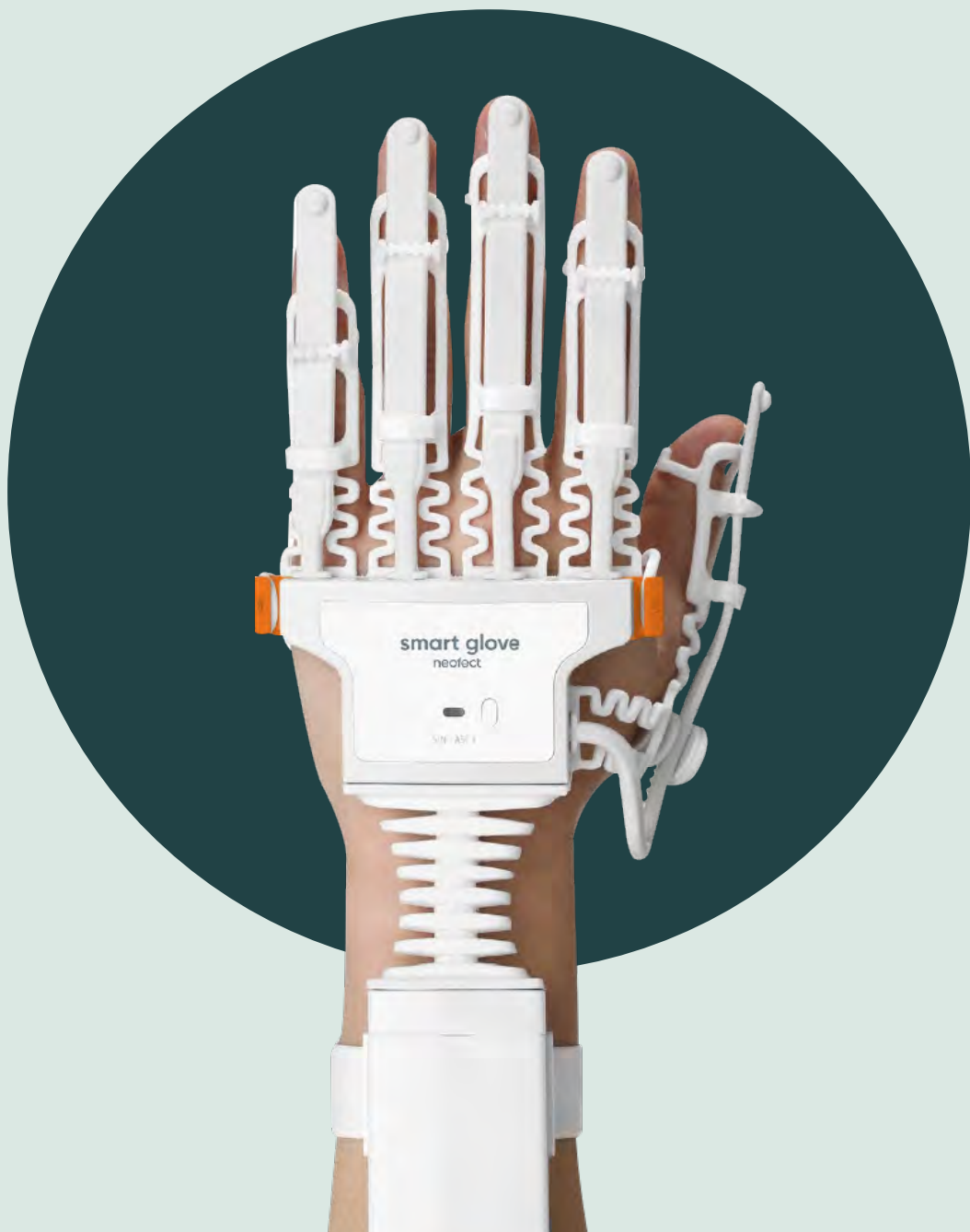


Digital Therapy Solutions



Questions? Please
visit us on:
www.neurotek.com.au



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Hello, we are Neofect!

ABOUT NEOFECT

Neofect is a supplier of digital diagnostic and active treatment therapy solutions for the upper and lower extremities as well as in the cognitive domain.

Our mission is to make therapy for patients more accessible and successful through motivating, playful and measurable hard- and software solutions.

