



STREXBOX™

THE FLYWHEEL EXPERTS™

PRODUCT CATALOG Q3 + Q4 2020

WHAT

Flywheel training with eccentric overload is scientifically proven to provide

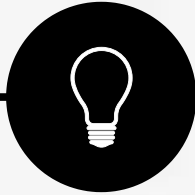
- I faster sprinting speeds | *
- II higher jumps | *
- III less injuries | *
- IV muscle growth and muscle strength | *

* | Studies in detail see page 20-25

HOW

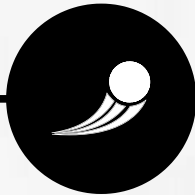
STREXBOX inventions since 2016:

2016 ●



Mission: make flywheel training affordable + be flywheel innovations leader

2017 ●



HORIZONTAL FLYWHEEL for large movement area + safety + easy to store

2019 ●

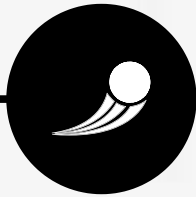


STREXBOX TOWER: the Heavy-duty-Tower in the flywheel market



HOW

2019 ●



STREXBOX Slide: new training stimulus for abductors and adductors



2020 ●



STREXBOX POWERMETER = Live force-time-chart for in depth analysis of the eccentric and concentric phase and give guidance your athlete.



WHY

I

STREXBOX = the Flywheel Experts: own testing facilities, experienced flywheel builders since 2017, constant R&D and innovation, highest quality product made in Austria

II

STREXBOX Academy with 30+ flywheel WORKOUT manual videos free of charge

III

Best value for money.

IV

Largest product range: Boxes, Towers, Slides, Powermeter, Accessories

V

Trusted by 100+ pro sport clubs and physical therapists

PRODUCTS

HOME • TRAVEL • STUDIO • POWERMETER • TOWER • SLIDE



EUR/USD on
www.strexbox.com
www.strexboxusa.com

STREXBOX COMPARISON



	I	II	III
	STREXBOX Home	STREXBOX Travel	STREXBOX Studio
Body	Metal/Wood	Full Metal	Full Metall
Shaft	Single-Bearing Shaft	Reinforced Double-Bearing Shaft	Reinforced Double-Bearing Shaft
Size	Small Box 60 x 40 x 10 cm/ 23,5 x 15,5 x 4"	Small Box 60 x 40 x 10 cm/ 23,5 x 15,5 x 4"	Large Box 90 x 55 x 10 cm/ 35 x 21,5 x 4"
Copatible Inertia Plates Sizes	S, L 1-3 pcs	S, L, XL 1-3 pcs	S, L, XL 1-3 pcs
Pullbelt	double-layered pullbelt	triple-layered pullbelt	triple-layered pullbelt
Recommended for	Home use	Travel, Physical Therapy	Studio Use, Pro Sports

STREXBOX POWERMETER

LIVE FORCE-TIME-CHART FORCE SENSOR



Only a live force-time-chart provides in depth analysis of the eccentric and concentric phase and live guidance of your athlete.



Easily attached to the STREXBOX pullbelt



Fits all STREXBOX Boxes and STREXBOX Towers



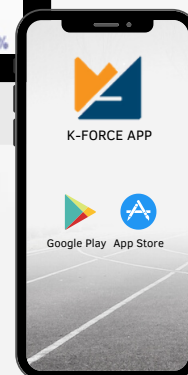
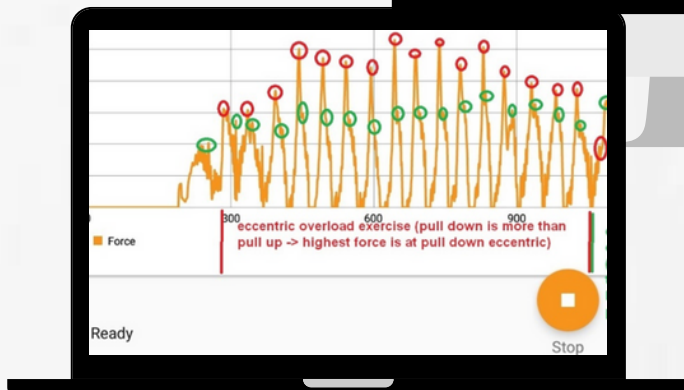
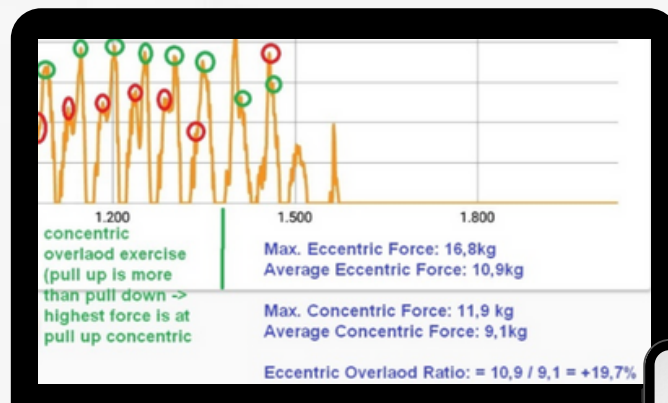
max. 300 kg/660 lbs



