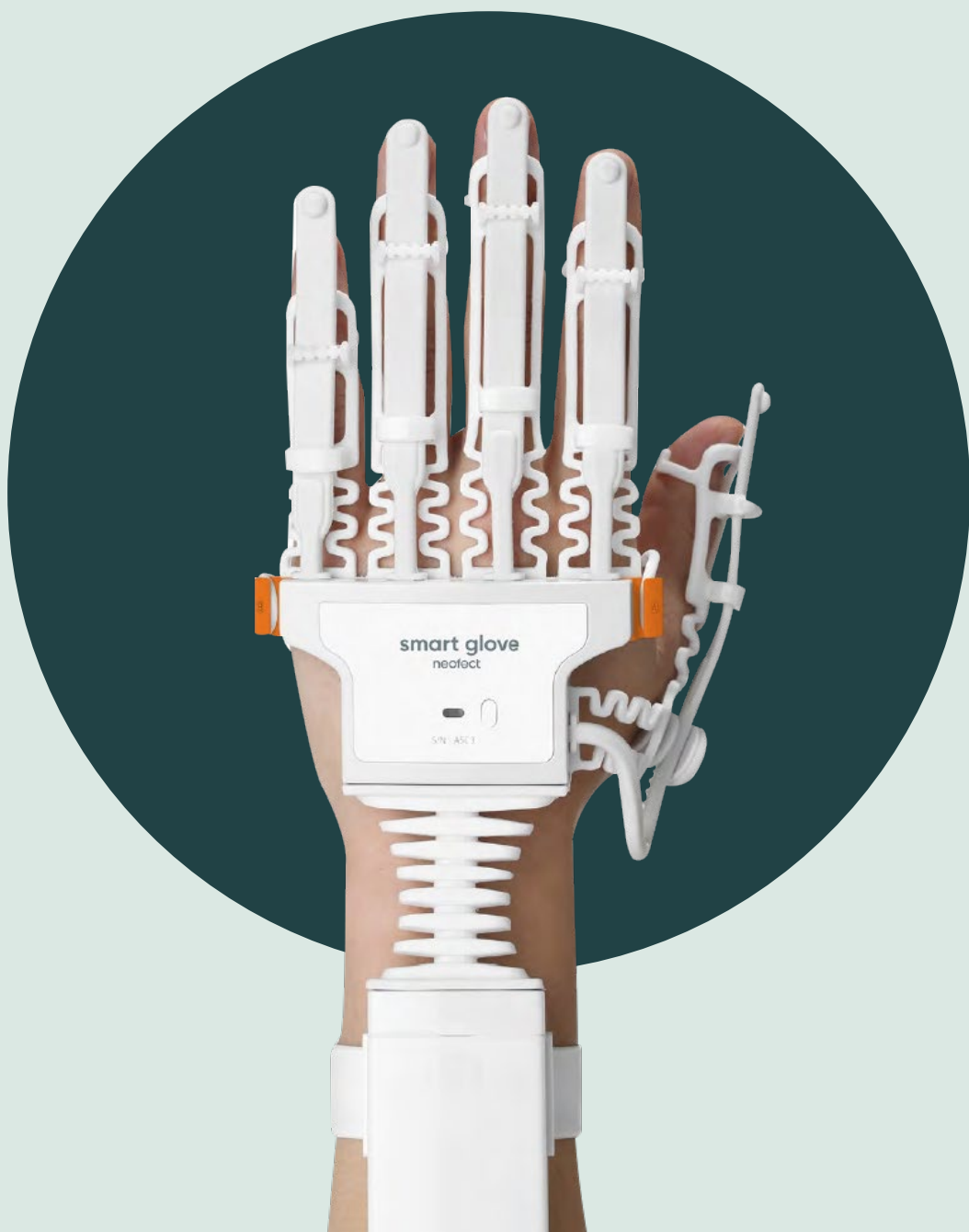


Digital Therapy Solutions





Questions?
Please visit us on:
www.neofect.eu



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Hello, we are Neofect!

ABOUT NEOFECT

Neofect is a vendor 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.

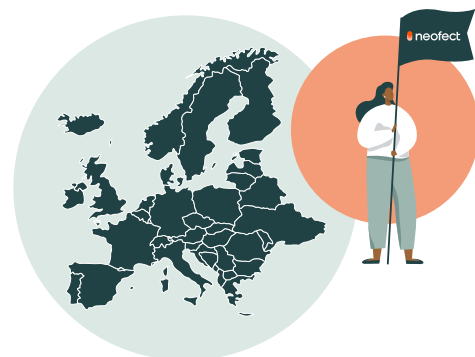
The applicability is in the field of occupational and physiotherapy as well as in the practical environments of clinics, specialized institutions and rehabilitation centers.

