

# HFS REHALITE

La plateforme à roue d'inertie qui allie polyvalence et rapidité de mise en œuvre pour l'amélioration des performances sportives et la réathlétisation.

REHABASE est la plate-forme à roue d'inertie qui vous permet d'effectuer des exercices contre la résistance générée par l'inertie et l'énergie cinétique d'une roue d'inertie en rotation au lieu de poids. REHABASE est composé d'un arbre rotatif, auquel sont fixés une corde et un volant d'inertie.

Pour commencer l'exercice, il est nécessaire d'enrouler la corde autour de l'arbre rotatif. Ensuite, une action concentrique est effectuée pour dérouler la corde de l'arbre rotatif et faire tourner le volant d'inertie.

Lorsque la corde est complètement déroulée, l'inertie et l'énergie cinétique du volant d'inertie relié à l'arbre induisent l'enroulement de la corde dans la direction opposée et une action excentrique est alors nécessaire pour décélérer la corde et commencer un nouveau cycle d'exercice.

### **AVANTAGES DE L'A FORMATION À ROUE D'INERTIE**

- Les muscles sont environ 30% plus forts lorsqu'ils se contractent de manière excentrique. Si la corde est décélérée en un temps plus court que celui de son accélération, les muscles peuvent être surchargés de manière excentrique pour induire des stimuli d'entraînement plus élevés.
- La résistance du volant d'inertie dépend également de la vitesse de l'exercice; il est donc possible d'adapter la charge à différents angles de travail au cours d'une même répétition en modifiant la vitesse de contraction.
- Capacité de produire des contractions maximales pendant chaque répétition et pas seulement pendant la dernière répétition, contrairement aux poids libres, car la résistance s'adapte à la vitesse qui diminue avec la fatigue.

### **REHABASE AVANTAGES**

- Le changement rapide de résistance intégré.
- Le système de réglage rapide de la corde qui permet de régler la longueur de la corde en fonction de l'amplitude de mouvement de chaque exercice en une seconde seulement et depuis le dessus de la plate-forme.
- Le guidon pour aider à l'équilibre.
- Le design optimisé pour réaliser des exercices au-dessus et en dehors de la plateforme.
- L'axe cylindrique au lieu de conique, qui permet de générer une plus grande surcharge pendant la phase excentrique de l'exercice
- La possibilité de combiner le guide mural pour des exercices à chaîne cinétique ouverte.



"Améliorez la coordination, modulez la résistance pendant chaque rep et surchargez vos muscles de manière excentrique tout en effectuant des mouvements spécifiques au sport".

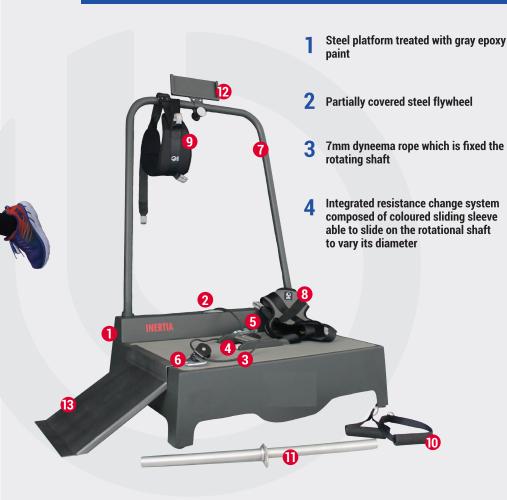


### CHANGER L'A RÉSISTANCE EN UNE SECONDE

Le système breveté de changement de résistance, vous permet de varier jusqu'à 5 résistances à la même vitesse d'exercice, sans changer le volant d'inertie et juste en une seconde.

La roue d'inertie est partiellement couverte et garantit une plus grande sécurité pendant l'utilisation de l'appareil, ce qui le rend idéal pour les environnements où plusieurs personnes s'entraînent en même temps.

# Composition



- 5 Quick rope regulation system that allows you to release and lock the rope by pressing a pedal with the foot
- Accessory attachment kit consisting of a pulley and carabiner
- Support handlebar, which assists balance or helps to modulate concentric/eccentric phase with the help of the hands
- One size harness with a maximum capacity of 400 kg
- 9 One size belt with a maximum capacity of 400 kg
- 10 Handles with 30 mm grip
- Rotating steel handlebar with 30 mm diameter
- Adjustable tablet holder for a 10-11 inches tablet
- 13 Inclined platform to facilitate exercise involving lateral pushing movements against the device

### **FEATURES**

Max user weight
Max size
Platform exercise surface size
Machine weight
Sensor power supply

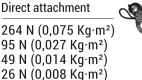
### **VALUES**

160 kg 91 x 74,5 x 125 cm 88 X 50 X 24 cm 64 kg 5V-26°

With the same operating speed, the patented mechanism of LITE allows you to change the resistance instantly by changing the shaft diameter as indicated in the table below.

### Resistance at exercise speed of 0,5 m·s<sup>2</sup> (inerzia equivalent)

Sled colour	Resistance	Diameter
	Shaft without sliding sleeve	25 mm
	Black sliding sleeve	41 mm
	Red sliding sleeve	57 mm
	Grey sliding sleeve	73 mm
	White sliding sleeve	89 mm





with pulley
527 N (0,1575 Kg·m²)
190 N (0,056 Kg·m²)
97 N (0,028 Kg·m²)
59 N (0,017 Kg·m²)

39 N (0,011 Kg·m<sup>2</sup>)



Accessory for directly pulling the rope, suggested for exercises using the guide to the wall.



19 N (0,005 Kg·m<sup>2</sup>)

Pulley to doble resistance, suggested for exercise above the platform

MONITOR
YOUR WORKOUT
WITH APP





LITE App allows you to check in real-time data of your workout, such as force, power and acceleration.

The data is collected through an encoder available as an option, which can be applied directly on the rotating shaft.

# LITE MOMENTUM

The first landmine born as a landmine and not as a barbell



"Optimize set-up time, freedom of movement and exercise monitoring during sport specific movements and Olympic lift variations"

LITE momentum consists of two stainless steel rods, each fixed to a biaxial joint, on which two weights, can be locked in different points, so as to vary the resistance thanks to LITE's patent-pending mechanism.

To exercise with LITE MOMENTUM you just need to move the ergonomic handles inserted in the ends of the steel rods. Like when using traditional landmine, resistance decreases while lifting the rod. This is due to the fact that when the working angle changes, it also changes the intensity of the component of the weight force vector pendicular to the ground.

LITE MOMENTUM is particularly effective to perform strength- and power- based exercises that involve pushing, pulling and rotational movements.

### **LANDMINE TRAINING ADVANTAGES**

- The force applied to win resistance is not perpendicular to the ground.
- You can combine coordinative movements on different directions as the rods move on two axes.
- Explosive movements are performed in greater safety compared to free weights since the rods move along well-defined conferences.

### **LITE MOMENTUM ADVANTAGES**

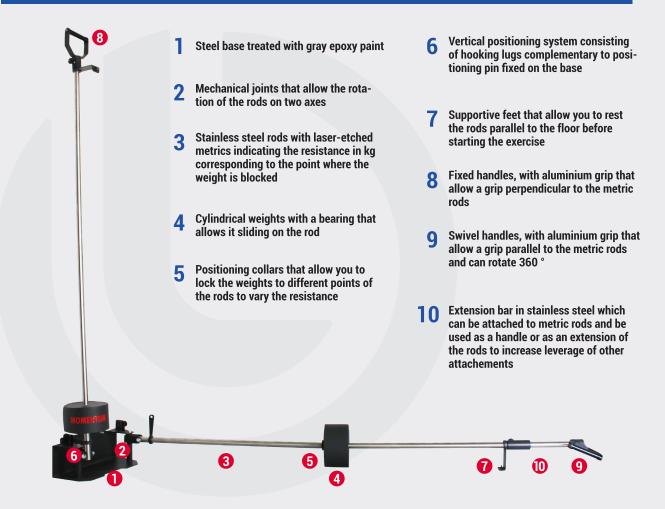
- The two rods allow you to perform unilateral exercises independently between the limbs which better stimulates motor control and coordination of movements.
- Accessories such as handles are optimized to perform the most varied exercises with biomechanically functional handles.
- The integrated accelerometer allows you to measure training data such as working angle, force and acceleration, which is crucial to monitor and plan explosive training programs.
- The hooking system that allows you to save space by storing LITE MOMENTUM upright the wall in less than 30cm space.



### THE TIME IS GOLD

The patent-pending system of LITE MOMENTUM allows the resistance to be varied quickly and millimetrically without removing or adding additional weights, simply by blocking the same weight in different points of the metric rod, with specific references that indicate the equivalent weight in kg.

### **COMPONENTS**



FEATURES		VALUES
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50 x 21 x 19 cm Base size Maximum length in use \* 218 cm Total height in vertical storing position \* 210 cm Machine weight 100 kg Handles grip size 13 x 28 cm Handles height from the ground in horizontal position 14 cm Maximum resistance per rod \* 39 kg 9 kg Minimum resistance per rod \* Sensor power supply 5V-26°

MONITOR
YOUR WORKOUT
WITH LITE APP





LITE App allows you to check in real-time data of your workout, such as force, power, acceleration and angular displacement.