Free app for iPhone & iPad, Android phones & tablet



Ready to use – arrives fully assembled, simple user-friendly interface, device is already pre-calibrated ex works and ready for immediate use.



STREXBOX HOME



small & easy to store
60 x 40 x 10 cm/
23,5 x 15,5 x 4"



for occasional users



compatible with 1-3 pcs
inertia plate S & L



All you need to start your squat training. If you want to also perform upper body exercises, please check out the STREXBOX Home Basic Set which comes with extension belts for upper body training and bar short.

	STREXBOX Home	STREXBOX Home Basic Set	STREXBOX Home Basic Set + Powermeter
Inertia Plate Large	✓ 1 x	✓ 2 x	✓ 2 x
Hip Belt	✓	✓	✓
Extension Belts for upper body exercises (up to 220 cm/7 feet height)	x	✓	✓
Bar Short 50 cm/ 20"	x	✓	✓
POWERMETER force sensor	x	x	✓



**GET THE MOST OUT
OF YOUR TRAINING.**

STREXBOX TRAVEL



small & portable
60 x 40 x 10 cm/
23,5 x 15,5 x 4"



for professional travel



compatible with 1-3 pcs
inertia plate S, L & XL



Full metal body (base body only 8,8 kg/19 lbs heavy) and portable size 60 x 40 x 10 cm/23,5 x 15,5 x 4" makes it the best choice for traveling sport teams and mobile physical therapists. Best price model that also fits our revolutionary Inertia X-Large!

	STREXBOX Travel	STREXBOX Travel Basic Set	STREXBOX Travel Basic Set + Powermeter
Inertia Plate XL	✓ 1 x	✓ 1 x	✓ 1 x
Inertia Plate L	x	✓ 1 x	✓ 1 x
Hip Belt	✓	✓	✓
Extension Belts for upper body exercises (up to 220 cm/7 feet height)	x	✓	✓
Bar Short 50 cm/20"	x	✓	✓
Squat Harness	x	✓	✓
POWERMETER force sensor	x	x	✓

STREXBOX EXPERIENCE EVERYWHERE.

STREXBOX Travel



WARNING: Remove inserts please and check condition of pull belt before each use! Replace pull belt immediately if any deformation or crack is visible, take a closer look especially near the shirt/insert plate mounting!

STREXBOX™

STREXBOX STUDIO



large standing area
90 x 55 x 10 cm/
35 x 21,5 x 4"



with reinforced double-bearing
shaft for professional users



compatible with 1-3 pcs
inertia plate S, L & XL



Offer your customers the eccentric overload benefits and lift your customers training results and satisfaction to a new level! The most comfortable (biggest standing area), durable and minimum-maintenance solution, for your studio.

	STREXBOX Studio	STREXBOX Studio Full Set	STREXBOX Studio Full Set + Powermeter
Inertia Plate XL	✓ 1 x	✓ 1 x	✓ 1 x
Inertia Plate Large	✓ 1 x	✓ 1 x	✓ 1 x
Inertia Plate Small	x	✓ 1 x	✓ 1 x
Hip Belt	✓	✓	✓
Extension Belts for upper body exercises (up to 220 cm/ 7 feet height)	✓	✓	✓
Bar Short 50 cm/20"	✓	✓	✓
Curl Bar 70 cm/28"	x	✓	✓
Harness	x	✓	✓
Ankle Cuff	x	✓	✓
One Arm Handle	x	✓	✓
Foam Grips	x	✓	✓
Rope Grip	x	✓	✓
POWERMETER force sensor	x	x	✓



STREXBOX

**THE POWER OF
ECCENTRIC TRAINING**

STREXBOX TOWER



chest exercises and core exercises



The heavy-duty-tower in the flywheel market

Can be mounted on the wall or on the floor in the center of your room, mounting tools are included. Height adjustable from 20-180 cm/ 8-70" in 17 steps (each 10 cm/4"), total height of Tower is 195 cm/77". If you are looking for an allround talent who can do it all, the STREXBOX Tower is your best training buddy.



