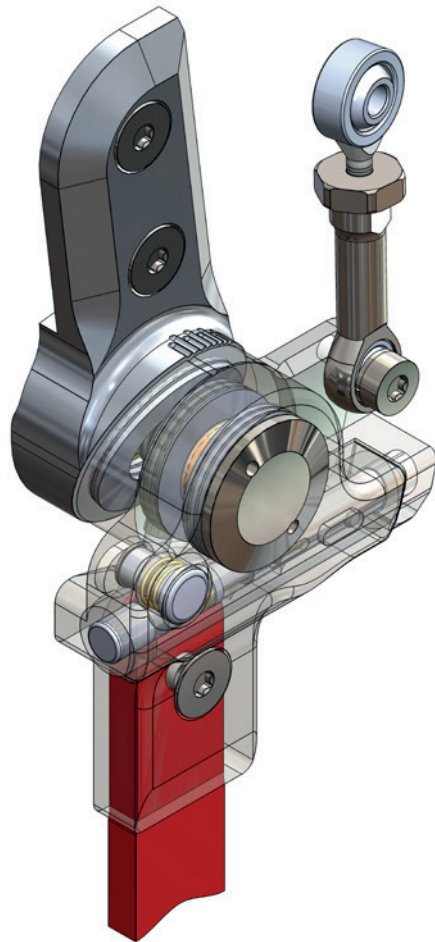


Reciprocating 2D Hip Joints in Comparison

For the bipedal human, pelvic rotation is an essential part in achieving an energy-efficient gait. This rotation helps to reduce energy expenditure by facilitating an efficient transfer of kinetic energy. The longer the step length, the more pelvic rotation required. However, maximum step length is not always the deciding factor in joint selection. In some instances, a narrower pelvic width may be preferable for wheelchair use. Therefore, to accommodate all eventualities, we have developed two distinct joint options which we compare here.



