



## Handing Over the Orthosis

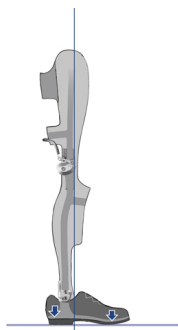
### Results Analysis incl. Documentation (Protocol for Checking the Orthosis Function)

After having produced the final orthosis, the orthopaedic technician will hand it over to the patient. Together with the patient he checks if the orthosis' alignment, function and comfort are ensured. If necessary, he will adapt and adjust it.

The Protocol for Checking the Orthosis Function serves as guideline and documentation. Print the protocol and use it for the fitting of the orthosis. Like that, you will be able to compare the state after fitting to changes in the future.

#### On the Workbench

#### Step 1/1

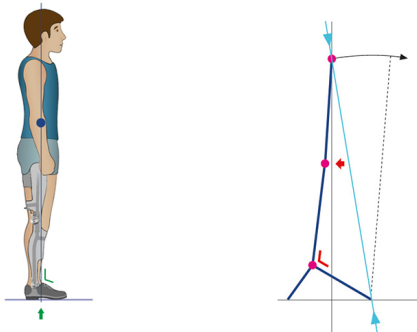


Place the orthosis in the shoe or on a tool adapted to the same heel height.

The line of gravity (blue) should approximately pass through the middle of the femoral shell and ventrally ahead of the ankle joint. Correct the alignment if necessary.

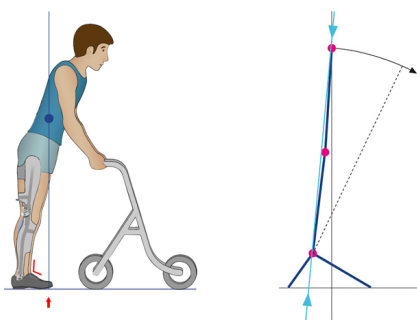
### Statically on the Patient

#### Step 1/3



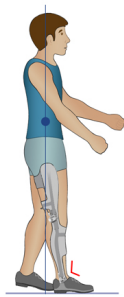
In order to check the efficacy of the forefoot lever, the patient must wear the orthosis and stand with equal load on both legs. If the dorsiflexion stop is reached at the right time, the forefoot lever is activated and the line of gravity passes ventrally ahead of the ankle joint. The patient is able to stand with both feet on the ground without supportive appliances, thus the visual field is enlarged and the arms and shoulders are less loaded.

#### Step 2/3



If the forefoot lever is not activated because the dorsiflexion stop is reached too late, the line of gravity passes too far ahead the ankle joint. The patient is not able to stand without supportive appliances. Correct the dorsiflexion stop accordingly.

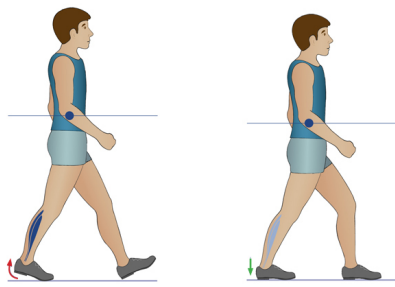
### Step 3/3



If the forefoot lever is not activated because the dorsiflexion stop is reached too early, the line of gravity passes too far behind the ankle joint. When standing, the patient cannot put load equally on both legs but has to take a step back with the contralateral leg in order to avoid falling backwards. Check the present leg length compensation and, if necessary, correct it and/or the dorsiflexion stop accordingly.

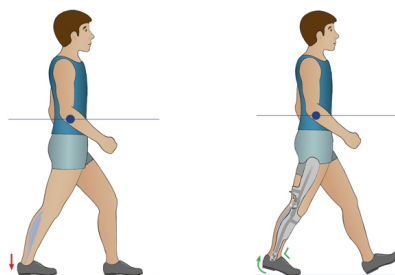
## Dynamically on the Patient

### Step 1/3



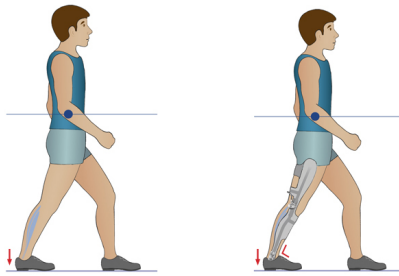
In a physiological gait, the heel lifts from the ground in terminal stance. If the plantar flexors are too weak to lift the heel from the ground, the body's centre of gravity drops, the step length is shortened and the knee flexion angle of the contralateral leg is too wide.

### Step 2/3



An orthosis with correctly adjusted dorsiflexion stop activates the forefoot lever and the heel lifts from the ground in terminal stance as in a physiological gait. The body's centre of gravity remains stable, the step length is not shortened and the knee flexion angle of the contralateral leg is not too wide, hence, less energy is consumed.

### Step 3/3



An orthosis with correctly adjusted dorsiflexion stop activates the forefoot lever and the heel lifts from the ground in terminal stance as in a physiological gait. The body's centre of gravity remains stable, the step length is not shortened and the knee flexion angle of the contralateral leg is not too wide, hence, less energy is consumed.

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