











# **Isometric Tests on ISOplate**

## **Isometric Mid-thigh Pull**

- Have athlete stand on the plate shoulder width. Adjust the chain length at a mid-thigh height, assuming the knee angle is at (125-145) and hip angle (140-150).
- Athlete takes the barbell and warms up by performing several gradually increasing submaximal repetitions.
- To avoid a false force peak, instruct the athlete to gradually increase the pull strength.
- Turn the device on, press the start measurement button and perform the test by attempting a maximal upward pull.
- The assessment can last about 10 seconds while maintaining the maximum pull for at least
- To end the assessment either press the device blue button or lower the device and the metal bar to the ground.

### **Isometric Deadlift** (lift-off or knee passing)

- Athlete stands on the plate with feet placed shoulder width. Adjust the chain at length of 22.54 cm /
- Athlete takes the barbell with hands shoulder width apart and warms up by performing several submaximal repetitions.

8.875" (lift-off) or at knee height (knee-passing).

- To avoid a false force peak, instruct the athlete to gradually increase the pull strength.
- Turn the device on and perform the test by attempting a maximal upward pull.
- The assessment can last about 10 seconds while maintaining the max pull for at least 3 seconds.
- To end the assessment either press the device blue button or lower the device and the pulley to the ground.

#### **Isometric Belt Squat or Isometric Front Squat**

- Athlete stands on the plate, feet placed shoulder width while the setup is the following for: Front Squat: attach the bar at the height of front rack position while keeping the knee angle (125-145) and hip angle at (140-150). **Belt Squat:** attach the belt at the appropriate height while knee angle (125-145) and hip angle (140-150).
- (2) Consider a warm-up by performing several increasing submaximal repetitions, while for: Front Squat: holding the barbell in front rack position and keeping the elbows and chest high. **Belt Squat:** placing the arms on the hips and keeping chest upwards.
- To avoid production of a false force peak, instruct the ahtlete to gradually increase the pull strength.
- Turn the device on, press the blue button and perform the test by attempting a maximal upward movement.
- The assessment can last about 10 seconds while maintaining the max pull for at least 3 seconds.
- blue button or lower the device and the bar to the ground.

## **Isometric Pushup**

- Consider warming up by performing several sets of pushups.
- Athlete can place the belt around the chest with the chain facing forward.
- Have athlete assume mid push-up position, hands placed slightly wider than the shoulder, elbow at 90 degrees and adjust the chain length from chest to ground.
- Before measuring instruct the athlete to gradually increase the push strength to avoid the sudden peak. Turn the device on and press the blue button.
- **5** Perform the assessment by attempting a maximal push-up. The assessment can last about 7 seconds while maintaining the max pull for at least 3 seconds.
- To end the assessment either press the device blue button or lower the body to the plate.

**Additional tests** 

Single Leg Pull

Lateral Trunk Bend









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