

D-WALL®



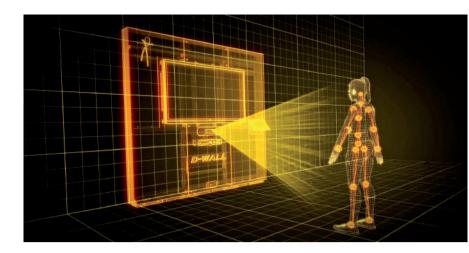
A picture is worth a thousand words



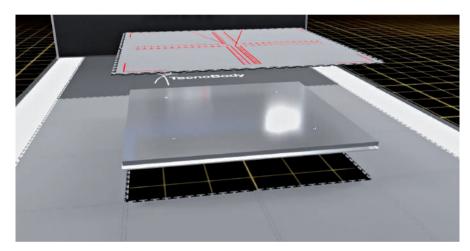


D-WALLThe Technology





The **3D camera** integrated on D-WALL, is one of the hubs of the system. Thanks to **body recognition** and to the **gesture interface**, the athlete and the patient get real-time feedback on every movement performed.



Each movement is managed in an integrated manner, detected by the **force platform** for **recording balance and forces**, which sends the data to the system and allows you to return the final feedback.



The natural and instinctive **learning process** in the mirror is enhanced and incorporated into an integrated development of the **analysis of the gesture** on the monitor.

D-WALLA thousand and more potentials







Coordination, speed, responsiveness and agility are just a few specificities to put into game for **functional strength training**. Thanks to DWALL the **patient or athlete** can easily view in real time accurate and targeted analysis of strength. The combination of weights, barbells, kettlebells, fitballs and medicine balls guarantees a complete functional training and makes D-WALL the most complete system to develop your optimized gym in a little space.

Balance control has always represented research of the perfection of movement and inner harmony. DWALL, thanks to the combination to the **active boards kit and accessories for proprioception**, it is the perfect

tool for make the client work in rehabilitation, health fitness and athletic

training with a focus on perception of one's body in the space.



Thanks to D-WALL you can train the **agility** of your athlete with specific fully customizable modules.

In fact, the operator can configure the exercise by selecting **multiple settings**. Objectives, their size, speed to react to, exposure time and setting determine exercises that can be organized according to different levels, based on the targets you want your client to reach.

Training with the agility and cardio module allows you to **improve coordination** and responsiveness skills, always with real-time feedback.



The specific D-WALL module for **occupational therapy** allows the therapist to focus on assessment and treatment to develop, recover or maintain the activities of daily and working life of people with cognitive, physical or neurological disabilities.

In fact, the therapist can set up **daily life activities** that help the patient to train the ability to perform exercises in contexts that recall **home activities** (kitchen and living settings).



Thanks to D-WALL it is possible to involve children in motor activities useful for **neuro-motor rehabilitation**, but also dedicated to **psychomotor skills** and therefore to develop personal balance at an early age and to harmonize the different areas of development.

With the digital mirror, the trainer can stimulate children to take on a **healthy and dynamic lifestyle**, capturing their attention through functional but at the same time playful and recreational exercises.





In all the **rehab centers** of the world it is possible to find the classic proprioceptive boards, often used for postural control in front of mirrors.

Balance Kit is the new proprioceptive-postural set of TecnoBody equipped with three electronic boards wirelessly connected to the D-Wall digital mirror.

The software of proprioceptive systems counts many application modules for both **assessment and training purposes.**

The technology is simple and immediate but the Software features are those **certified by Technology**.

















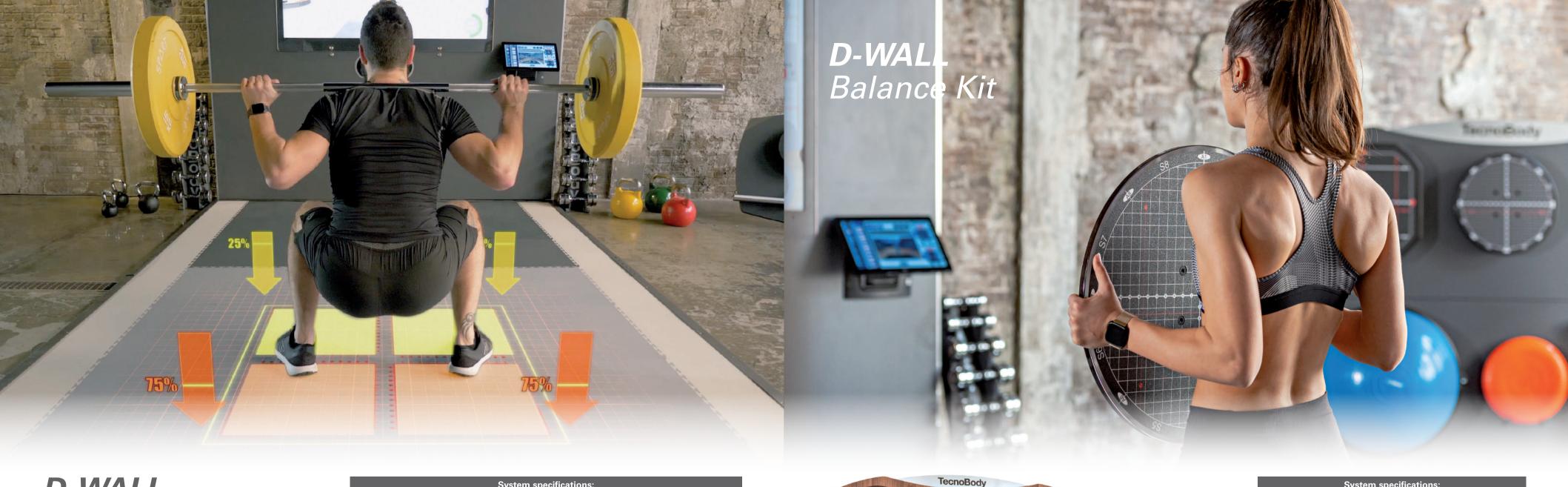








Balance Small Group



D-WALL Stabilometry

INTEGRATED STABILOMETRY

Electronic force platform equipped with 4 load cells for the Postural detection in both static and dynamic modes