The data is detected through an accelerometer sensor, available as an option, which can be applied directly on the rods.

<sup>\*</sup>measurements without accessories inserted. Accessories can be up to 14cm long

### **LITE AER**

The pneumatic device for high speed movement and sprints



"Move in any direction with a smooth and constant resistance"

### PNEUMATIC DEVICE TRAINING ADVANTAGES

- The air resistance (pneumatic) reduces the inertia during high-speed movements and allows the muscles to stay constantly activated during exercises.
- The resistance remains softer during the entire movement by limiting trauma to the joints.
- The resistance can be adjusted quickly and millimetrically.

### **LITE AER ADVANTAGES**

- The rope can be pulled for up to 28m and the resistance is completely constant and reactive in both direction for all the length of the rope.
- Thanks to the design it can be used for both movements with a short range of motion and sprints or change of direction.
- Easy and quick setup.

LITE AER is the LITE device that allows you to exercise against a resistance produced by compressed air instead of weights.

Specifically, LITE AER includes a pneumatic piston that thanks to the LITE's patent-pending system allows the device to generate a constant and reactive resistance for nearly 30 meters.

Regardless of the exercise you want to perform, thanks to its design and pneumatic resistance, LITE AER allows for a softer and millimetrically adjustable resistance.

Therefore, LITE AER is particularly effective for both the improvement of athletic gestures such as sprints and changes of direction, or for short movements that require high speed of execution.

#### **EASY AND QUICK SETUP**



Adjust the resistance by simply pressing one button.



Change the height of the rope thank to the quick guide, and easily Quickly apply the set the device for any type of exercise.



pulley to double the resistance.

### **COMPONENTS**



- 1 Steel structure treated with gray epoxy paint
- 2 Connector for air compressor
- 3 Buttons for setting resistance
- 4 Mechanical pressure gauge for pressure detection
- 5 Pressure to weight conversion table
- **6** Guide for adjusting the height of the rope
- Pulley that allows moving the rope in all directions
- 8 Accessory attachment system
- 9 One size belt with 400kg maximum loading
- 10 3 mm dynema rope
- 11 Handles with 30 mm grip

FEATURES	VALUES	PRESSURE	RESISTANCE with direct attachment to the rope	RESISTANCE with pulley
Machine height	202 cm	1 bar	2,5 kg	5 kg
Machine weight	80 kg	2 bar	5 kg	10 kg
Maximum base footprint	48 X 37 cm	3 bar	7,5 kg	15 kg
Minimum rope height	88 cm	4 bar	10 kg	20 kg
Maximum rope height	17,6 cm	5 bar	12,5 kg	25 kg
Minimum resistance	2,5 kg	6 bar	15 kg	30 kg
Maximum resistance	40 kg	7 bar	17,5 kg	35 kg
Rope length	28 m	8 bar	20 kg	40 kg



Accessory for direct attachment, the rope can be pulled up to 28m. Ideal for high-speed movements.



Pulley, the rope stretches up to 14m. Ideal for slower strength-based movements.

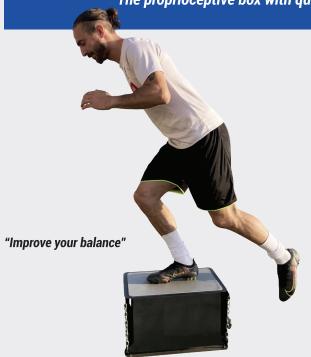
LITE AER requires the use of an air compressor, with recommended pressure up to 8 bar to reach the maximum resistance of 40 kg (with pulley), but once loaded it can also be used outdoors without using electricity.

For use in professional environments we recommend a silent membrane compressor that avoids noise when loading.



### **LITE FLUCTUS**

The proprioceptive box with quick oscillation adjustment system



LITE FLUCTUS is the proprioceptive box with a patent-pending design that allows you to perform monopodalic exercises with situations of instability induced by horizontal oscillations of the surface.

LITE FLUCTUS is particularly effective for improving the motor control of the lower limbs. LITE FLUCTUS consists of two surfaces connected to each other through special chains that allow oscillation of one over the other.

Thanks to the uniqueness of the LITE mechanism, it is possible to adjust the oscillation of the box millimetrically to customize the difficulty of the training according to the person. Furthermore, the more coordinative complex the movements, the greater the oscillation of the platform.

