

# 1080 QUANTUM

## INTELLIGENT RESISTANCE TRAINING



## Elevate Sports Performance and Rehabilitation

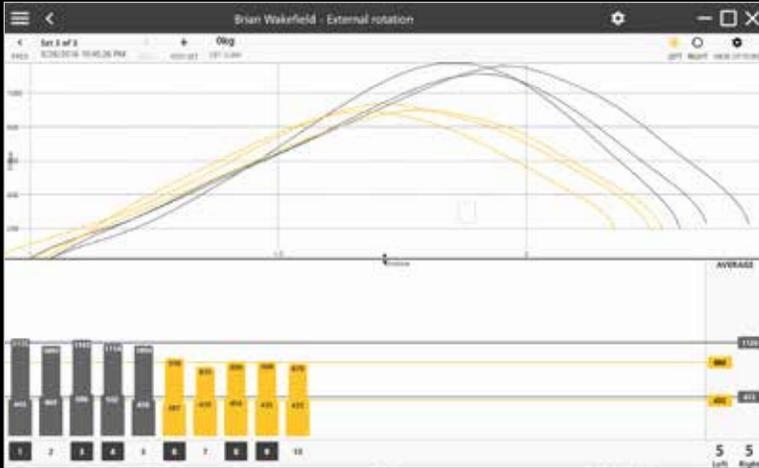
- Deliver any type of resistance at a wide range of speed and load in any direction
- Measure and view the key force, speed, and power variables instantly
- Improve strength and power faster and effectively manage Return To Play progression

**1080 Motion**

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## CUSTOMIZED RESISTANCE

Why settle for one type of resistance when you can have many? Quantum offers the following resistance types for testing and training in both the concentric and eccentric phase of any movement:

- ▶ Iso inertial – emulated normal weight stack resistance
- ▶ Isotonic- constant resistance mode
- ▶ Isokinetic- constant speed for optimal force development and time undension
- ▶ Variable inertia - resistance and inertia when you need it. Perfect for power, ballistic, and high velocity training
- ▶ Vibration- Set specifically at 25 Hz with six different intensity levels

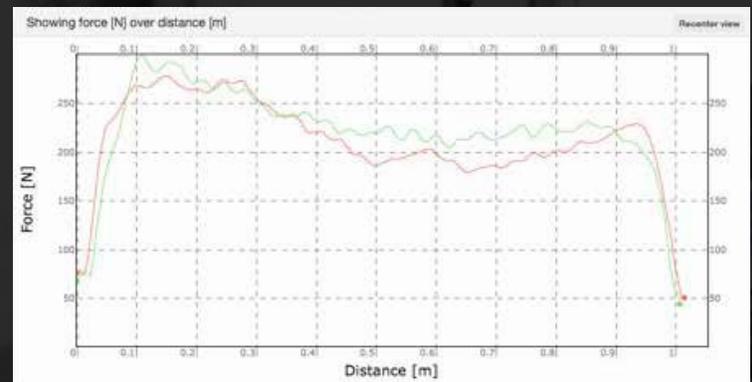
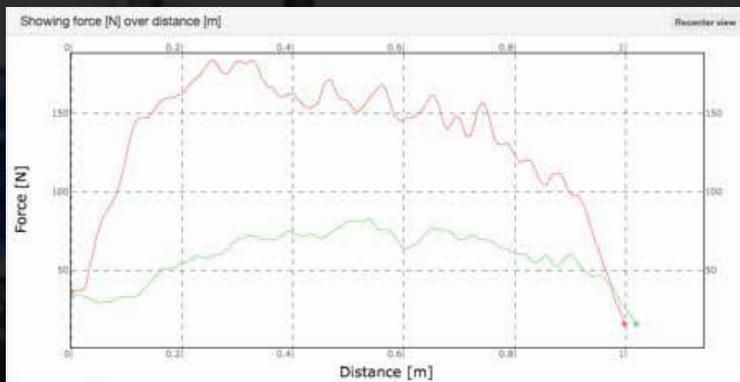
Customize load and speed to the different phases of exercises

- ▶ Set resistance and speed independent of each other in the concentric and eccentric phase. Allows for true eccentric overloading superior to flywheel technology.
- ▶ Eccentric boost – high loads and low rates in the eccentric phase. Permits supra-maximal eccentric contractions.

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## EFFECTIVE AND SAFE RESISTANCE

The true advantage of the 1080 Quantum technology is the ability to load the body with more precision based on different resistance types and careful control of resistance and speed in the different phases of an exercises. With time constraints being a major variable for professionals, the resistance technology enables users to provide the most effective stimulus to the individual without risk or under loading them.



Above is the research grade reporting of an injured athlete with strength balance (left) who after a short period of a few weeks was able to get near perfect symmetry (right).

## Rehabilitate Harder and Train Safer

These key features of 1080 Quantum, instant speed and resistance regulation, allows the professional to effectively individualize training programs. The instant feedback on force, speed and power ensures users stay within safe fatigue levels while making important strength and power gains.

The reporting options allow detailed post testing, training and rehabilitation analysis making progression and individualized training programs easier to create and execute. The data is easily exported for research grade analysis and permits integration with Athlete Management Systems (AMS). The software is user friendly in team settings.

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## VERSATILITY FOR PROFESSIONALS



### Train and Rehabilitate with Instant Feedback

The 1080 Quantum can be used as a single station cable column or combined with another to form a 1080 Syncro enabling different exercises and increased resistance. Both options have an intuitive and engaging user interface with real-time feedback of each repetition of an exercise. The different resistance types and great ranges of resistance and speed settings make 1080 Quantum gentle enough to assist the elderly post surgery, yet powerful enough to challenge elite athletes.