System specifications:

- Strength Platform: 1000 x 1000 x 35 mm weight: 100 kg
- Operating surface on the ground: L 2.5 x P 2.0 m.
- Resolution: 150 g • Range: 0-150 kg

- Sampling frequency: 100 HzMaximum load detected 150 kg
- Maximum load applicable 800 kg
 Communication: via RS232 port to D-WALL
- 24 V DC power supply, from D-WALL





- Bipodalic diameter: 520 mm weight: 4.8 kg
 Single-tube diameter: 390 mm weight: 2.8 kg
 Monoaxial 450x450 mm weight: 4.6 kg

System specifications:

- Balance Pad 450x450 mm
- Balance Disk diameter: 320 mm
- Bosu diameter: 530 mm
- Measurement / Resolution:

Bipodalic - Angles +/- 12° (0.1° resolution) Single-cycle - Angles +/- 15° (0.1° resolution)

Monoaxial - Angles +/- 15° (0.1° resolution)

- Sampling frequency: 100 Hz
- Maximum load applicable: 150 kg
- Communication: Bluetooth wireless to D-WALL
- Footboard power supply: 3.7v rechargeable batteries
- Power supply Footpegs: charger on the Carriage Support
- Charger: 5 V DC power supply, from D-WALL

D-WALL Functional strength

In the motor gesture, strength control is one of the most important parameters both in daily activities and in sports, where gesture and loads are exasperated. There are two fundamental parameters for managing strength: **postural control in stressful situations and balancing of loads on the ground**.

These are two parameters that all professionals in the sector, who often find themselves in difficulty about how to explain to their own patients-customers, well know.

This is why it only makes sense to have an exercise in Functional Training in upright station.

That's why there are so many mirrors in gyms around the world...

But now that mirror has become digital.

















Data-sheet / Strength



TB ROCKER kit

Rocker: 5 / 14 kg Weights: 2 x (2,5 - 5 - 10 kg)



TB HANDLEBARS kit

8x2 (1 - 8 kg)



TB Kit KETTLEBELL

3 sizes: 2 - 6 - 10 kg



TB ELASTIC kits

2x4 elastic 120 cm



MEDICAL BALLS Kit PROFESSIONAL

3 sizes: 8 - 10 - 12 kg



TB
MEDICAL BALLS Kit

3 sizes: 1 - 3 - 5 kg





Series: 16 - 24 - 32 kg



TB OLYMPIC WEIGHT Kit

Weights: 2 x (5 - 10 - 15 - 20 - 25 kg)







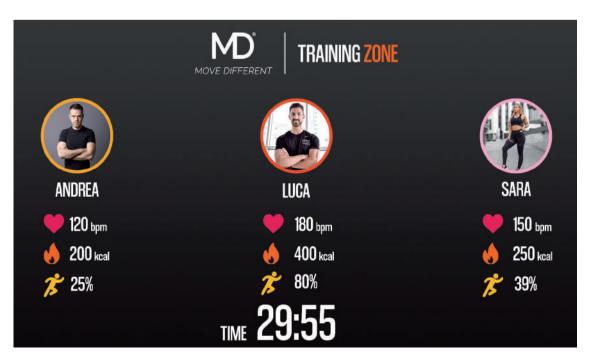




The tests and training carried out with D-WALL can be optimized with the constant **monitoring of the heart rate**, guaranteed by the **Polar Software Package**.

The D-WALL software integrates the feedback on the heart rate of patients and athletes for an always safe and optimized activity, thanks to the association between the **brachial band** and the system.

The association between D-WALL and Polar Software Package guarantees you the highest degree of **precision and safety** in carrying out tests and workouts.





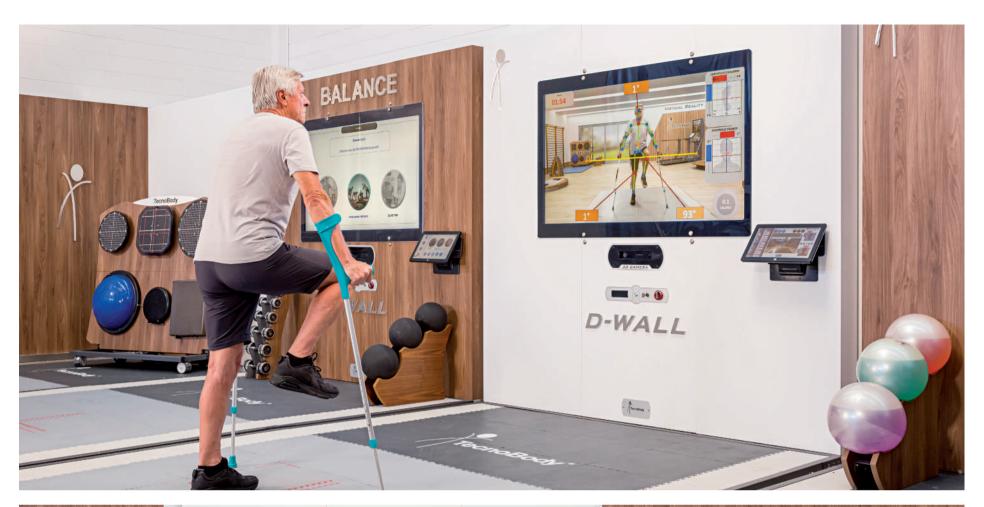




In the Rehab/Occupational Therapy software module, the programs range from **recovery of joint mobility** to **muscle strengthening** of the various post-acute body segments, passing from training for load management and occupational therapy.