Inertia Plate Large

✓ 1 x

✓ 2 x

✓ 2 x

Inertia Plate Small

x

✓ 1 x

✓ 1 x

Floor mounting platform

✓

✓

✓

Wall mounting brackets

✓

✓

✓

Heavy-duty-anchors and 2 x Open-end-wrench tools

✓

✓

✓

Ankle Cuff

x

✓ 2 x

✓ 2 x

Rope Grip

x

✓

✓

One Arm Handle

x

✓

✓

Foam Grips

x

✓

✓

Core Sling

x

✓

✓

POWERMETER force sensor

x

x

✓





HEAVY-DUTY- TOWER

STREXBOX SLIDE

- ✓ new training stimulus for abductors and adductors
- ✓ sliding squats, sliding lunges, sliding core exercises and sliding push-ups!
- ✓ stainless steel gliding rail

The effective way for professionals to train eccentric overload with sliding squats, sliding lunges, sliding core exercises and sliding push-ups! If you are looking for something new which gives you a new training stimulus, the STREXBOX Slide should be your choice.



	STREXBOX Slide	STREXBOX Slide + Pads
Inertia Plate Large	✓ 1 x	✓ 2 x
Inertia Plate Small	x	✓ 1 x
Foam Pads for soft surface	x	✓



FULL BODY WORKOUT

ACCESSORIES

Rope Grip



Inertia Plate
S 24 kg/50 lbs
L 60 kg/130 lbs
XL 120 kg/260 lbs



Powermeter



Foam Grips



D Handle



Bar Short



Curl Bar



Ankle Cuff



ACCESSORIES

ACCESSORIES FOR BOXES ONLY

Hip Belt



Squat Harness



Heel-Up & Lateral Squat Block



ACCESSORIES FOR TOWER ONLY

Core Sling



Rowing Handle



STUDIES

SCIENTIFIC EVIDENCE IN MORE DETAIL

PRO SPORTS

Your interests:
faster sprinting
speeds,
higher jumps,
less injuries

Study: Effects of adding a weekly eccentric-overload training session on strength & athletic performance in team-handball players

In the study a weekly eccentric overload session were added to the regular training schedule of a handball team for 7 weeks. The eccentric overload group (11 people) added 1 session per week with 4 sets of 8 repetitions with bilateral half-squat and unilateral lunge exercises compared to the control group (7 people). The eccentric overload group showed an increase in triple hop distance performance. Additionally the eccentric overload group showed higher improvements in eccentric and concentric power of the half-squat (increases between +6.5% and +22%) and lunge exercises (increases between +13.1% and +24.9%).

In summary, important pro-sports related performances like functional jumping performance, power output can be improved with eccentric overload training. Already 1 additional eccentric overload session per week can result in optimizing the professional athlete's performances and can win key plays and key games for your team.

Sabido R, Hernández-Davó JL, Botella J, Navarro A, Tous-Fajardo J. Effects of adding a weekly eccentric-overload training session on strength and athletic performance in team-handball players. Eur J Sport Sci. 2017 Jun;17(5):530-538.

Study: Effects of a 10-week in-season eccentric-overload training program on muscle-injury prevention & performance in junior elite soccer players

One group conducted an additional eccentric overload training program with 1 or 2 sessions/week with 3-6 sets with 6 repetitions for 10 weeks while the other group followed the traditional trainings plan. The eccentric overload training group had a lower injuries per 1000 hour match play and lower numbers of absence days per injury. The eccentric overload training group had better 10m flying sprint time and 20m sprint times. Countermovement jumps performance increased too in the eccentric overload training group.

Overall a full point win for eccentric overload training for muscle injury prevention as well as for increasing linear sprinting speed and jumping performance of junior elite soccer players.

De Hoyo M, Pozzo M, Sañudo B, Carrasco L, Gonzalo-Skok O, Domínguez-Cobo S, Morán-Camacho E. Effects of a 10-week in-season eccentric-overload training program on muscle-injury prevention and performance in junior elite soccer players. Int J Sports Physiol Perform. 2015 Jan;10(1):46-52.36 young players (U-17 to U-19) divided into 2 groups.

