

Kistler presents a new analysis system for athletics

## Run a personal best thanks to explosive force development

The new KiSprint provides coaches and athletes with an efficient means of biomechanically optimizing [sprint starts](#) under competitive conditions. The robust and mobile solution has comprehensive software assessment options and can be individually adapted and expanded.

Winterthur, January 31, 2018 – “On your marks – get set – go!” Especially for short distances, a good start is crucial to achieving fast times and winning races. However, performance during a sprint start depends on many different factors, such as the starting position, reaction time, and force vector. In order to analyze this complex network of influencing variables efficiently and strategically, the Kistler Group has developed a new measuring system that makes comprehensive biomechanical optimization of an athlete’s starting process possible.

### Performance diagnostics made easy

The sprint starting blocks conform to the Olympic standard and can be individually adjusted (foot distance, footplate angle) as athletes are used to from training and competition. The piezoelectric three-component force sensors are integrated in the structure along with the charge amplifier. Thus, the force components can be recorded separately for each leg, which makes it possible to determine the resulting force vector and speed.

Particular attention has been paid to ease of use and convenient operation. The KiSprint system is quick to set up, easy to adjust with quick-release fasteners, and provides synchronous measurement data without the need for additional installations or tracking. With the integrated electronic starting pistol, all measurement processes are synchronized simultaneously with the start signal for the runner.

Immediately after completing a run, the associated Kistler Sprint software provides accurate analyses based on the data obtained. Comparisons between different athletes at different times are just as possible as the visualization of the starting process by high-speed camera. The speed of the athlete in the acceleration phase is continuously recorded and can be optimized accordingly – the system thus supports the most effective training possible as well as targeted performance diagnostics.

### Robust, mobile, and expandable

The robust, splash-proof Sprint system from Kistler can be used both indoors as well as outdoors. It can be attached to the bottom of the plastic track via spikes or screwed down permanently. The two wheeled cases included make it easy for a single person to transport the system.

For use in research, the five-component design allows the sprint starting blocks to be combined with COP (center of pressure) measurements in order to determine the ideal center of gravity. Furthermore, the system can also be expanded individually (for example, to measure hand strength). The solution, developed worldwide in cooperation with trainers and training centers, will be launched on the market in early 2018.

For more information, visit [www.kistler.com/sprint](http://www.kistler.com/sprint) or contact our local expert team.

Kistler is not only present in track and field, but also in swimming with its [PAS-S system](#), and even in the worlds of soccer, ice hockey, American football, and many other sports through the [MARS® system](#).



Image 1



Image 2



Image 3

#### Legends

**Image 1:** The new KiSprint consists of a sprint starting block, an electronic starting pistol and the Kistler Sprint software.

**Image 2:** The new KiSprint helps coaches and athletes to biomechanically optimize [sprint starts](#) under competitive conditions.

**Image 3:** The sprint starting blocks conform to the Olympic standard and can be individually adjusted (foot distance, footplate angle).

## **About the Kistler Group**

*Kistler, the originator of piezoelectric measuring technology, is the global leader in dynamic pressure, force, torque and acceleration measurement. Cutting-edge technologies provide the basis for Kistler's modular systems and services.*

*Customers in industry, research and development benefit from Kistler's experience as a development partner, enabling them to optimize their products and processes so as to secure sustainable competitive edge. This owner-managed Swiss corporation plays a key part in the evolution of automobile production and industrial automation, and its innovative sensor technology also helps foster the development of many newly emerging sectors. Drawing on our extensive application expertise, and always with an absolute commitment to quality, Kistler drives innovations ahead in lightweight construction, vehicle safety, emission reduction and Industry 4.0.*

*Over 1,850 employees at 61 facilities across the globe are dedicated to the development of new measurement solutions, and they offer individual application-specific support at the local level. Ever since it was founded in 1959, the Kistler Group has grown hand-in-hand with its customers and in 2016, it posted sales of CHF 364 million. About 10% of this figure is reinvested in innovation and research – with the aim of delivering better results for every customer.*

### **Media contact:**

David Stucki  
Divisional Marketing Manager ST  
Phone: +41 52 2241 258  
Email: [david.stucki@kistler.com](mailto:david.stucki@kistler.com)

### **Reader contact:**

Katharina Büchli  
Head of SBF Biomechanics  
Phone +41 52 224 15 99  
EMail: [katharina.buechli@kistler.com](mailto:katharina.buechli@kistler.com)