Critical Velocity Training

By Tom Schwartz

Description

- A Pace that is Sustainable for 30-35 minutes.
- A somewhat hard effort.
- 90% of V.O2 max, which is ~92% of vVO2 max.

Effects

- Improved aerobic capacity of Type IIA muscle fibers.
- Elevated average cruising speed during races, which is due to elevated threshold level.
- Increased kicking distance from the finish line because the rate of accumulating fatigue is reduced.

Workouts

- A 3200m runner with a time of 10:00
- Max. = 8 x 1km @ CV pace (jog 200’s)
- Typical = 6 x 1km @ CV pace + 6 x 200m @ 1600m pace (jog 200’s)

Training Volume Charts

- For long distance runners
  - See the Critical Velocity Training video sold by Championship Production:
Calculating Critical Velocity Training Paces

- Sprinters, Long Sprinters, Mid-Distance, and Distance Runners:
  - See the Critical Velocity Training video sold by Championship Production:

3 Training Progressions

- #1 - Decrease the recovery time between repetitions.
- #2 – Extend the length or duration of repetitions.
- #3 - Increase the speed of repetitions.
#1 - Reduce the recovery times

- Week 1: 90 second jog recovery between reps
- Week 2: 75 second jog recovery between reps
- Week 3: 60 second jog recovery between reps

#2 - Extend the length or duration of the repetitions

- Week 1: 12 x 400m (4,800m) or 12 x 1:15 (15:00)
- Week 2: 6 x 800M (4,800m) or 6 x 2:30 (15:00)
- Week 3: 5 x 1000m (5,000m) or 5 x 3:07.5 (15:37.5)

#3 - Increase the speed of the repetitions

- Week 1: 6 x 1km @ 3:20 (jog 75 seconds)
- Week 2: 6 x 1km @ 3:18 (jog 75 seconds)
- Week 3: 6 x 1km @ 3:16 (jog 75 seconds)

Questions & Answers

- Q1 - What if runners are showing excessive fatigue before a training session ends?
  - A1 - Withhold them from the next repetition, or have them perform a longer recovery jog.

- Q2 - What if weather or terrain conditions slows workout times or reduces performance?
  - A2 - Adjust the workout training paces, total volume, or recovery times. Be realistic!

- Q3 - What if illness, lack of sleep, eating too few carbs, or stress affects running performance?
  - A3 - Cut the losses immediately. Send runners home, or send them to the doctor, athletic trainer or physical therapist for treatment. Don’t ignore health problems and “wait it out!”
Q4 - How do I group my runners together for CV repetitions?

- A4 – First, group athletes based on current fitness and performance level; not their goals.
- A4 – Second, group athletes according to experience as runners (first) and athletes (second).
- A4 – Third, group athletes according to future race strategy. Practice the race plan!

Q5 - What if Runners perform CV Repetitions too fast?

- A5 - Educate them about the importance of running at realistic, assigned training paces. Hold them accountable immediately and always! Remember: “Workouts are not races.”
- A5 - Say, “When performance in races (or time-trials) improves, training speeds are faster. Be patient! Be self-restrained!”

Drew Hunter & Grace Ping Workouts

- See the Critical Velocity Training video sold by Championship Production: