



PICTURE Measurement system fixed on leg (middle) and possible graphical user interface (left)

MEASUREMENT SYSTEM FOR HIP IMPLANT SURGERY

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Customer benefit

The information about the leg length and the hip rotation center is an important quality criterion for hip implant surgery to reconstruct the original biomechanics.

A new measurement system provides following advantages:

- Objective determination of the hip joint centered leg length and the hip rotation center
- Measurement of those parameters before surgery and after the hip implant test placement with direct comparison
- Possibility for fine adjustment with modular implants
- Intraoperative application
- Avoidance of secondary diseases

Measurement principle

The optical marker is positioned with a nonslip seating at the shin bone of the patient. It includes two LED with camera detection as well as an inertial sensor for angle measurement to determine the position.

The leg is lifted hyper extended by the surgeon at the heel. Due to the resulted sensor movement the hip joint centered leg length and the hip rotation center are calculated. The first measurement is performed before surgery, the second one after the hip implant test placement. If differences are recognized the hip implant can be readjusted with the help of a modular implant until the reconstruction of the original biomechanics.

IN COOPERATION WITH