The exercises of the **Occupational Therapy module** can be carried out both in an upright position and seated, even with the support of a plan support for the upper limbs.

It is possible to select the use of a single limb or both based on specific patient problems or, for example, in the case of paresis or amputated limbs, as well as setting **19 different programs** with **3 different difficulties**.





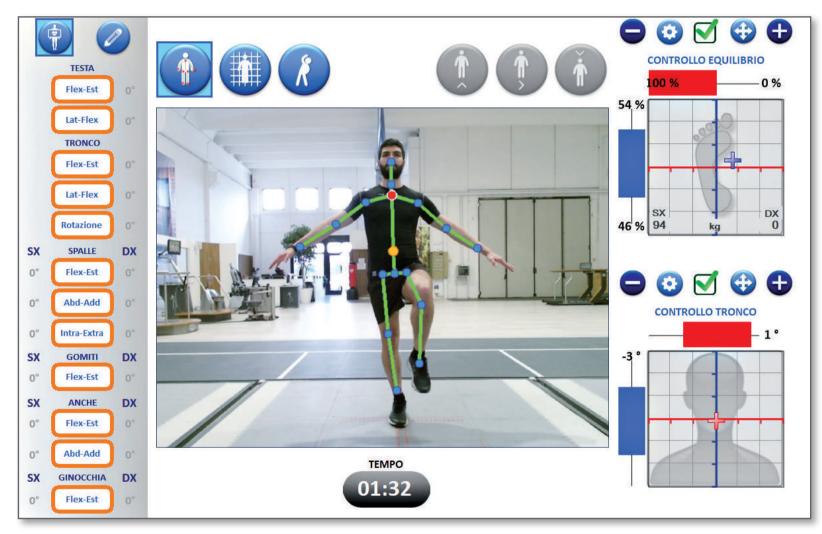


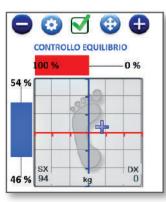


D-WALLSoftware

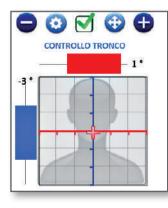
The software interface is designed to be intuitive and functional for both the operator and the user.

A software configuration to give you **flexibility, ease of use and diversification** of content. The tests and the programs contained inside are organized with a configuration divided into **3 families** and by presence of the specific hardware, that is the force platform and the electronic platforms.





A constant feedback on balance control and for load distributed on the foot.

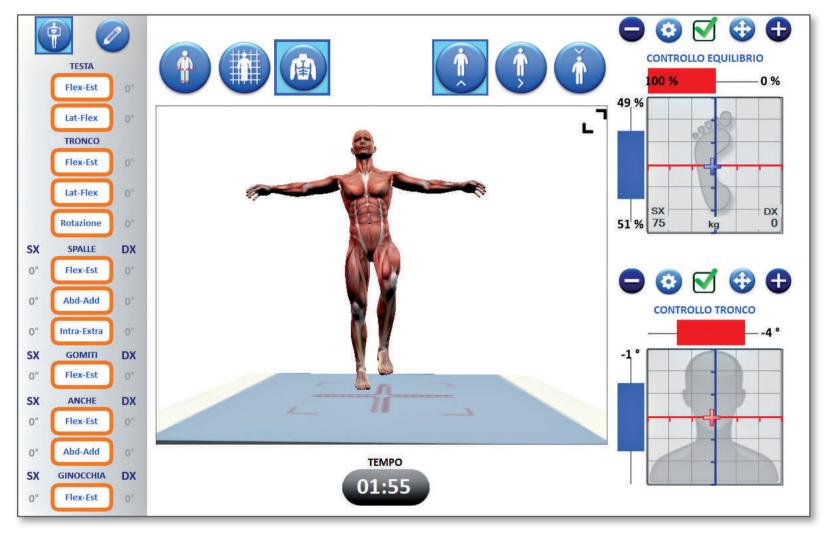


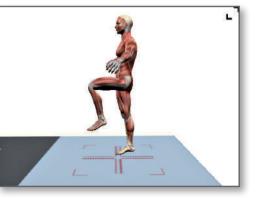
A constant feedback on control of trunk flexion-extension.

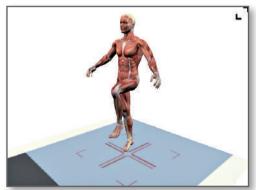


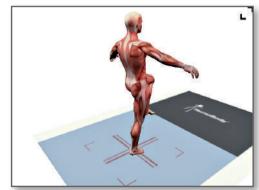
The **65" screen** of D-WALL represents the **digital evolution of the mirror**, always present in every environment dedicated to movement.

The process of **natural learning** and **neuro-motor feedback** is displayed on the screen by the software interface to return an advanced image of the quality of the movement.



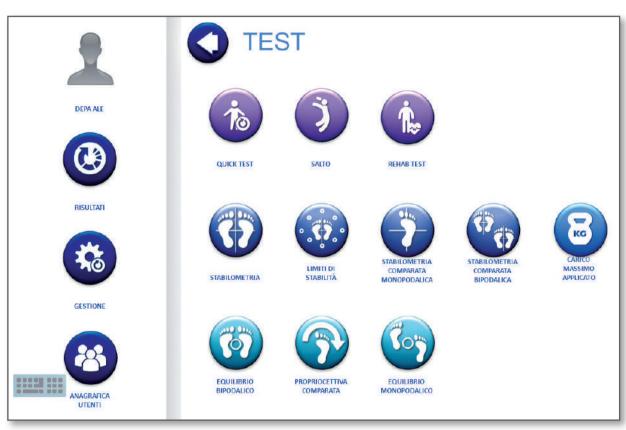












One of the features that give D-WALL the high intrinsic value of its potential is the ability to manage a library of specific tests grouped into **11 families**: Quick Test, Jump Analysis and Health Test, Stability limits, Monopodalic Comparative Stability, Bipodalic Comparative Stability, Maximum Applicable Load, Bipodalic Balance, Comparative Proprioception, Monopodal Balance.

