

## Force-Velocity Profile Guidelines

If you look up force-velocity profiles, you will get several thoughts on guidelines. Here are a few keys that should be standard:

- Standardize a ten-minute warm up that will prepare the joints. It should stay the same each retest to avoid variability.
- 2-3 minutes rest between sets and standardize the exact amount for each retest.
- Start with 3-Repetitions per set until 60%, and then drop to 2-Repetitions per set until 80%. After 80%, you can use 1-Rep per set. Only track the best repetition per set for the profile.
- Standardize the following components:
  - Distance (for example if you are performing squats, make sure the depth is standard for each rep, set, and retest.
  - Technique (for example if you are using the trap bar deadlift, I recommend coming to a complete stop on the ground each repetition.
  - Time of day
  - Equipment used
- I have the intensities spelled out for you, but I understand that not everyone has the time to perform such a time intensive test. The only requirement is to perform at least five sets with one set from each Quality of Strength:
  - Start with one set faster than 1.3m/s
  - One set between 1.0-1.3m/s
  - One set between 0.75-1.0m/s
  - One set between 0.75m/s-0.5m/s

- One set greater than 0.5m/s

Quality of Strength:	Mean Velocity:
Absolute Strength	<0.5m/s
Strength Speed	0.75-1.0m/s
Speed Strength	1.0-1.3m/s
Starting Strength	>1.3m/s

The more sets an athlete performs will lead to a more exact profile. Once you perform the profile, it will light up red if the velocity is below the standard deviation that I have determined from our own research. If it lights red, it's a slight warning to attack that quality of strength especially if the rate is specific to the sport of the athlete. If it lights green, that means the athlete has over developed that quality. Therefore, the green blocks are of less concern.

You can use this profile to:

- Measure fatigue by noticing any major deviation in velocity from the testing day.
- Measure improvement over several qualities of strength versus only relying on 1-repetition maximums.

I hope these guidelines help you with testing your own athletes, and more importantly will help you with a response to the test. Remember, a test is only as good as the coach's response and continued monitoring. Email me at [Travis@GymAware.com](mailto:Travis@GymAware.com) with any questions.