Study: Hamstring injury occurrence in elite soccer players after preseason strength training with eccentric overload

Another study focusing on elite soccer players with a preseason eccentric overload strength program for the hamstring muscle group. 30 players from two premier-league division teams in Sweden were divided into 2 groups. Group 1 added a preseason eccentric overload strength program 1-2 times a week for 10 weeks while group 2 did not do eccentric overload exercises. All hamstring injuries were registered during 10 months. The eccentric overload training group 1 had 3 hamstring injuries within 10 months, while the group 2 with traditional training had 10 hamstring injuries (+333%). It is truly astonishing that eccentric overload plays such a vital role in preseason training for hamstring injury prevention.

The results showed that the occurrence of hamstring strain injuries was clearly lower in the training group (3/15) than in the control group (10/15). In addition, there were significant increases in strength and speed in the training group. Eccentric overload training proves again its capabilities for injury prevention and sprint speed increases at already trained professional athletes.

Askling C, Karlsson J, Thorstensson A. Hamstring injury occurrence in elite soccer players after preseason strength training with eccentric overload. Scand J Med Sci Sports. 2003 Aug;13(4):244-50.

More studies at
strexbox.com/studies/pro-sports/

Study: Eccentric training for the treatment of tendinopathies

This study shows effectiveness of eccentric exercise can have on the Treatment of tendinopathies Subsequent studies have shown the benefits of eccentric exercise on patellar tendon, rotator cuff and proximal lateral elbow.

Murtaugh B, Ihm JM. Eccentric training for the treatment of tendinopathies. *Curr Sports Med Rep.* 2013 May-Jun;12(3):175-82.

Study: Effects of In-Season Inertial Resistance Training with Eccentric Overload in a Sports Population at Risk for Patellar Tendinopathy

Volleyball and basketball players are a risk group for patellar tendinopathy. 38 woman and 43 men of 8 different basketball and volleyball teams were divided into 2 groups. One group performed 1 weekly eccentric overload training session for 24 weeks in addition to their current training schedule, while the other group just follow their current training schedule. The weekly eccentric overload session consisted of 4 sets of 8 repetitions squats. The results show that the countermovement jumps and lower limb muscle power were both significantly better with the additional eccentric overload training.

Additionally eccentric overload training does not trigger any patellar tendon complaints, which makes it a safe and vital tool for professional athletes.

Gual G, Fort-Vanmeerhaeghe A, Romero-Rodríguez D, Tesch PA. Effects of In-Season Inertial Resistance Training With Eccentric Overload in a Sports Population at Risk for Patellar Tendinopathy. *J Strength Cond Res.* 2016 Jul;30(7):1834-42.

Study: Inertial flywheel resistance training and muscle oxygen saturation

The results of this study show that the eccentric training with a flywheel led to a greater decrease in muscle oxygen saturation and a longer reoxygenation than traditional barbell squat training.

Timón R, Ponce-González JG, González-Montesinos JL, Olcina G, Pérez-Pérez A, Castro-Piñero J. Inertial flywheel resistance training and muscle oxygen saturation. J Sports Med Phys Fitness. 2017 Jul 24.

Study: Eccentric exercises in the treatment of overuse injuries of the musculoskeletal system

The authors of this study confirm very good results after eccentric exercises for tendinopathies treatment and suggest eccentric training as first treatment option.

Dimnjaković D, Bojanić I, Smoljanović T, Mahnik A, Barbarić-Peraić N. [Eccentric exercises in the treatment of overuse injuries of the musculoskeletal system]. [Article in Croatian]. Lijec Vjesn. 2012 Jan-Feb;134(1-2):29-41

Study: Measuring postural control during mini-squat posture in men with early knee osteoarthritis

The authors of this study emphasize the importance of rehabilitation with eccentric training from the early degrees of knee osteoarthritis to prevent postural instability and quadriceps muscle strengthening.

Petrella M, Gramani-Say K, Serrão PR, Lessi GC, Barela JA, Carvalho RP, Mattiello SM. Measuring postural control during mini-squat posture in men with early knee osteoarthritis. Hum Mov Sci. 2017 Apr;52:108-116. In this study 24 people (mean age: 52.35±5.00) with knee osteoarthritis grades I and II and 24 people (mean age: 51.40±8.07) without knee osteoarthritis participated in this study.