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“.

Sebastian Tölg
Head of Sales



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



Tactee Daily Aid



Treax Pads



Smart Balance

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



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Neofect Smart Glove



The Neofect Smart Glove is a biofeedback Training tool designed to improve range of motion, coordination, and timing by a patient in training games, using the patient's hand as a controller.

Smart Glove at a glance:

TARGET GROUP:

Cerebral palsy, Stroke
Developmental delay,
Multiple sclerosis,
Moyamoya disease,
Parkinson's disease,
traumatic brain injury,
Spinal cord injuries,
Guillain-Barre syndrome
Arthritis, Bone fractures,
Tendon and ligament
lesion, Hand patients

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 handicapped 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.



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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,
Moyamoya disease,
Parkinson's disease,
Traumatic brain injury,
Spinal cord injuries,
Guillain-Barre syndrome
Bone fractures, Tendon and
ligament lesion,
Hand patients

FEATURES:

Real-Time Biofeedback Device

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

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

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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

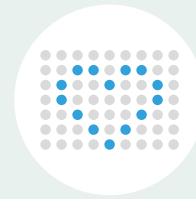


Pinch Board



Mixed Shape Board

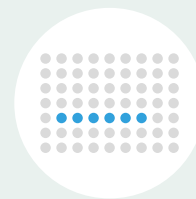
TRAININGSBEISPIELE:



FUNCTIONAL

Shape completion

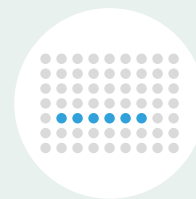
Place pegs to complete the shape.



FUNCTIONAL

Snake trap

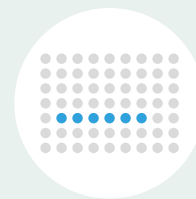
Trap the snake's body with a peg..



COGNITIVE

Pathfinder

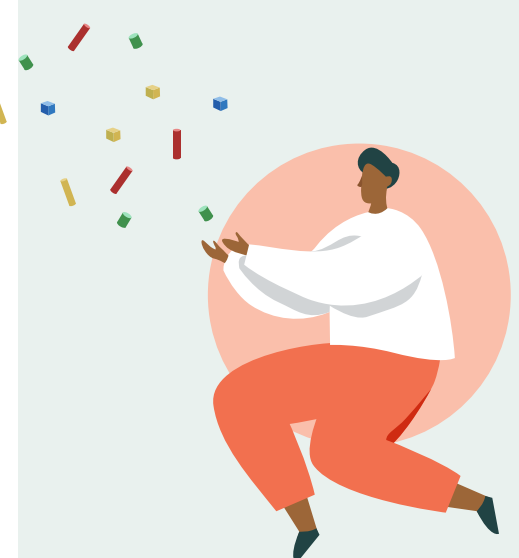
Connect all lights to make a path.



COGNITIVE

Memory placement

Memorize the lit locations and place the pegs correctly.





Neofect Smart Balance



Playful & Measurable training for body control, stability & balance: Smart Balance combines comprehensive diagnostics with playful exercises for the the lower extremities.

Smart Balance at a glance

TARGET GROUPS:

For people with difficulties with their area of balance, standing stability, coordination and posture. Especially with neurological or geriatric balance disorders or otherwise caused failure symptoms.

FEATURES:

- Level access without tipping hazards
- Torso sensor to control the posture
- Flat mat, therefore no manipulation of the stand

SMART BALANCE REHABILITATION

Evaluation

- Romberg test
- Limits of Stability (LOS)
- tatic evaluation in sitting and standing (COP)
- Foot and buttock pressure

Reports

- Detailed reporting for therapists and users
- Evaluation and training reports

Training

- Varied exercises for static and dynamic training
- Modern graphics
- Varied application possibilities
- Live feedback during the exercises

ADVANTAGES



MOBILE

Use Smart Balance in practice and on home visits



EVALUATION

Static and dynamic evaluation options in sitting and standing



TRANSFER

Exercises lead from sitting to standing



TRAINING

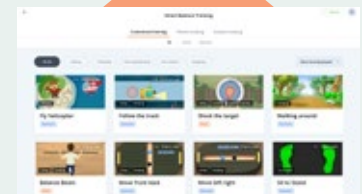
Varied, playful & varied exercises



REAL-TIME FEEDBACK

Precise sensor technology for direct feedback during the training

TRAINING EXAMPLES



TRAINING TARGET

Exercises for fall prevention and general body awareness, promotion of body control, sense of balance and the coordinative action ability



Smart Playground



The Smart Playground is an exercise platform with projector technology for active movement training, taking into account coordinative, reactive and cognitive tasks.