- ▶ **Tablet Controlled and Operated**
- ▶ **Realtime Data Output**
- ▶ **Rapid and effective management for group sessions**
- ▶ **Different Resistance Types**
- ▶ **Durable and Rugged Design**
- ▶ **Cloud data storage and Web application for analysis**

In addition to providing nearly limitless resistance options, the 1080 Quantum system offers all the necessary accessories to provide the total testing, training and rehabilitation experience.

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## ABOUT THE TECHNOLOGY

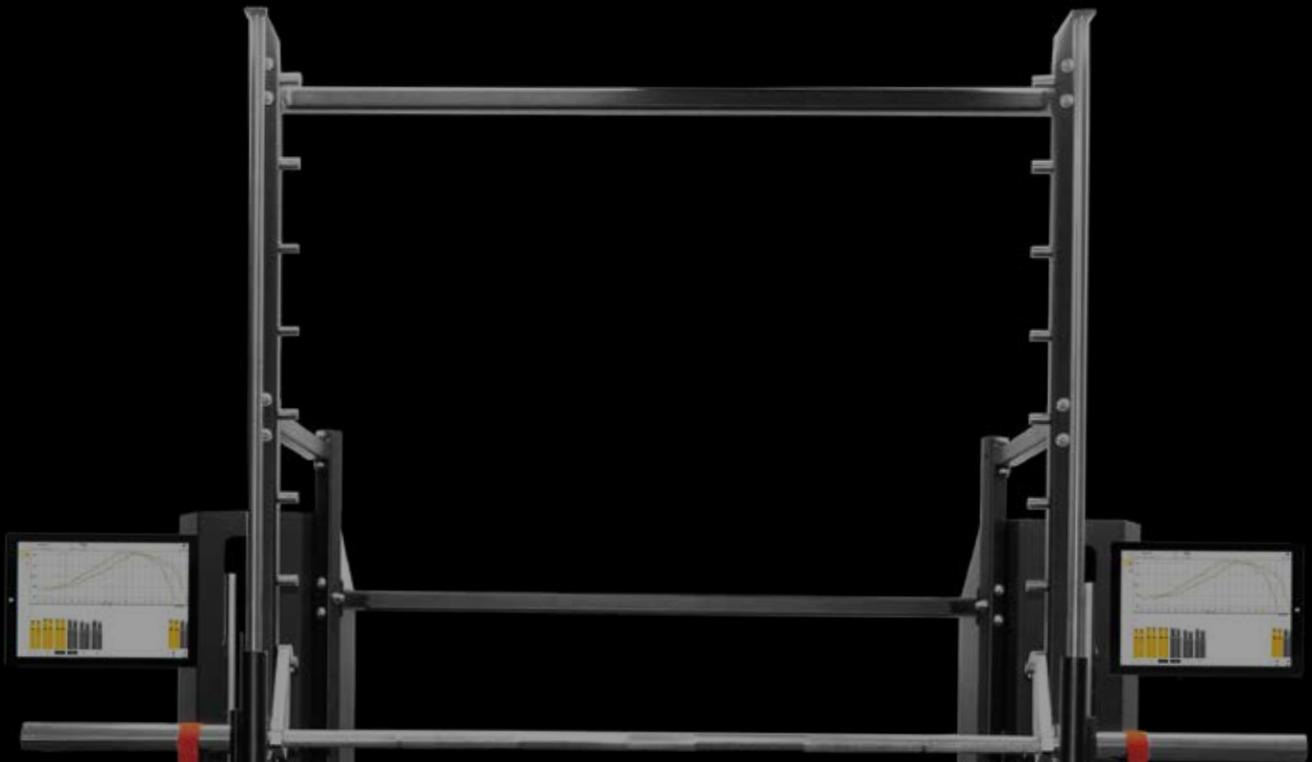
1080 LAB™

### 1080 Quantum System Specifications

- 1-25 kg (2-55 lbs) of continuous concentric load
- 1-30 kg (2-66 lbs) of continuous eccentric load
- 1-60 kg (2-132 lbs) of continuous eccentric load with Gear 2
- Maximum con/ecc load during 3 seconds: 75 kg (165 lbs), 150 kg (331 lbs) with Gear 2
- Concentric velocity: 0.1–8 m/s (0.3-26 ft/s)
- Eccentric velocity: 0.1–6 m/s (0.3-20 ft/s)
- In Gear 2 maximum speed is halved
- Recorded frequency of force, speed and power: 333 Hz
- Tablet with touch screen interface or laptop
- Operating system: Windows 10
- Weight: 180 kg (400 lbs)
- Body height: 1.7 m (5.6 ft)
- Max cable travel: 5 m (16 ft)

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## ABOUT THE TECHNOLOGY



### 1080 Syncro System Specifications

- 2-100 kg (4-220 lbs) of continuous concentric load + bar and weights with Gear 2
- 2-120 kg (4-265 lbs) of continuous eccentric load + bar and weights with Gear 2
- Maximum con/ecc load, with bar/no weights, during 3 seconds: 175 kg (386 lbs), 325 kg (717 lbs) with Gear 2
- Concentric velocity: 0.1–8 m/s (0.3-26 ft/s)
- Eccentric velocity: 0.1–6 m/s (0.3-20 ft/s)
- In Gear 2 maximum speed is halved
- Recorded frequency of force, speed and power: 333Hz
- Tablet with touch screen interface or laptop
- Operating system: Windows 10
- Weight: 180 kg (400 lbs) each
- Body height: 1.7 m (5.6 ft)
- Max cable travel: 5 m (16 ft)