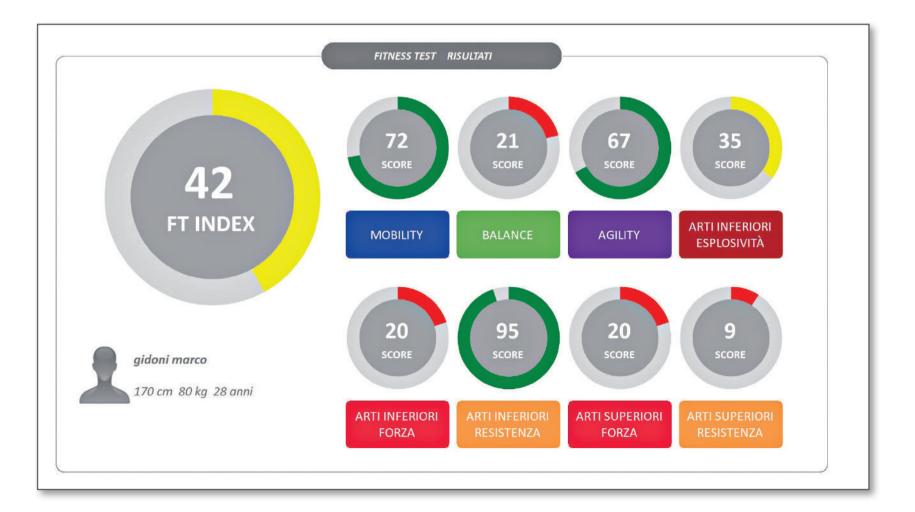
The objective assessment of the athlete's or patient's abilities, the first step towards a correct, quality and safe performance, is made possible precisely by the **interaction between software and system components**.



For the trainer the **Fitness Test** with D-WALL allows to carefully analyze the strengths and weaknesses of customers both in the drafting of specific plans and in the recovery phase from accidents and retraining.

A single analysis allows to check the state of strength, balance, resistance, agility and joint mobility through **five test modules (Overhead Squat, Balance, Push Up, Squat Jump, Agility)** and monitor it checking athletes' progress over time.

