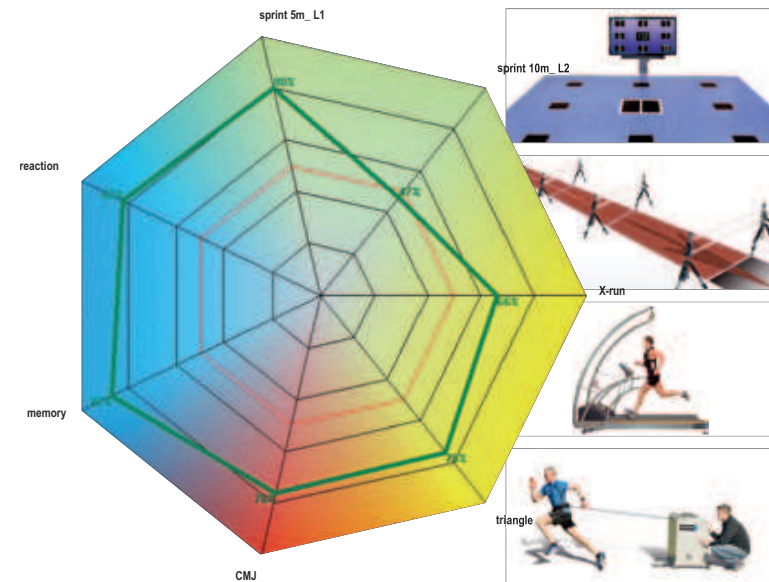


# speedlab

new methodologies in speed and agility training



speedlab®

## speedlab®

- measuring and improving of game speed, agility, first step explosiveness and jumping skills, direction changes and cognitive skills
- appropriate intensity – low extent of training
- easy usage, clear data and evaluations
- actual speedcheck, long term studies, group comparison

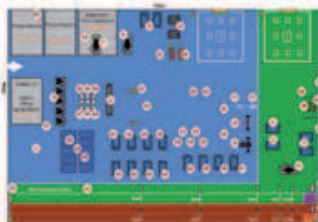
improve your game speed

**SpeedLab concept**

SpeedLab® is a new innovative high-tech concept that is focused on competition for motivated athletes and coaches, a modern athletic training system specialized in variable speed training and healthy workout. In contrast to many other measurement-technologies most SpeedLab® modules are compatible with each other. The technology is based on sports-scientific methodology. The most important element in development of the SpeedLab® is the SpeedCourt®. SpeedLab® is by not just just a highly modern measurement system. Equipped with high level training apparatus and the SpeedLab® training methods the SpeedLab® technology can be the central element of a high end sports complex for modern athletes and coaches.

Through RFID-wristbands, tablet-PC's and a database, SpeedLab delivers short and long term analysis possibilities, the development potential from youths to professionals is demonstratively applicable at all levels. When fractions of seconds decide the outcome of competitions, speed cannot be left to chance!

SpeedLab® integrates methodologies, training programs, know-how, software and capital equipment from experts in this field and from specialized companies such as h/p/cosmos, Global Speed by Frank Eppelmann, Running School by Mike Antoniadis and the functional training expert Lamar Lowery.



- basics
- Technology by GlobalSpeed
  - SpeedCourt, SpeedTrack
  - SpeedLab-Software with test editor, data capturing and database
  - Tablet-PC and RFID-wristbands
  - Flatscreens at each station
  - Facility planning
  - h/p/cosmos pulsar 3p, h/p/cosmos quasar
  - h/p/cosmos comet 3p
  - The Running School Methodology
  - Education and Workshops



**SpeedLab modules**

**SpeedCourt**

SpeedCourt® is an interactive training and sports concept. It uses contact mats, a big display screen and sophisticated software with visual stimulation, innovative training and test programs with data management and a clear reporting and performance visualization tool.

Through its unique variability it provides competition-like and individual training as well as accurate performance diagnostics. With the revolutionary concept of SpeedCourt® you can test and practice explosive acceleration, dynamic direction changes, coordination and cognition in ways unknown so far.

The SpeedPro software is user friendly and enables the user to quickly edit paths. Sports specific – position specific – impact controlled. The integrated database functionality is an essential tool for modern coaches and therapists.

- sophisticated measurement + training
- game speed / agility / cognition / tappings / jumps / reactions
- permanent installation on 7m x 7m and mobile solutions
- standard of 12 contact plates
- RFID-reader incl. Bus-System
- Defined and open programs
- Results immediately and clearly on screen
- Use with individuals, groups, with football, medicine ball, etc.



