotation to the left and to the right. The test is therefore highly relevant especially for people with sedentary lifestyles and those performing activities that strain the shoulder (in particular, working above shoulder level). Tension caused by psychological strain must also be taken into consideration, since the muscles of the neck and shoulder are typically a projection area of the psyche.





## Hip flexor muscles

A reduced stretching capacity of the iliopsoas muscle may result from monotonous bend postures (e.g. permanently sitting) or from unbalanced muscle use (e.g. intensive sprint training) if balancing stretching stimuli are missing. Over the long run this may lead to an unphysiological strain on the intervertebral disks of the lumbar spine, especially if the abdominal muscles are additionally weakened. The test must therefore be primarily seen as a test for determining the health of a person's back. This information is important for the untrained person as well as for the professional athlete.

## Ischiocrural muscles

The ischiocrural muscles are a muscular area which is typically prone to a reduction of the stretching capacity. It is frequently used as a general parameter to determine the overall mobility as in, for instance, the sit-and-reach test where it interacts with the mobility of the back. A permanently bent posture (e.g. sitting) and/or unbalanced stress without adequately balancing stretching may reduce the stretching capacity. Reduced mobility can already present itself during childhood and adolescence, if stretching exercises in the context of a sports program are neglected. Insufficient stretching capacity may have a negative effect on the posture of the spine in the long run due to flattening of the natural lumbar lordosis. Additionally, stress is increasingly placed on the back when flexing the torso, which leads to an increased stress on the intervertebral disks. This also increases the risks of muscle injuries within this muscle area.

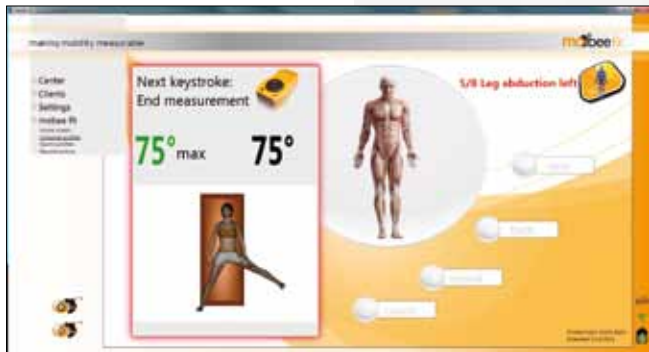


## Lumbar muscles

If the leg muscles are overstrained, they become tense, which can be seen particularly in the region of the lumbar spine. Similar to the problems of the shoulder and neck tension, psychological stress can also cause pain and limited mobility. The extensor muscles of the back are stretched in the lumbar area during the rotation test to check their stretching capacity. It is not unusual that there are differences between the sides here, which should be taken into consideration accordingly. This test is applied by all who want to avoid or counteract back problems in the long run.





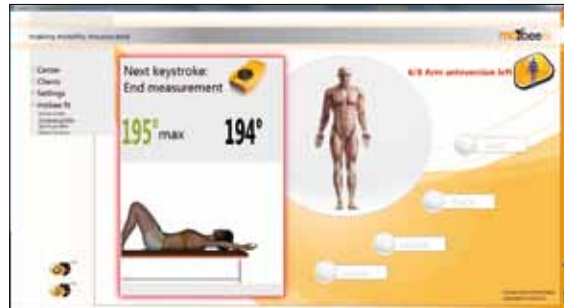


## Adductor muscles

A reduced stretching capacity of the adductor muscles has a disadvantageous effect by limiting the overall physiologically available mobility and increasing strain on the pelvis and the lumbar spine (e.g. evasive movements). A normal or good stretching capacity of the adductor muscles is important especially for athletes in order for them to use the physiologically possible range of motion and to avoid muscular strain and injuries.

## Pectoral muscles

Increased flexed posture in everyday life may cause a decreased stretching capacity of the large pectoral muscles over time. Working in a sitting position over long time and other activities involving a bent forward posture intensify this effect. Correspondingly, unbalanced muscle training which does not adequately take the opposing muscles into consideration may lead to a reduction of the stretching capacity or to an intensification of a preexisting condition. An increased kyphosis (excessive forward curving of the spine) is usually accompanied by a limited stretching capacity of the pectoral muscles.



## Calf muscles

Insufficient stretching capacity of the calf muscles especially leads to increased mechanical stress on the Achilles tendon, which may cause problems and harm in the long run. This may additionally lead to disturbances of the posture, which extends from the knee and hip joint up to the spine.







## Straight thigh muscles

A reduced stretching capacity often develops in this muscle, typically combined with shortening of the hip flexor muscles. This reduction supports the intensification of the physiological lumbar lordosis, which may in the long run lead to a dysfunctional posture of the spine with a corresponding increase in the strain on the intervertebral disks, especially of the lumbar spine. This test is of particular interest in combination with the hip flexion test and relevant for assessing body posture and a healthy back.

# The assessment - Making your **customer** understand!

mobee fit offers a vivid and graspable assessment to you and your clients. All measurements will be analyzed under preventive aspects and their results will be illustrated in customer-friendly grading diagrams and charts.

## Total Score

In addition to the individual analysis of single measurement results, a total score is calculated for all measurements conducted within one profile. Three health-relevant dimensions constitute the basis of this score:

- Range of Motion (age- and gender-specific classification of measurement results)
- Symmetry (comparison of right side and left side)
- Harmony (consideration of even or uneven distribution of mobility)

## Trend analysis

The direct comparison of an arbitrary amount of measurements enables a training progress analysis. This measurable proof of success will not only increase your clients' motivation but also their trust in your work.



# Advantages at a glance

- Graspable and precise mobility assessment thanks to state-of-the-art sensor technology
- Significant and relevant tests in the major joint areas for a long-term health of the musculoskeletal system
- Solid data for the conception of a preventive mobility and strength training
- Tangible and comprehensible presentation of measurement results
- Detection of lopsided movement habits
- Increase of motivation and trust through trend analysis
- Perfect for mobile use in occupational and corporate health or personal training

