

Combining Science, Innovative
Technology and The Art of
Coaching in High Performance
Sport

Elite Training Switzerland



Elite Training HQ





Who are our clients?

- Highperformance athletes (competition)
- Teams
- Motivated people, Amateur Athletes



What are we doing?

- Complete physical preparation of athletes:
 - Testing
 - Training
 - Rehabilitation (btw. Initial Physio Therapy and Performance Training)



Testing - **Why Test**

1. Medical or health consideration
2. Assess performance standard
3. Generate individual training recommendations



Testing - Medical or health consideration

- Assessment governed and conducted by medical professionals
- Result dictates a player's ability in terms of health to compete in a given sport



Testing - **Assess performance standard**

- Identify an objective performance standard produced by an athlete at a given point in time to be compared to future measurements in attempt to track and monitor objective performance
- Functions to track physical improvement of a player in an objective sense to improve player and trainer work progress
- Should as closely as possible reflect the sport



Testing - Generate individual training recommendations

- Give insight into physiological process that are generating the current performance standard
- Identify needed training areas or training adjustments to further improve performance standard
- Results should be directly useful for trainers and applied



Testing - Sport Specific Testing

- Testing or assessing performance in a different sport or exercise modality does not reflect performance in the desired sport, for example cycling assessments do not reflect Skiing Performance
- Correlations may exist but margin of error can be rather large
- E.g. on Snow or in lab with similar biomechanics



Testing - Function Specific Testing

- Testing or assessing performance needs to reflect the functional needs of the sport at hand, not just the modality of exercise.
- Consequence of both of these specifications is that a skiing test should be on-snow and in an high intensity interval-prolonged rest modality.
- E.g. In Lab: Similar bioenergetics, 60s all out with 10 min rest, 4-8x, High Intensity Interval Type



Testing - Technology

We need technology to take the next step in testing and training!



Testing - How to Test - Technology

- Technology that makes sense:
 - Sport specific testing and training
 - Has the ability to open up “the black box”
 - Easy to integrate into the training process
 - Monitoring: the technology should help us plan better training sessions (Goal!)
 - User friendly
 - Players “buy-in”



Testing - How to Test - Technology

- 1080 Quantum and 1080 Sprint
 - Robotic Technology
 - Real Time Feedback (Power, Speed, Force etc.)
 - Allows for sport specific Testing
 - Load and Velocities are independently adjustable both in the concentric and eccentric phase
 - Different load characteristics: Isotonic, Isokinetic, No Fly Weight, Vibration
 - 1080 Sprint portable
 - Testing AND Training!

Testing - How to Test - Technology





Testing - How to Test - Technology

Example Quantum

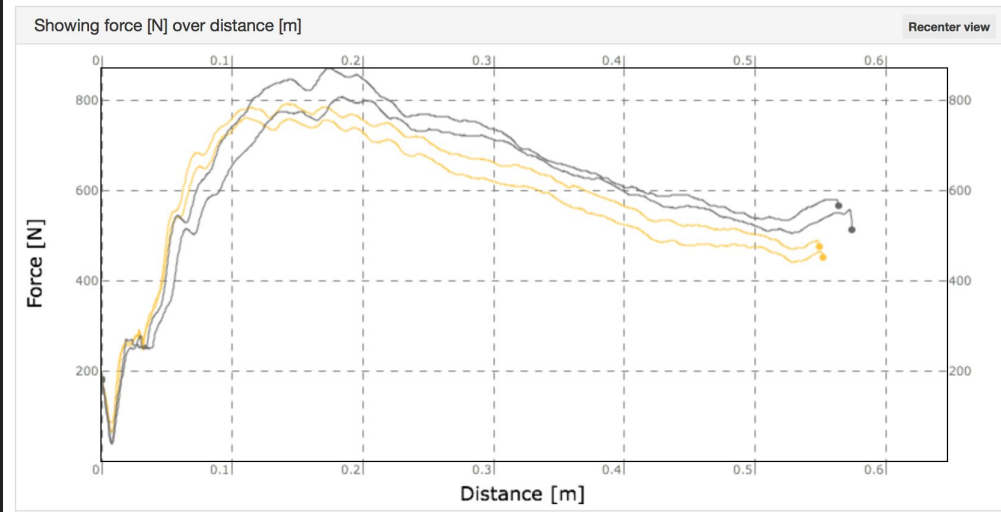
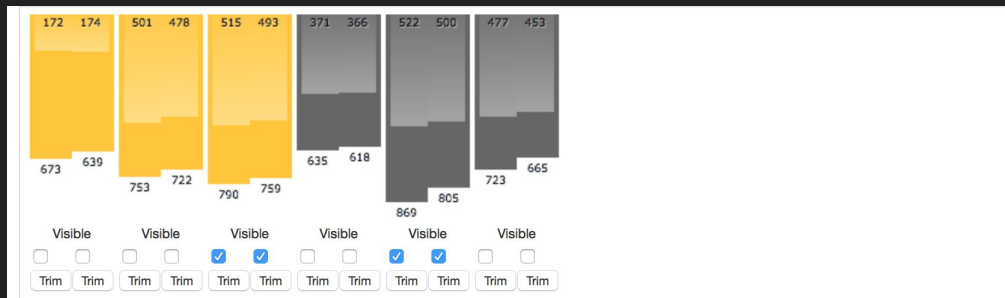




Testing - How to Test - Technology

Example Quantum

Eccentric Force



Testing - How to Test - Technology

Example Sprint Report

