

# Taller n° 4

## RESUMEN DEL TALLER:

The ability to quickly accelerate forward is a decisive factor of performance in track-and-field and is also of paramount importance in sports that require athletes to cover a given distance in the shortest possible time (Gabbett, 2012; Haugen et al., 2014).

Consequently, a considerable amount of research has been dedicated to understanding the biomechanics of sprinting (Pantoja et al., 2016), to determining the most valid and feasible testing methods (Samozino et al., 2016; Cross et al., 2017), and to designing effective training methods that improve acceleration ability and sprint running (Lockie et al., 2012; Alcaraz et al., 2018).

One of the aspects of acceleration and sprint running that has been receiving an increasing amount of attention in the last few years is the force-velocity-power (FVP) relationship.

Reliability of the sprint FVP profiling using a KiSprint system provide accurate information on mechanical patterns and technique during sprint initiation and acceleration, and can thus assist in personalization of training programs.

With the Kistler Sprint system you get an advanced tool to improve your sprint start and get off the blocks in the most efficient and successful way. Hundredths of a second can make the difference as to whether a race is won or lost. Make the difference right from the beginning with the Kistler Sprint system.

Winning a championship or becoming an Olympic champion drives every professional athlete. To fulfill their dream, athletes spend hours of hard training in the gym and on the track.

The start is a key component in sprinting races, especially for short distances. For a perfect start athletes need the right technique to be able to transform explosive power efficiently into maximum speed in the shortest amount of time.

The Kistler Sprint system can effectively enhance an elite athlete's skill in sprint starts by providing key performance and timing parameters and also giving insight combined with immediate visual feedback. Objective data enables coaches and athletes to adapt the performance and technique directly in the next start. As a result, performance is measured objectively and can be improved with each practice.

Kistler's instrumented starting block measures the ground reaction forces that cause athletes to move it also provides insight about the efficiency of an athlete's performance at the start block.

An integrated laser measures the velocity and provides and-un-biased timing results of the start performance.

With visual feedback from high speed video, you can easily analyze the kinematic aspects of the motion during sprint start and the first steps. It supports the analysis of the force measurements and facilitates the coaching of athletes.

All relevant factors for the sprint start are displayed in analytical software and allows for user-friendly data evaluation. The graphic visualization makes it easy to understand and provides an overview right after the trial to evaluate the performance.

Get on your mark with Kistler, experience effective improvements on your training and succeed at your upcoming competitions.

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