

***tyromotion***

**AMADEO®**  
HANDREHABILITATION



>  
**REVITALIZE  
HANDS**





# THE AMADEO® SYSTEM

## THE CLEVER THERAPY DEVICE FOR ALL PHASES OF NEUROLOGICAL REHABILITATION

The Amadeo® has been a success as it creates a system for all phases of neurological rehabilitation. Target-oriented exercises on the device help to improve motor functions of patients with restricted movement in individual fingers or in the whole hand. The patient rapidly gains a new quality of

life due to the therapy program customized to his/her individual requirements. The therapist selects from a number of different modules according to the progress made during the therapy and can also choose between completely passive, assistive or active variations.

### MACHINE AND BRAIN ENDLESSLY TALENTED

Due to the patented mechanism of the Amadeo® a natural gripping movement is recreated and impressed on the patient's hand. As simple as this step may seem, the more ingenious are the body's ways of processing it and healing. The brain begins, stimulated by the hand and finger movements, to organize or reorganize motor functions. The intensive training with a high frequency of gripping movements especially encourages this rethinking process.

During the task-oriented training with Amadeo® the demands on the motor functions can be increased continually. The device supports exactly the intensity which is needed for the patient to exercise at their individual limit of performance.

Amadeo® improves both motor functions and finger or hand force and reduces spasticity. In this way the patient is aided in finding back to the greatest possible natural range of movement of their hand. The varied training and the clear feedback evaluations are very motivating for the patient. In close a combination between the therapist and Amadeo® the results of the therapy are improved and the quality of the therapy increases.



*"The Amadeo® is a variable assistant at my side in all phases of treatment. This effective instrument provides an unbelievable range of movement possibilities. This greatly motivates my patients as do the immediate bio-feedback and the measurements of the therapy progress which they find interesting and challenging."*

Monika Fuxjäger, Occupational Therapist

# THE PERFECT TEAM

## THE THERAPIST AND THEIR ASSISTANT THE AMADEO®

Amadeo® is an effective instrument in supporting a patient in rehabilitation. At the same time Amadeo® helps lighten the load of the therapist.



### WORKING WITH AMADEO®

#### 1 ADJUST INDIVIDUALLY

There are just as many different hands as there are people. Amadeo® adjusts to them as far as hand width, hand length and arm length is concerned. The hand-arm supporting surface is positioned by the therapist and supports the weight of the upper and lower arm, as well as that of the hand during the therapy.

#### 2 PASSIVE AND ACTIVE THERAPY

After the finger pads have been attached to the fingertips and the thumb, automated sequences of movements are carried out. Depending on the cause of the neurological damage the patient can undergo either passive or active therapy. The patient's therapist designs a therapy process for each individual.

- a. CPM therapy – the passive hand is stimulated
- b. Active therapy – when finger or hand function begins again, training is adjusted to the individual limit of performance.
- c. Interactive therapy – active training in a virtual environment by carrying out various target-oriented tasks.

#### 3 SPECIALIZED IN HANDS

Amadeo® moves the fingers and the thumb according to a certain pattern. The finger slides can transpose a flexion and extension movement to the fingers and thumb either individually one after the other or all together; each of these movements alternately or any of them at random are also possible. The limit of movement can be set for each individual finger; single fingers can be excluded altogether or limited. In this way the therapist can react optimally to each and every restriction a patient has.

#### 4 MEASURE PROGRESS

Over bio-feedback in real time the patient can follow the movement sequences acoustically and visually. Integrated sensors allow for recording and evaluation of the finger forces which occur. Therapy progress is made measurable and can be explained easily when discussing the effect of the therapy.



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## THE MOST IMPORTANT BENEFITS OF AMADEO® COUNTED ON ONE HAND

1

Constant and ergonomic simulation of the gripping movement

2

Ideal for use in all phases of neurological rehabilitation (passive therapy, assistive therapy, active and interactive therapy)

3

Measurement of the isometric forces and range of movement

4

Integrated bio-feedback in real time

5

Highly adjustable – easy application