More studies at
strexbox.com/studies/rehab/

BODY BUILDING & CROSSFIT

Your interests:
muscle growth and
muscle strength

Study: Skeletal muscle functional and structural adaptations after eccentric overload flywheel resistance training: A systematic review and meta-analysis

This meta-analysis summarizes the results of eccentric overload training quite accurately: free weights and weight-stack machines are still the most popular resistance training machine, but eccentric overload devices result in greater improvements in muscle power and muscle growth. Additionally, eccentric overload appears to increase vertical jump height and running speed. The most effective eccentric overload mode is described as high speed workout with low inertia.

Sergio Maroto Izquierdo, David García-López, Rodrigo Fernandez-Gonzalo, Jose Antonio de Paz. Skeletal muscle functional and structural adaptations after eccentric overload flywheel resistance training: A systematic review and meta-analysis. Journal of Science and Medicine in Sport. 2017 Mar; 20:943-951.

Study: The effects of eccentric versus concentric resistance training on muscle strength and mass in healthy adults: a systematic review with meta-analysis

This study is interesting, because it looks at the results of eccentric training on muscle mass and muscle cross-sectional area. Both parameters heavily define how your body looks and how tight it feels. This study includes 20 randomized controlled trials. First, the results of this meta-analysis show that eccentric exercise at higher intensities increases total and eccentric strength more significantly than standard concentric training. Second, eccentric training at high intensities is more effective at growing muscles (measured in muscle girth) more effectively.

Third, eccentric training at high intensities shows a notable trend towards increasing muscle cross-sectional area (measured with magnetic resonance imaging or computerized tomography), which affects how tight your muscles feel.

Roig M, O'Brien K, Kirk G, Murray R, McKinnon P, Shadgan B, Reid WD. The effects of eccentric versus concentric resistance training on muscle strength and mass in healthy adults: a systematic review with meta-analysis. Br J Sports Med. 2009 Aug;43(8):556-68.

Study: Muscular performance after concentric and eccentric exercise in trained men

The study are about previously resistance-trained men (age 26.9 +/- 3.4 yr). The effects of concentric and eccentric training is compared on performance and structural muscle measures. The concentric training group (8 people) and the eccentric training group (9 people) performed during 12 week elbow flexors workouts. Measurement criteria were the angular velocity at standard loads and maximum concentric and eccentric strength. Additionally hypertrophy (muscle growth) were measured on muscle cross-sectional areas and single cell cross-sectional areas. The results for the strength results show that concentric strength increased by +18% for the concentric group and +14% for the eccentric group. Eccentric strength increased by +9% for the concentric group and +26% for the eccentric group. Maximum angular velocity increased similar in both groups.

The results for the muscle mass growth results show that the cross-sectional area of both the elbow flexors did not increase at the concentric group but did increase with +11% on the eccentric group, which is impressive. Additionally the type I and type IIA fibers did not increase in the concentric group but increased in the eccentric group. In addition, the type II fibers of the relative cross-sectional area increase from 64% to 73% in the eccentric training group. In conclusion, the muscle strength results were in small favor for eccentric training and the muscle mass growth results were in big favor for the eccentric training compared to traditional weight-based concentric training.

Vikne H, Refsnes PE, Ekmark M, Medbø JI, Gundersen V, Gundersen K. Muscular performance after concentric and eccentric exercise in trained men. Med Sci Sports Exerc. 2006 Oct;38(10):1770-81. This

More studies at
strexbox.com/studies/body-building/
strexbox.com/studies/cross-fit/

FLYWHEEL WORKOUTS

Our suggestions is to do your workout at an intensity that you are exhausted after 60 to 90 seconds. We recommend 3 sets with 60 seconds break in between.

See all at www.strexbox.com/flywheel-workouts/

STREXBOX Boxes

Focus: Legs
Lateral Squat:

Focus: Legs
Split Squat:

STREXBOX™
WORKOUT GUIDE
LATERAL SQUAT

STREXBOX™
WORKOUT GUIDE
SPLIT SQUAT

STREXBOX Tower

Focus: Core + Arms
Chop Kneeing Top Down

Focus: Core
Core Rotation with Rotational Sling

STREXBOX™
WORKOUT GUIDE
CHOP KNEEING TOP DOWN

STREXBOX
ECCENTRIC OVERLOAD
MADE AFFORDABLE
WORKOUT GUIDE
CORE ROTATION WITH ROTATIONAL SLING

STREXBOX Slide

Focus: Chest + Arms + Core
Sliding Push Ups

Focus: Core
Sliding Abs

STREXBOX™
WORKOUT GUIDE
SLIDING PUSH UPS

STREXBOX™
WORKOUT GUIDE
SLIDING ABS