Our portable systems such as the „Smart Glove“ are based on the functional principle of the biofeedback method, in which even the smallest movements of clients are visualized and can be improved through playful exercises within the framework of neuroplasticity.

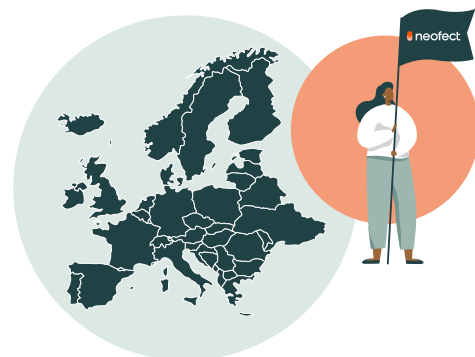
The applicability is in the field of occupational and physiotherapy as well as in the practical environments of clinics, specialized institutions and rehabilitation centers.

Our customers use Neofect solutions for patients suffering from neurological, pediatric, geriatric or orthopedic conditions.



„Our solutions help people to improve their quality of everyday life“.

Soobin Lee
Managing Director



11

YEARS ON THE MARKET

3.023

INSTALLATIONS

50

CLINICAL STUDIES

30

COUNTRIES

Therapy that is fun and motivating

NEOFECT SYSTEMS AT A GLANCE



Smart Board



Smart Glove



Cognition



Smart Kids



Smart Pegboard

OUR SYSTEMS ARE BASED ON THE FOLLOWING PRINCIPLES:

Principle of motor learning

Motor learning describes the learning of movements through practice and experience. The goal is to bring relatively stable neural changes and continuously improving motor movements.

Principle of continuity

Training once does not lead to success. To achieve a training goal, the training must be repeated several times and over a longer period of time. If the loads are missed, the body falls back to the initial level.



Neofect Smart Board

With functional arm reaching, Neofect Smart Board effectively improves the patient's coordinated movement across multiple joints and active range of motion.



Smart Board at a glance:

TARGET GROUP:

Cerebral palsy, Stroke,
Spinal cord injuries, Multiple
sclerosis, Traumatic brain injury
Musculoskeletal diseases,
Bone fractures, Rheumatism,
Tendon and ligament lesion

FEATURES:

Results in Real Time

Measuring of AROM before and during training. Recording of time trained, range of motion and reaction time.

Gamified Exercises

Intensive, repetitive, task-oriented training for motoric learning in accordance of patient's individual level of performance.

Data and Outcomes Tracking

Evaluation of arm, shoulder and elbow movement data. Analyzing and monitoring of patient's training progress.

REHAB PROCESS



ASSESSMENT & EVALUATION

Free exploration, destination arrival, and path drawing are evaluated with three movements, and the patient's condition and movement are analyzed based on data.



TRAINING

Gamified exercises encourage the patient to continually challenge himself / herself assigning tasks on the appropriate level games with the algorithms.



RESULT & REPORT

For each training, the progress is reported with key results like movement speed, range of motion, quality of the movement and the degree of improvement.

GOALS OF TREATMENT

Training of active range of motion and improvement of coordination

SMART BOARD REHAB PROTOCOL

Main Features

- Ergonomic design allows full movement of arm
- Movement task specified on areas of daily living
- Quantitative analysis of the patient's skills and their progress
- Real time biofeedback through infrared sensors
- Customizable learning algorithm

Upper Extremity Movement

- Scapula: Protraction and retraction
- Arm: Extension and flexion
- Arm: Horizontal adduction and abduction
- Arm: Internal and external rotation
- Arm: Circumduction
- Elbow: Extension and flexion



Neofect Smart Glove



The Neofect Smart Glove is a biofeedback Training tool designed to improve range of motion, coordination, and timing.

Smart Glove at a glance:

TARGET GROUP:

Cerebral palsy, Stroke,
Developmental delay,
Multiple sclerosis,
Parkinson's disease,
traumatic brain injury,
Spinal cord injuries,
Guillain-Barre syndrome
Arthritis, Hand injuries

FEATURES:

Real-Time Biofeedback Device

Measuring of AROM before and during training. Recording of time trained, range of motion and reaction time.

Gamified Exercises

Intensive, repetitive, task-oriented training for motoric learning in accordance of patient's individual level of performance.

Data and Outcomes Tracking

Evaluation of finger and wrist movement data. Training progress is monitored including repetitions, ROM coordination and timing.



