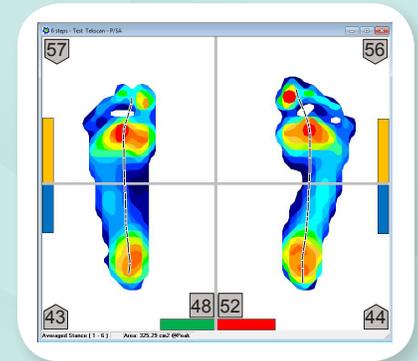# Balance & Stability

## Objective Data You Need for Balance, Posture & Sway

Tekscan's pressure measurement mats objectively measure balance and asymmetries which might be otherwise unobserved. Research suggests, the most reproducible of the current methods to quantify standing balance is based on center of pressure (COP)[1]. In addition to COP data, Tekscan's easy-to-use software provides weight bearing information, area of sway and comparative reports.

Whether you are looking to evaluate rehabilitation effects, assess injury risk or perform a comprehensive concussion assessment Tekscan has the solution.



*Instantly view weight bearing information and Center of Pressure*

## Trusted & Proven: Why Tekscan's Balance Systems?

Tekscan's balance systems are trusted worldwide by leading researchers and clinicians focused on a variety applications including:

- Real-time visual feedback for training
- Measure treatment outcomes
- Compare pre/post treatments or interventions
- Identify weight-bearing asymmetries
- Assess injury risk
- Baseline testing and concussion assessments
- Fall risk assessments

The subjective nature of balance testing leads to a common issue of low inter/intra-rater reliability for certain balance tests. According to Brenton-Rule, et. al., using one of our automated systems reduces the rater error, 'due to postural sway values being captured by the measuring system and not the examiner, rater error and bias, which may be present in non-computerized tools, such as the swaymeter, was minimized[2]'.

1    Gerbino, P.G., Elizabeth Griffin and David Zurakowski. 2007. 'Comparison of Standing Balance Between Female Collegiate Dancers and Soccer Players.' Gait and Posture 26 (October): 501-507.
2    Brenton-Rule, A., et. al. 2012. 'Reliability of the Tekscan MatScan Systems for the Measurement of Postural Stability in Older People with Rheumatoid Arthritis.' Journal of Foot and Ankle Research (August)

# Technology to Enhance the Following Markets:

- Physical therapy
- Sports medicine
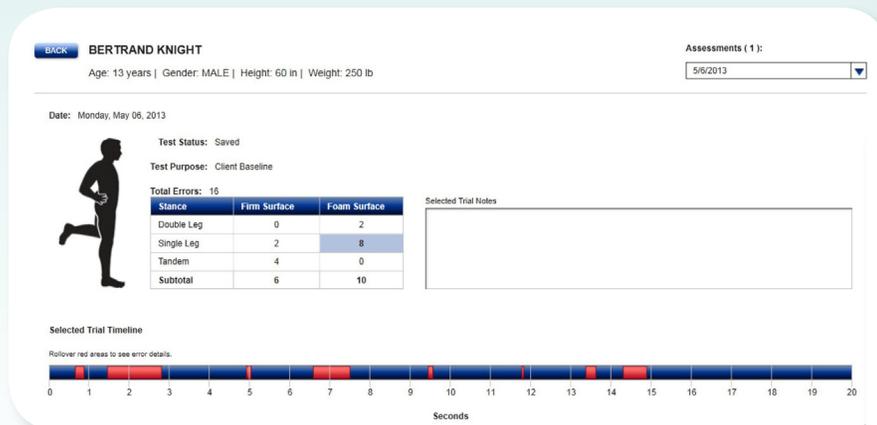- Orthopedics
- Chiropractics
- Athletic training

## Software to Analyze Sway, Balance, Posture & More

Choose from a selection of software that can be used to improve a subject's balance, increase their agility, develop muscle tone and treat a wide variety of pathologies. Simplify industry standard protocols and remove objectivity through the automation of the following protocols:
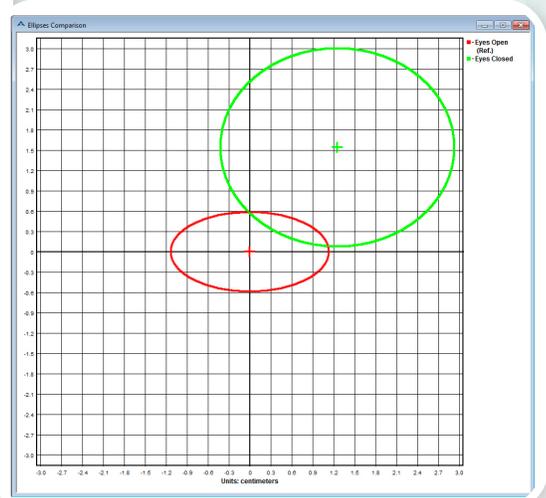
- Balance Error Scoring System (BESS)
- Sports Concussion Assessment Tool (SCAT3™)

*Easily compare pre/post treatment. Subject is shown on the MobileMat®.*

BACK  **BERTRAND KNIGHT**

Age: 13 years | Gender: MALE | Height: 60 in | Weight: 250 lb

Assessments ( 1 ): 5/6/2013

Date: Monday, May 06, 2013

Test Status: Saved

Test Purpose: Client Baseline

Total Errors: 16

| Stance | Firm Surface | Foam Surface |
|---|---|---|
| Double Leg | 0 | 2 |
| Single Leg | 2 | 8 |
| Tandem | 4 | 0 |
| Subtotal | 6 | 10 |

Selected Trial Notes

Selected Trial Timeline

Rollover red areas to see error details.

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Seconds

*Sports AT software (shown above) automatically calculates errors committed during the Balance Error Scoring System (BESS). View timeline to isolate when error occurred.*

*Analyze stability with quick comparison of pre/post area of sway with the Sway Analysis Module (SAM).*

## Tekscan®

**CONTACT US TO LEARN MORE**

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