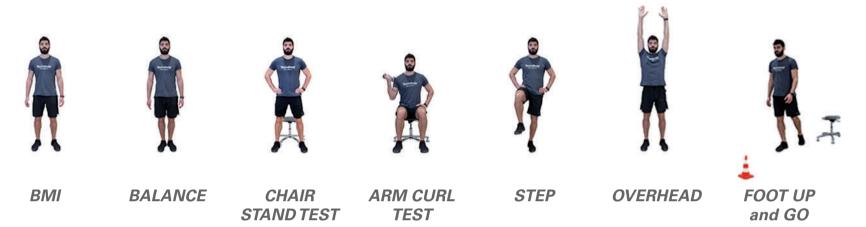




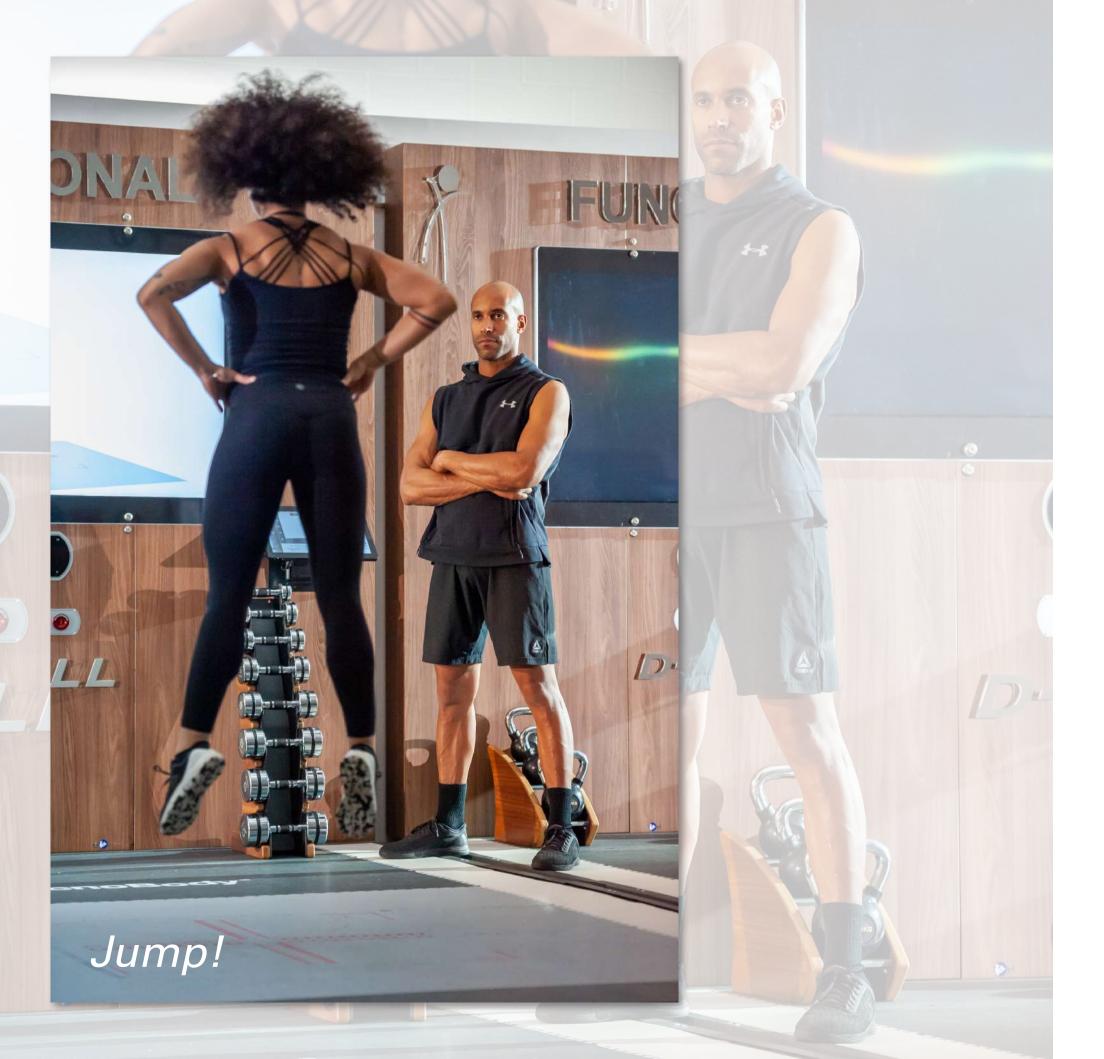


A battery of **7 simple and non-invasive tests** lasting **15 minutes** and able to return an analysis of "Functional Fitness" for **adults and Third Age subjects**.

The **Health test** allows the therapist to assess the state of independence in the movement of the patient and to build specific programs to prevent or treat health decline, falling risk and loss of independence.









Through the **Jump Analysis module** it is possible to analyze in real time all the kinematic and dynamic parameters of the jump.

You can evaluate in specific Squat Jump with and without countermovement, with free arms or not.

Through the powerful software you can perform a detailed post analysis frame by frame. Specifically you can assess the **oscillation of the COP** (center of pressure) and the **anatomical degrees** of the motor gesture.

An objective improvement of your athlete's quality of movement can be achieved only in this way.





Posture/Proprioception TecnoBody







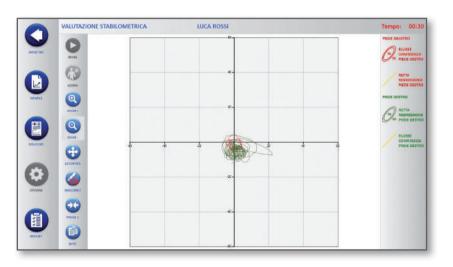


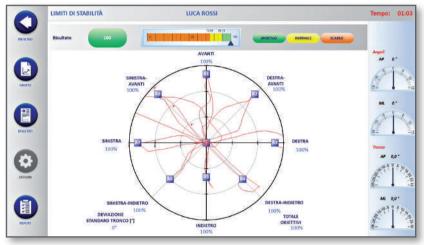


Static assessment

Through the static assessment module the trainer or therapist has the possibility to evaluate the **perception of the space in the static phase**

During the test the displacement of the Center of Pressure (CoP) is evaluated. The various displacements of both the load on the ground and the body to manage the orthostatic balance are thus analyzed. Visual, proprioceptive and vestibular sensory apparatus are put under the magnifying







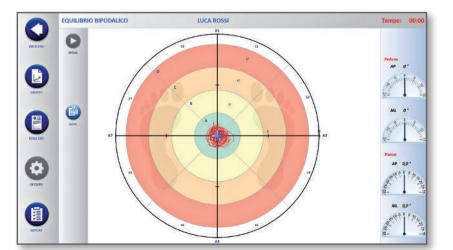


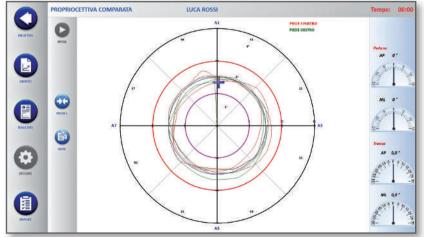


Dynamic assessment

The assessment of balance in conditions of instability on D-Wall examines the displacements of the person compared to perturbations of the proprioceptive board. The user can be tested on D-Wall to verify his abilities of balance management, also controlling the management of his body in space in conditions of instability.

Through **dynamic tests** the trainer or therapist can recommend a specific movement path aimed at improving the client's skills.











The rich library of training programs is organized in **three families**, **Rehab**, **Health and Sport**, and allows the trainer to schedule rehabilitation, maintenance and functional training programs by selecting different categories of exercises that refer to different abilities.

From occupational therapy to strength and agility, moving out of strength, balance to many other skills that can be tested with D-WALL, the training modules are **flexible and functional** both for the operator and for the user.

A Library with hundreds of exercises and programs







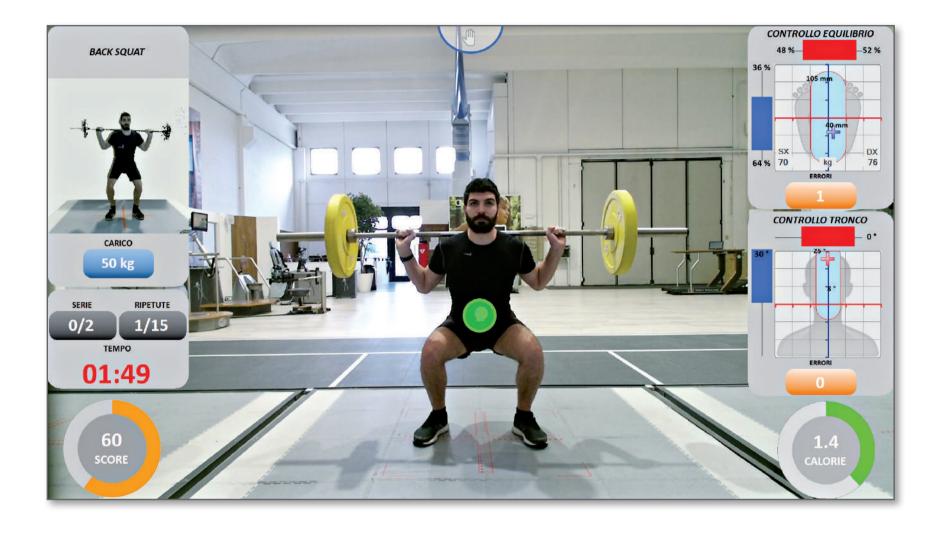


The **versatility of use** of D-WALL is based precisely on the many possibilities and settings that can be selected from the library of exercises and programs.