Smart Playground at a glance:

TARGET GROUP:

Active movement training for children and adults as part of occupational therapy and physiotherapy, fitness and rehabilitation centres, schools and much more.

FEATURES:

Simple

- Simple set-up and preparation
- No loss of time
- No additional equipment required
- Independent of location

Intelligent

- 100% digital measurement
- Recording and evaluation
- High user activity

Motivating

- Playful & varied exercises
- Content with increasing difficulty
- Content reacts directly to movement
- Up to 6 users can be mapped simultaneously

Multifaceted

- 23 movement tasks
- 12 cognitive movement contents
- 17 creative movement games

BENEFITS



VALUATION

Simple evaluation and management of performance data



ADJUSTABLE

Individual customisation of the projection surface to every room

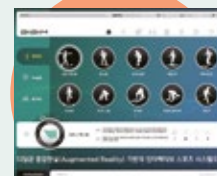


TRAINING PLANS

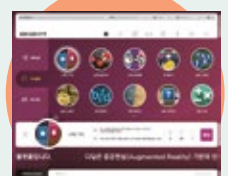
Quick and easy compilation of content



TRAINING EXAMPLES:



FITNESS
TRAINING



COGNITIVE
TRAINING



CIRCUIT
TRAINING



Tactee Daily Aid

Tactee is a magnetic adapter system that provides new opportunities to create a functional grip.



Tactee at a glance

FEATURES:

Quick and easy to use

Easy application and stable hold.

Promotes independence

Flexible application to support your needs.

All components dishwasher safe

The components can be washed with soap and water or in the dishwasher.

Variable application possibilities

Different adapters and accessories allow support and training for daily activities.

Suitable as a training device

Functions of daily activities are improved and trained.

Independent adaptation

Accessories can be changed and adapted.

WHAT IS TACTEE?

A functional grip is essential to be able to manage your daily activities independently. The functional grip can be lost completely or partially, after neurological injuries, stroke, MS, tetraplegia or other disabilities. The result will be a lower quality of life and less independence.

The Tactee system is a set of assistive devices designed to restore autonomy and independence in daily activities of people with mono or bilateral functional grasping deficits.

The system is based on an innovative magnetic coupling solution, between a grasping element worn by the patient and various interchangeable tools.

WHAT DOES A TACTEE SET CONSIST OF?

The system, with 3 different grasping element sizes, includes special cutlery and adapters that make it possible to use them with various common items such as pens, toothbrushes or razors and so on.



TACTEE TOOLS



HAND ADAPTER

The hand adapter can be quickly and easily attached to the hand. It is available in three sizes.



ACCESSORIES

Further magnetic accessories such as a knife, fork and spoon complete the hand adapter.



MULTIFUNCTIONAL ADAPTER

With the help of the multifunctional adapter, everyday objects such as a pen or a toothbrush can be used.

The adapter is available in three sizes. The measurement is taken around the MCP-joints

SIZE	SMALL	MEDIUM	LARGE
cm	19 - 22	21 - 24	23 - 27
inches	7.5 - 8.66	8.30 - 9.40	9 - 10.60



Treax Pads

Treax Pads is an innovative training system that targets rehabilitation after acquired brain injury, physical training for elderly, or development of children's motor and cognitive skills.



Treax Pads at a glance

TARGET GROUPS

Treax Pads were developed for people in rehabilitation after acquired brain injury, elderly who need motor training, and children who need to train coordination.

FEATURES:

Wireless

Uncomplicated and fast for flexible use and variable exercises

Variable arrangement

Place the plates on the table, the floor or on the wall

Visual feedback

Coloured LEDs provide simple visual feedback

Different functions

Variable training programs for coordination, balance, reaction, and force scale

Modular system

Consists of 6, 9 or 12 plates. Any number expandable

Mobile use

For usage in rehab facilities, senior centers, clinics and during home care.



Battery operated



Lightweight



Loadable up to 150 kg

ADVANTAGES

High degree of flexibility

Direct visual feedback

cognitive + motor training

TRAINING EXAMPLES



HAND

- 3D Elbow and Shoulder (ADL)
- Strength (pressure)
- Reaction and attention
- Hand-eye coordination



FOOT

- Balance and equilibrium
- Posture
- Strength and strength endurance
- Static-dynamic changes
- Stability

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

Please contact us at:
info@neofect.eu