EVALUATION

The Smart Glove software allows an extensive evaluation of finger and wrist passive and active range of motion. Individual measurements determine the level of training.



GAMIFIED TRAINING

The Patient trains his / her wrist and fingers through ADL games and leisure activities. This encourages the patient to continually challenge himself / herself assigning tasks on the appropriate level games with the algorithms.



RESULT & REPORT

Patient progress is tracked and reports can be created to provide outcomes information for clinician documentation. The results give conclusion about agility, repetitions and the degree of improvement.



Neofect Cognition



The Neofect Cognition allows the user specific and measurable training of cognitive functions through individualised, playful exercises at variably adjustable levels.

Cognition at a glance:

FEATURES:

Audiovisual feedback

Visual and acoustic stimuli support during the training.

Adaptive level control

Difficulty levels that can be adjusted at any time ensure optimal requirements.

Data visualisation

Detailed evaluations provide overview and traceability.

Immediately ready for use

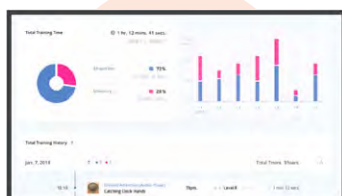
Training starts within a few seconds.

Data export

Export the data by mail, USB or print.

Client management

Each user can be deposited quickly and easily.



More success in cognitive training

Thanks to adaptive level control and statistical display of the results, exercises can be easily planned and successes precisely tracked.



ATTENTION

False Hare

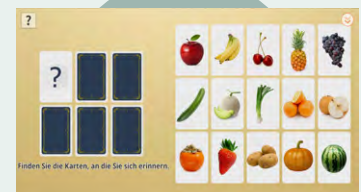
Selective attention
Visual discrimination



EXECUTIVE FUNCTION

Symbols & Numbers

Thinking flexibility
Working memory
Abstraction ability



MEMORY

Remember Cards

Working memory
Visual memory



SPATIAL-VISUAL

Circle Objects

Recognition
Structuring
Reasoning



Neofect Smart Kids



The Neofect Smart Kids is designed for children to train their upper extremity with rehab games. Neofect Smart Kids can help children improve their motor control and promote neuroplasticity with fun, repetitive training.

Smart Kids at a glance:

TARGET GROUP:

Cerebral palsy, Stroke,
Developmental delay,
Multiple sclerosis, Arthritis,
Parkinson's disease,
Traumatic brain injury,
Spinal cord injuries,
Guillain-Barre syndrome,
Hand injuries

FEATURES:

Real-Time Biofeedback Device

Measuring of AROM before and during training. Recording of time trained, range of motion and reaction time.

Gamified Exercises

Intensive, repetitive, task-oriented training for motoric learning in accordance of patient's individual level of performance.

Data and Outcomes Tracking

Evaluation of finger and wrist movement data. Training progress is monitored including repetitions, ROM coordination and timing.



EVALUATION

The Smart Kids software allows an extensive evaluation of handicapped wrist passive and active range of motion. Individual measurements determine the level of training.



GAMIFIED TRAINING

The Patient trains his / her wrist and fingers through ADL games and leisure activities. This encourages the patient to continually challenge himself / herself assigning tasks on the appropriate level games with the algorithms.



RESULT & REPORT

Patient progress is tracked and reports can be created to provide outcomes information for clinician documentation. The results give conclusion about agility, repetitions and the degree of improvement.



Neofect Smart Pegboard

Neofect Smart Pegboard provides visual and auditory feedback to motivate users through gamified training as they rehabilitate.



Smart Pegboard at a glance:

FEATURES:

Digital Training Program

Provides results oriented, digital training for upper limb, visual/ spatial and cognitive abilities.

Optical Feedback

Equipped with high-intensity LEDs. Provides visual cues for placement of pegs.

Acoustical Feedback

Provides a multi-sensory experience through voice and sound effects to prompt the user through training.

Sessions

Create individual training sessions for every user.

Various Levels

Adjust level of training to the individual skills and needs of users.

Modular System

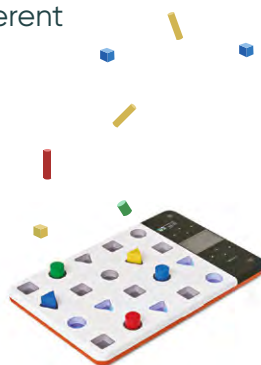
The Smart Pegboard contains 3 different boards for more than 15 exercises.