Buran-2D

For patients **25 to 85 kg**

Joint thickness **37,5 mm**

Adjustable connectors

Separate sitting and walking axes

Maximal pelvic rotation

► More on pages 136/137

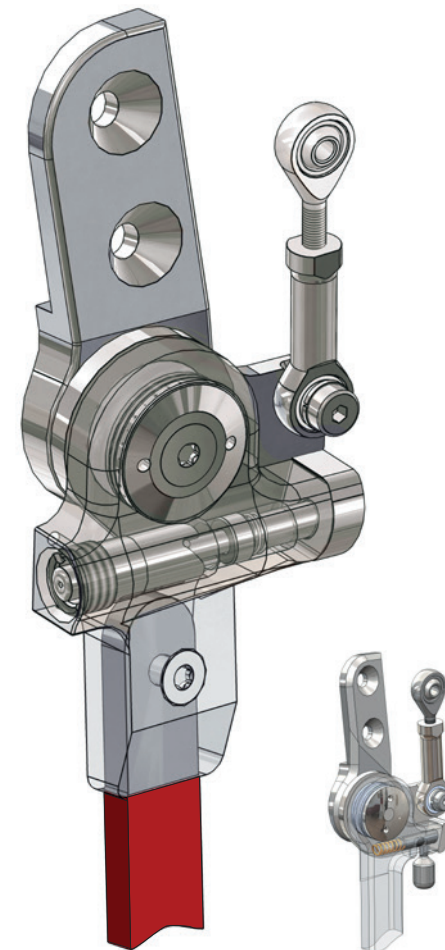
Revo-2D

For patients **10 to 85 kg**

Joint thickness **32 mm**

Standard pelvic rotation

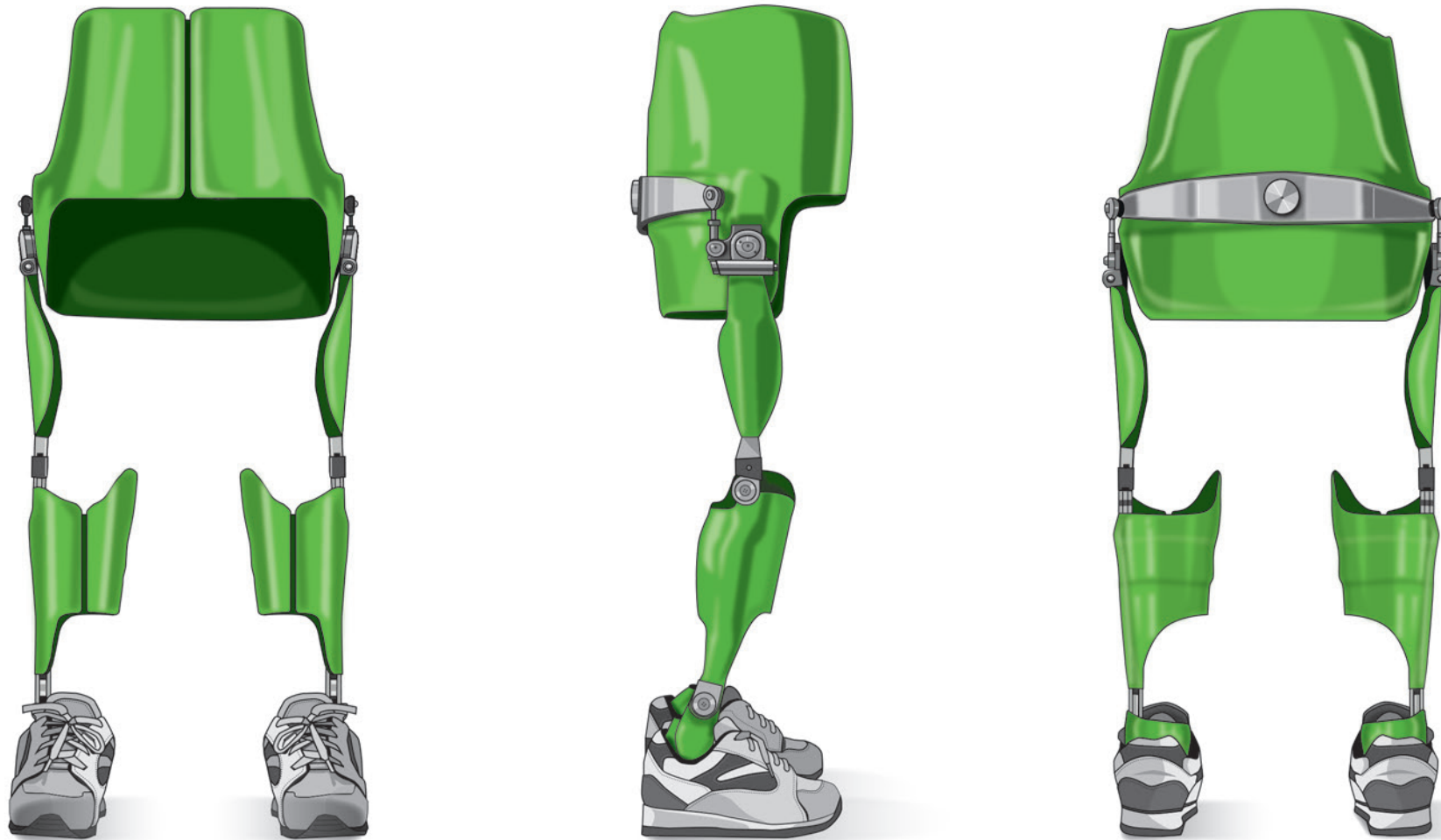
► More on pages 138/139



RGO



Example: A patient with a lesion in the thoracic to upper lumbar regions resulting in flaccid paralysis is fitted with an RGO. The orthotic components of this device have been minimized to the essentials required for function, following the principle “as little as possible, as much as necessary”. This includes a high trunk section to address spinal issues (scoliosis/kyphosis) and stabilize the rib cage. The lower portion of the trunk extends over the buttocks to supply the critical contact point in adherence to the 3-point pressure system, as well as providing a lateral edge to assist in free sitting. To facilitate donning, thigh cuffs are omitted. Fully enclosing, circular cuffs for the calf and foot sections, along with adapted orthotic shoes, ensure a secure hold of the leg.



Achieving optimal function from the RGO requires precise, individual customization. To ease alignment modifications, we recommend the Buran-2D hip joint, Klassik-Konso or Konso-0 knee joints in combination with Shuttle ankle joints, all of which allow for angle adjustments.