### PROPRIOCEPTIVE TRAINING ADVANTAGES

- Helps reduce center of mass movements during situations requiring monopodal stability.
- It helps to restore altered somatosensory information that negatively affects motor control.

### **LITE FLUCTUS ADVANTAGES**

- The quick and millimetrically adjustable oscillation system, simply by turning the appropriate knob.
- The design that allows complete freedom of movement on each side.
- The portability
- The instability that is independent of the deformation of the surface and requires a rebalancing of the center of mass that is not solely modulable through the ankle joint and strength.

FEATURES	VALUES	
Maximum user weight Maximum dimensions Platform surface Platform weight	120 kg 53 x 28 x 38 cm 53 x 38 cm 15 kg	



- Steel platform treated with gray epoxy paint and coated with non-slip mat
- 2 Knob to adjust the oscillation
- 3 Transport slot
- 4 Oscillating chains

### **INDIVIDUALIZE YOUR TRAINING**

By turning the knob it is possible to adjust the oscillation of the box in an instant.

By unscrewing the knob, the oscillation gradually decreases and vice versa.

## PERFORMANCE BOARD

The all-in-one solution to train wherever and how you want

The PERFORMANCE BOARD is the all-in-one tool of LITE which includes fundamental technologies for functional training and development of sports performance.

Specifically, the PERFORMANCE BOARD consists of a flywheel platform, resting on two sledges which they also allow it to be used as a sled for sprint.

The flywheels have special handles so that they can be used as free weights.

Furthermore, on the platform there are special anchoring points for elastic bands; and there are four holes in which it is possible to apply wheels to convert the platform into a slide board and perform exercises that involve sliding movements.





### PERFORMANCE BOARD ADVANTAGES

- Possibility to train using different technologies
- Easy to store
- Portable
- Quick set-up and that does not require anchoring to walls

### **USED IT WHEREVER YOU WANT**



The portability of the PERFORMANCE BOARD makes it ideal for those who love to train outdoors or for those who needs to perform workouts in different environments.

### **APPLICATIONS**

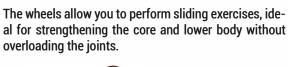


Flywheel training allows you to generate resistance by accelerating and decelerating a flywheel through the pull of a rope. This modern methodology is extremely effective for developing strength during sport-specific movements, in particular when they require eccentric overloads.

The grips on the flywheels allow you to use the latter also as free weights, so as to being able to perform a full body workout and improve motor control and coordination during complex movements.



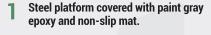
The anchor points allow you to fix specific elastic bands on the platform and train both limbs, in particular by performing explosive exercises that enhance the performance of high-speed movements during sports.





The special sleds allow you to perform exercises to develop power and speed during key athletic gestures that require application of horizontal forces such as sprints and side runs.

### **COMPONENTS**



- 2 Plastic sleds.
- 3 Quick couplings for wheels.
- 4 Anchors point for elastic bands.
- 5 Carabiners for sled use.

- 6 Flywheels with handle slots to be used as free weights.
- 7 Rope for sled use.
- 8 Belt for sled sprint and flywheel exercises with maximum capacity of 400 kg.
- Quick-release wheels for conversion to slide board.
- Quick flywheel rope adjustment system.



### **FEATURES**

Max. overall dimensions without disc Platform height Exercise surface Maximum user weight Harness

#### **VALUES**

40,5 x 75,5 x 19 cm 14 cm 55 x 36 cm 120 kg One size

- Pulley and carabiner to attach accessories for flywheel use.
- 12 Set of elastic bands.
- 13 Exercise handles.
- 14 Locking knob for flywheels.
- 15 Accessory bag.

### **FLYWHEELS**



Red flywheels: resistance to 0,5 m·s² = 94N; equivalent inertia =0,02925 Kg·m²

Black flywheels\*: resistance to 0,5 m·s<sup>2</sup> =187N; equivalent inertia = 0,0585  $Kg \cdot m^2$ 

### **FREE WEIGHTS**



flywheels: 30 cm diameter, thickness 0.5 cm, weight 2.6 kg

flywheels: 30 cm diameter thickness 1 cm, weight 5.2 kg

### **ELASTIC BANDS**



Yellow band = 4,5 kg Green band = 9 kg Red band = 13,5 kg Blue band = 18 kg Black band = 22,5 kg

### WHEELS



Quick connection, diameter 12.5 cm

#### SLITTA



Weight without discs \*\* = 15 kg

- \* it is possible to add up to two black flywheels and one red flywheel;
- \*\* Under the platform there is a specific pocket in which to insert the flwyheels to increase sled resistance.