**SpeedTrack**

SpeedTrack is a multi-functional laser-measurement system. It allows to acquire time from linear measurement sprints, shuttle runs and explosiveness.

The double starting plate provides an accurate and error-free start. It also provides a measure of competitive sprinting situations such as lateral movements and jumps. Standard tests such as tapping, reaction tests and measurements are possible with the speed jump track.

The light barriers are made of double reflection lasers.

- 5 double laser sensor
- double starting plate
- 1 RFID-reader incl. bus-system
- 1/1000-sec. and km/h
- distances free selectable, 400m
- shuttle-runs
- results immediately + clearly



**h/p/cosmos pulsar 3p**

The h/p/cosmos pulsar 3p high performance treadmill with 3-phase power supply was designed for professional running and training applications like overspeed, coordination and functional training and also for high performance testing. A special wide and long running surface in combination with a comfortable and extremely durable running belt provides the environment for running and high speed applications. Furthermore the h/p/cosmos safety arch gives the athletes the necessary safety to reach their limits without fear of injury through falling. Special design features involve extra wide footboard with marking and special siderails with additional handgrip for jump-on and jump-off at very high speed, making up for a perfect speed training treadmill.

Running surface 190 x 65 cm, Speed 0 ... 40 km/h, Elevation -25 ... +25 %, Drive motor 4.3 kW with high-performance 3-phase power supply, 2 interface ports com1 / com2 for PC-, ECG, Ergospirometry-, Blood pressure system or printer - compatible to most of the systems worldwide, incl. PC software h/p/cosmos para graphics for device control and visualisation.

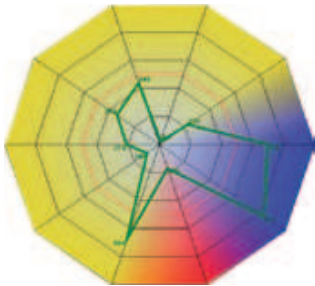


**h/p/cosmos comet 3p**

- |                |                     |
|----------------|---------------------|
| 100m rope      | overspeed training  |
| constant force | resistance training |

One of the great benefits of the h/p/cosmos comet sprint trainer is, that the traction resistance can be adjusted electronically and is independent from the speed of the subject and even from the running direction of the subject. The subject dictates the speed and the running direction, not the device!

Changes to the traction support (rope pulls the subject toward the machine) and changes of the traction resistance (subject running away from the machine and subject pulls the rope) can be made at any time.



**SpeedLab benefits**

- measuring and improving of
  - reaction speed, first step explosiveness and jumping skills
  - turns, change of directions
  - cognitive skills
- talent diagnostics and technique learning at an early stage
- training like competition
- appropriate intensity – low extent of training
- injury prevention based on precise movement and training control
- early reintegration after injuries (before - after comparison)
- easy usage, clear data and evaluations
- actual speedcheck, long term studies, group comparison
- motivation through feedback, highscore and „playful“ athletic training
- investment in own infrastructure, players and systematic future development
- high quality and reliability of technology and service

**results and success stories**

**13% improvement (60cm) on 5m-Sprint in 3 month**

Player 1 (green), Soccer professional, 26 years old, regular SpeedLAB testing and training period over 1 year, improvement from 1,179sec. to 1,022sec. Difference of 0,157sec. = approx. 60cm gain of distance in a sprint duel of only 5m. Interruption of training process after 4 months.

Player 2 (red), Soccer professional, 19 years old, no regular SpeedLAB testing and training process with minimal and inconstant improvement.



Speed: Evaluation example 5m Sprint and Start explosiveness



Agility: Evaluation example „X-run“ (defined change of direction sprints on the SpeedCourt)

**28% improvement in COD-sprint in 3 month (change of direction)**

Player, Soccer Junior, 16 years old, regular SpeedLAB testing and training period over 1 year, improvement of total time for the „X-sprint“ from 6,684sec. to 4,826sec. (difference: 1,858sec. = 28%) within 4 months of pre-season.



Quickness: Evaluation example „Speed-Memory“ (open and cognitive change of direction sprints on the SpeedCourt)

**30% improvement in cognitive COD-sprint in 3 month**

Soccer Youth Player, 12 years old, regular SpeedLAB testing and training period over 1 year, reduction of standing time during change of direction from 0,359sec. to 0,251sec. (difference: 0,108sec. = 30%)