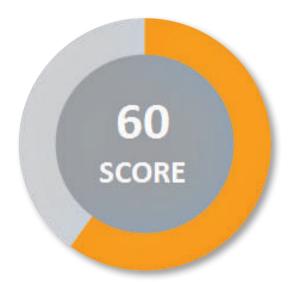
With flexibility and modularity, the trainer can build **customized trainings** on the different needs of the person and change them over time evaluating health status and improvements.

From the choice of the muscular apparatus put into play, to the tools used, every aspect is manageable by **interaction between operator and software.**

Training and Real-time feedback



Training Index Quality



The intrinsic immediacy in the mirror and the functionality of the **integration between software and D-WALL components** returns in real time and constantly a **feedback on the quality** of movement.

This concentration of data is condensed in an accurate and precise analysis which operator and user view and use to **correct the performance** of the exercises.

Every movement is analyzed in **quantity**, but first of all in **quality** and therefore in the correct and best way for each patient or athlete.





Games / Virtual Reality



The games library in the D-WALL software guarantees a **high-value training** which is based on scientific data, without neglecting the playful aspect.

The **immersive settings** of this section are functional to make the patient or the sportsman escape with the mind, but at the same time favor concentration on the **coordination** of movements and on the **objective**.

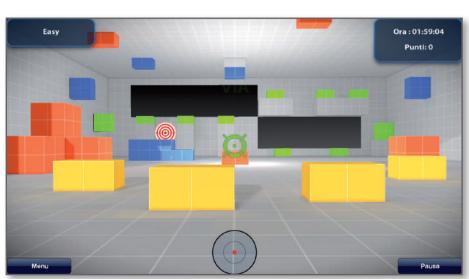
Games

A range of exer games that train balance, proprioception, agility and responsiveness by combining **functionality of the software** to the same of the **force platform** and accessory kits, for a unique and funny training experience.

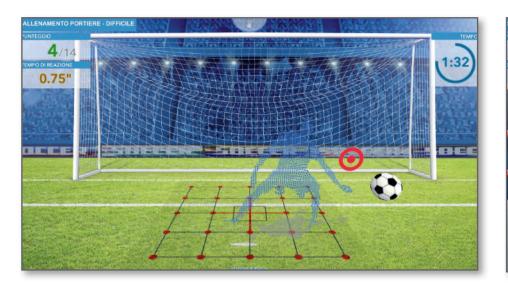


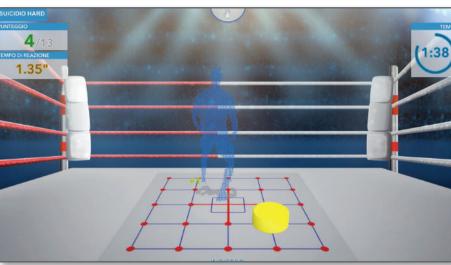






Virtual Reality





Each setting is designed to allow the **immersion** of the training experience and to escape the person from the classic motor re-education or training session with **SKI**, **Shoot**, **Fly and Equilibrium**.



Data-sheet - D-WALL Elite

System specification:

- Dimensions (weights/measures):
- •WALL area: A 2,4 x L 2,5 x P 0,18 mt.
- EARTH area: A 0,30 x L 2,5 x P 3,5 mt.
- OPERATING AREA: A 0.30 x L 2.5 x P 2.0 mt.
- •Total weight: 250 kg
- Video Wall 65" 16:9 FULL HD
- 15" 16:9 HDTouch Screen Monitor
- 3D FULL HD Camera 30 FPS
- Embedded PC CPU: I3-6100U 2.0 GHz:
- HD: 1Tbyte; RAM 4 GByte;
- Wireless keyboard
- S.O. Windows 10 Multilingual
- RFID reader for TecnoBody KEYS

- Contact layer: 5 mm non-slip PVC tiles e anti-slip anti-wear (DIN 51130-2014-02)
- Fire resistance EN ISO 11925-2: 2010
- Cushioning layer: 30 mm rubber tiles
- Resistance EN 13893-3: 2002
- Shore A hardness
- Flammability in accordance with EN1021-1 EN-1021-2
- 230 VAC, 50 Hz power supply
- Absorbed Current 3.5 A
- Absorbed power 800 W
- Conforms to Directive 93/42 / EEC
- Conforms to EN60601-1 III edition



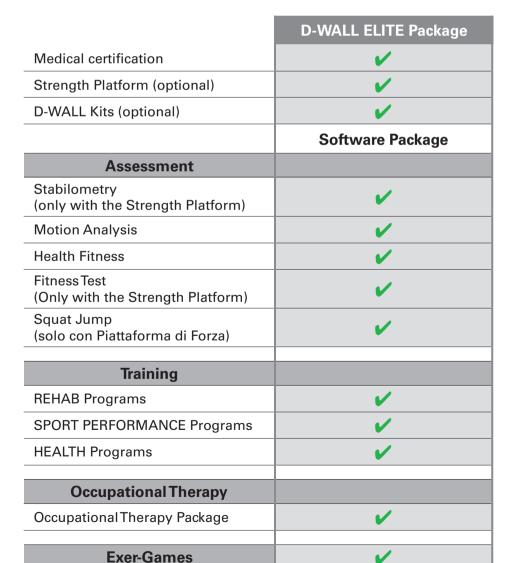








Software packages





Assessment



Training



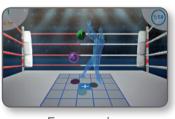
Report



Virtual Reality



Virtual Reality



Exer-gaming



Exer-gaming



3D Anatomical View

Data-sheet - D-WALL H-Sport

System specification:

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- •WALL area: A 2,4 x L 2,5 x P 0,18 mt.
- EARTH area: A 0,30 x L 2,5 x P 3,5 mt.
- OPERATING AREA: A 0.30 x L 2.5 x P 2.0 mt.
- •Total weight: 250 kg
- Video Wall 65" 16:9 FULL HD
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- 3D FULL HD Camera 30 FPS
- Embedded PC CPU: I3-6100U 2.0 GHz:
- HD: 1Tbyte; RAM 4 GByte;

Medical certification

D-WALL Kits (optional)

Stabilometry

Motion Analysis

Health Fitness

Fitness Test

Squat Jump

REHAB Programs

HEALTH Programs

Strength Platform (optional)

Assessment

(only with the Strength Platform)

(Only with the Strength Platform)

Training

SPORT PERFORMANCE Programs

Occupational Therapy

Exer-Games

Occupational Therapy Package

(solo con Piattaforma di Forza)

- Wireless keyboard
- S.O. Windows 10 Multilingual
- RFID reader for TecnoBody KEYS

- Contact layer: 5 mm non-slip PVC tiles e
- anti-slip anti-wear (DIN 51130-2014-02) • Fire resistance EN ISO 11925-2: 2010
- Cushioning layer: 30 mm rubber tiles
- Resistance EN 13893-3: 2002
- Shore A hardness

D-WALL H-SPORT Package

Software Package

1

- Flammability in accordance with EN1021-1 EN-1021-2
- 230 VAC, 50 Hz power supply
- Absorbed Current 3.5 A
- Absorbed power 800 W
- Conforms to Directive 93/42 / EEC
- Conforms to EN60601-1 III edition



Colors



D-WALL Accessories / Optional (Color related to the one purchased)



Sensorized platform



D-WALL ProKin Wireless





Kettlebell Kit



Active Balance Kit



Barbells Kit



Bobath balls Kit



Exercise balls Kit





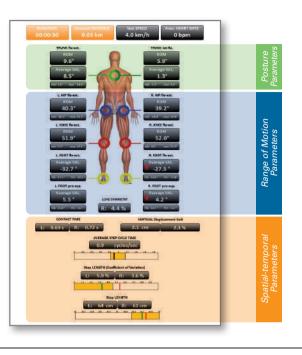
Fluidballs Kit



The 3 modern functional rehab phases 3RD PHASE MEDICAL FITNESS 1ST PHASE ACUTE PHASE REHAB 2ND PHASE FUNCTIONAL AND TECHNOLOGICAL REHAB

The 3 main steps





ASSESSMENT

Assessment in the rehabilitation field is fundamental to define an **objective starting point** of the patient's status. The evaluation by Tecnobody devices is accurate and objective, therefore **always comparable**. The tests that can be performed by the Tecnobody circuit are multiple and objectify muscle tension, proprioception, balance, strength control, gait and run analysis.





2 REHABILITATION

After the assessment and the first phase of rehabilitation it is possible to **program specific training** aimed at the needs of the patient. The training performed with the help of **continuous Bio-Feedback** increases concentration levels required and increase effectiveness of the training itself. The execution of a **more conscious training** improves the motor sense of the patient, making the recovery phase more effective.

Thanks to the flexible **TecnoBody Management System** you can either create exercises or draw from the library proposed by TecnoBody to associate them and customize them for the customer.





RECOVERY

It is possible to create and customize specific **functional recovery exercises** on Tecnobody devices. The technological and instrumental part will help modulate and speed up the healing process, also depending on the specific pathology.

Anatomic



TRUNK-PELVIS



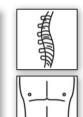












































The Medical Fitness Gym

At TecnoBody we believe that the **Medical Fitness gym** must have its own **strong and recognizable identity,** completely different from a fitness gym.

At the same time, the new Medical Fitness gym according to the **TecnoBody philosophy** within a Rehab center, must have a connotation of exclusivity, a dedicated service that **technology and innovative method** guarantee in an unprecedented way.

In fact, the customer, after the end of the path as a "patient", wishes to enroll in a path of maintenance and well-being and leave the "problem".

The new **Medical Fitness gym** must not have the characteristics of a medical gym, but of a **wellness** area. Light, interiors, layout and every detail must be studied to give a feeling of well-being and serenity.

In this way, the customer will feel safe and secure because he is aware that, if necessary, he will always be able to count on the staff who in the past have helped him to "stand up".

The **Medical Fitness** center therefore becomes an attractive center not only for patients, who need a quality rehabilitation service out of necessity, but also for new users who today are unlikely to enroll in a classic fitness gym.

In this context, the **APA (Adapted Physical Activity)** finds a natural location. Targeted training such as fall prevention, maintenance, soft gymnastics, postural training will be managed naturally and with extreme sensitivity.

Technology allows the operator to quickly and easily build **customized (Adapted) programs** just as required by the new international guidelines.







Health Fitness Solutions





Health Fitness 4.0 is assessment. We live in the information age and the new client wants to know his path of well-being and to know which is the finish line. We must inform and tell our client how he walks, runs, lifts a weight and controls his posture.

We can only improve if we know where we start from.



Health Fitness 4.0 means product innovation. The product has the strength of synthesis because it is real and tangible. And that's how Health Fitness 4.0 for TecnoBody identifies itself in a new generation of innovative products. At a glance, the customer and the end user can easily understand that something has changed. With this spirit we have created Walker View, Functional Line and now D-WALL and transformed the classic mirrors, present in fitness and rehabilitation centers around the world, into digital mirrors capable of evaluating, guiding and "intriguing" the new user.