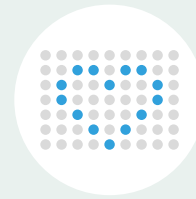
Standard Board



Pinch Board



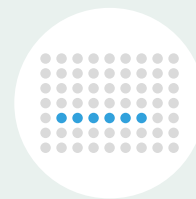
Mixed Shape Board



FUNCTIONAL

Shape completion

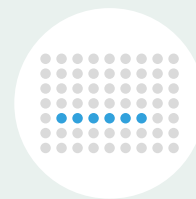
Place pegs to complete the shape.



FUNCTIONAL

Snake trap

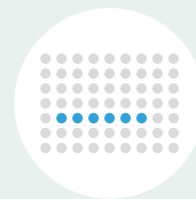
Trap the snake's body with a peg..



COGNITIVE

Pathfinder

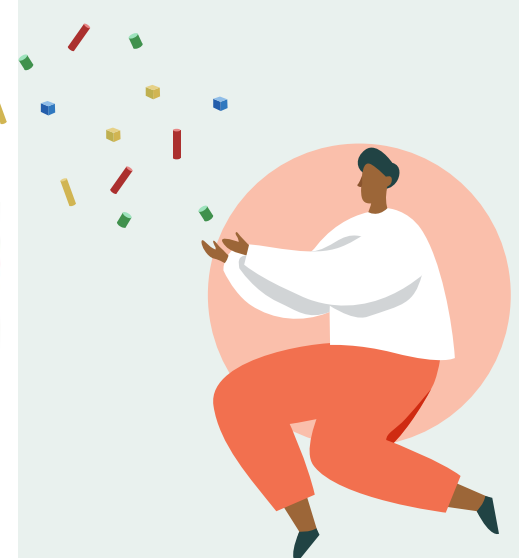
Connect all lights to make a path.



COGNITIVE

Memory placement

Memorize the lit locations and place the pegs correctly.



Neofect Smart Board Open Handle



For all patients with grip restrictions (Severe Spasticity, velcro straps) for fast and easy use of the therapy device and can also be fixed in a proper position

The soft silicone coating can be simply disinfected and adapts well and soft on the forearm.

The forearm can be fixed by two Velcro straps. For stable exercising, the hand can be fixed by an additional hand strap. The palm rest is movable and can also be fixed in the proper position.

FEATURES:



Weight
1,2 Kg



Measures:
350*130*100 mm

Neofect Multifunctional Bag

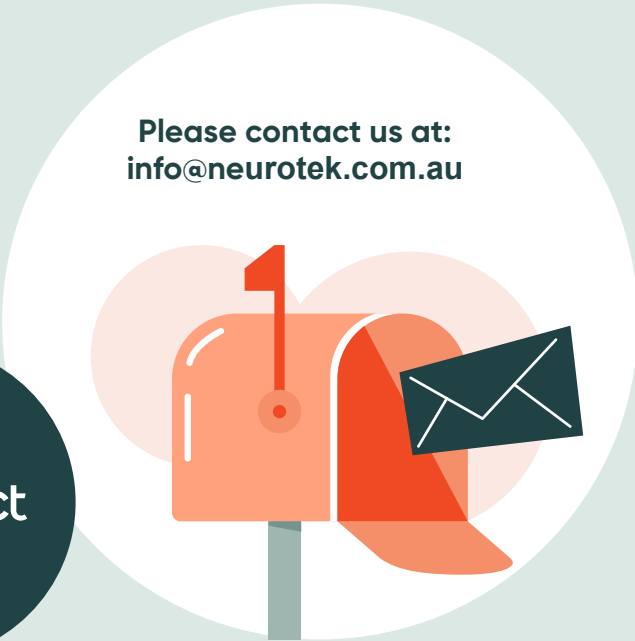


Advantages at a glance

- perfect for storage and transport of the Smart Pegboard
- Large compartments facilitate packing and unpacking
- Everything in its place
- Ideal for mobile use especially for home visits
- Sturdy padding keeps the equipment in place
- Hand loops and a shoulder strap make it comfortable to carry
- Robust material
- Wide zip
- Removable dividers for even more space
- Separate pocket on the outside front for carrying reports, recipes and small items



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