



Technical Specifications Amadeo HTS PS1

System

- ✔ finger/hand orthosis for functional rehabilitation of the hand
- ✔ sensor system for isometric force measurement and ROM assessment
- ✔ integrated software containing several therapy modules

Features

- ✔ possibility to move each individual finger independently
- ✔ continuous and ergonomic simulation of the grasping movement (including the thumb)
- ✔ tip pinch movement possible
- ✔ end-effector based system – no constraint movement
- ✔ left and right hand training possible without modification of the device
- ✔ high flexibility – easy to use on different patients
- ✔ adjustable armrest to fulfil all patients ergonomic needs
- ✔ height adjustment with electric telescopic pillar – range: 400mm
- ✔ pro- / supination can be adjusted by rotating the training module
- ✔ adjustment of velocity and force possible
- ✔ whole system is placed on a trolley and therefore easily moveable
- ✔ ergonomic finger connection parts with magnetic coupler
- ✔ 17" Touch screen pc incl. speakers integrated in the system

Ranges

- ✔ Force range of motors: 0 to 50N extension and flexion for each finger
- ✔ Force range of sensors: 0 to 40N extension and flexion for each finger
- ✔ Velocity range: grasping movement frequency up to 1Hz equals 60 grasping movements per 1 minute
- ✔ ROM range: full grasping movement 0° – 180° for each finger and the thumb

Software Features

- ✔ **CPM and CPMplus**
- ✔ velocity and force control individually for each finger
- ✔ miscellaneous motion patterns incl. tip pinch movement and single finger training
- ✔ anti-spasticity mode
- ✔ subject activity feedback
- ✔ **Assistive therapy module**
- ✔ patient in beginning of motor activity
- ✔ robot detects active movement and assists in concluding movement task
- ✔ **Interactive therapy module with augmented feedback**
- ✔ miscellaneous therapy modules for training of more advanced motor ability
- ✔ autonomous task oriented training with motivational aspect
- ✔ cognitive and coordinative tasks with audiovisual feedback
- ✔ subject activity feedback
- ✔ **Assessment Toolbox**
- ✔ ROM Assessment
- ✔ isometric force assessment for each individual finger
- ✔ **Database incl. detailed therapy history and assessment data of each patient**
- ✔ **Report generator for documentation of therapy data**

Main connection

- ✔ 100-240V 50-60 Hz 3A

Dimensions & weight

- ✔ 78x105x65 (W x L x H)
- ✔ Maximum weight: 110 kg incl. Control PC and trolley

Registration

- ✔ European Union: Medical Device according 93/42/EWG – CE certificate