GENERAL





POSTURAL



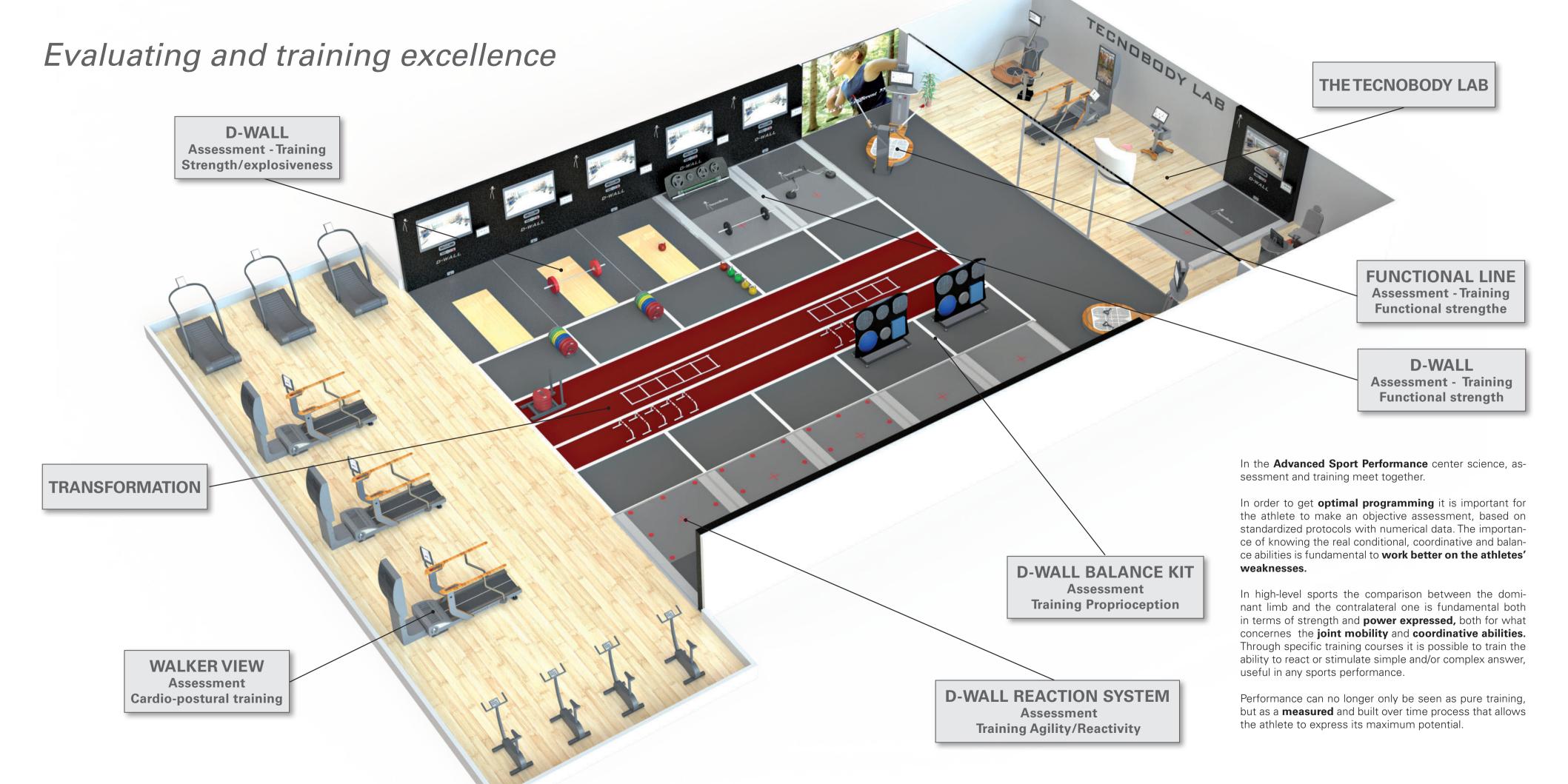


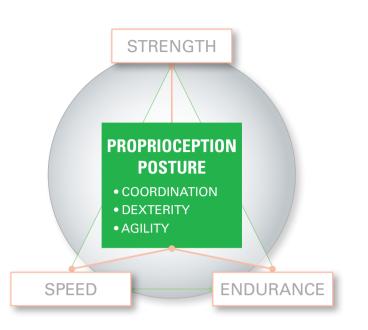
SPORTS



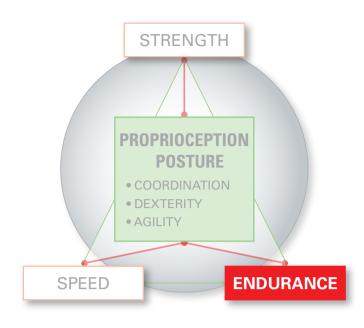




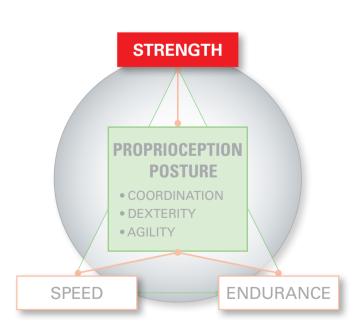




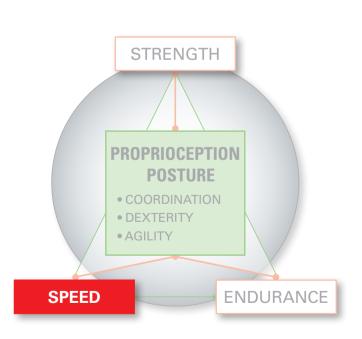














TecnoBody Management System®

Assessment / Training / Rehab













References





























