

Elevate Performance Coaching Mother-Of-All Track Squad Matrix (VDOT Formula - Combination Pace)

| | Race Time | | | | | VDOT | Repetition Distance | | | | | | Interval Distance | | | | | | Threshold Distance | | | | | |
|----|-----------|---------|---------|---------|----------|------|---------------------|-------------|---------|-------------|---------|-------------|-------------------|-------------|---------|-------------|---------|--------------|--------------------|--------------|---------|--------------|---------|--------------|
| | 1600m | 5km | 10km | Half M | Marathon | # | 200m | 200m (Pace) | 400m | 400m (Pace) | 800m | 800m (Pace) | 400m | 400m (Pace) | 800m | 800m (Pace) | 1000m | 1000m (Pace) | 1000m | 1000m (Pace) | 1200m | 1200m (Pace) | 1600m | 1600m (Pace) |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 0:05:13 | 0:18:00 | 0:37:20 | 1:22:36 | 2:53:30 | 56.3 | 0:00:40 | 0:03:20 | 0:01:20 | 0:03:20 | 0:02:40 | 0:03:20 | 0:01:26 | 0:03:35 | 0:02:52 | 0:03:35 | 0:03:35 | 0:03:35 | 0:03:52 | 0:03:52 | 0:04:38 | 0:03:52 | 0:06:13 | 0:03:53 |
| | 0:05:22 | 0:18:30 | 0:38:20 | 1:24:50 | 2:57:03 | 54.6 | 0:00:41 | 0:03:25 | 0:01:22 | 0:03:25 | 0:02:44 | 0:03:25 | 0:01:27 | 0:03:38 | 0:02:55 | 0:03:39 | 0:03:39 | 0:03:39 | 0:03:58 | 0:03:58 | 0:04:45 | 0:03:58 | 0:06:23 | 0:03:59 |
| 2 | 0:05:31 | 0:19:00 | 0:39:23 | 1:27:12 | 3:01:52 | 52.9 | 0:00:42 | 0:03:30 | 0:01:24 | 0:03:30 | 0:02:48 | 0:03:30 | 0:01:30 | 0:03:45 | 0:03:00 | 0:03:45 | 0:03:45 | 0:03:45 | 0:04:04 | 0:04:04 | 0:04:53 | 0:04:04 | 0:06:33 | 0:04:06 |
| | 0:05:40 | 0:19:30 | 0:40:27 | 1:29:34 | 3:06:40 | 51.3 | 0:00:43 | 0:03:35 | 0:01:26 | 0:03:35 | 0:02:52 | 0:03:35 | 0:01:32 | 0:03:50 | 0:03:04 | 0:03:50 | 0:03:50 | 0:03:50 | 0:04:10 | 0:04:10 | 0:05:00 | 0:04:10 | 0:06:42 | 0:04:11 |
| 3A | 0:05:25 | 0:20:00 | 0:41:29 | 1:31:54 | 3:11:24 | 49.8 | 0:00:44 | 0:03:40 | 0:01:28 | 0:03:40 | 0:02:57 | 0:03:41 | 0:01:34 | 0:03:55 | 0:03:09 | 0:03:56 | 0:03:56 | 0:03:56 | 0:04:16 | 0:04:16 | 0:05:07 | 0:04:16 | 0:06:52 | 0:04:18 |
| | 0:05:58 | 0:20:30 | 0:42:31 | 1:34:12 | 3:16:04 | 48.4 | 0:00:45 | 0:03:45 | 0:01:30 | 0:03:45 | 0:03:01 | 0:03:46 | 0:01:36 | 0:04:00 | 0:03:13 | 0:04:01 | 0:04:01 | 0:04:01 | 0:04:22 | 0:04:22 | 0:05:15 | 0:04:23 | 0:07:02 | 0:04:24 |
| 3B | 0:06:08 | 0:21:00 | 0:43:36 | 1:36:37 | 3:20:57 | 47 | 0:00:46 | 0:03:50 | 0:01:33 | 0:03:53 | 0:03:06 | 0:03:53 | 0:01:39 | 0:04:08 | 0:03:18 | 0:04:08 | 0:04:08 | 0:04:08 | 0:04:29 | 0:04:29 | 0:05:23 | 0:04:29 | 0:07:12 | 0:04:30 |
| | 0:06:17 | 0:21:30 | 0:44:35 | 1:38:49 | 3:25:21 | 45.8 | 0:00:47 | 0:03:55 | 0:01:35 | 0:03:58 | 0:03:10 | 0:03:58 | 0:01:41 | 0:04:13 | 0:03:22 | 0:04:13 | 0:04:13 | 0:04:13 | 0:04:34 | 0:04:34 | 0:05:29 | 0:04:34 | 0:07:21 | 0:04:36 |
| 3C | 0:06:26 | 0:22:00 | 0:45:42 | 1:41:18 | 3:30:20 | 44.5 | 0:00:49 | 0:04:05 | 0:01:37 | 0:04:03 | 0:03:15 | 0:04:04 | 0:01:43 | 0:04:18 | 0:03:26 | 0:04:18 | 0:04:18 | 0:04:18 | 0:04:41 | 0:04:41 | 0:05:37 | 0:04:41 | 0:07:32 | 0:04:43 |
| | 0:06:35 | 0:22:30 | 0:46:41 | 1:43:30 | 3:34:45 | 43.4 | 0:00:50 | 0:04:10 | 0:01:40 | 0:04:10 | 0:03:20 | 0:04:10 | 0:01:45 | 0:04:23 | 0:03:31 | 0:04:24 | 0:04:24 | 0:04:24 | 0:04:46 | 0:04:46 | 0:05:44 | 0:04:47 | 0:07:41 | 0:04:48 |
| 4A | 0:06:44 | 0:23:00 | 0:47:43 | 1:45:48 | 3:39:22 | 42.3 | 0:00:51 | 0:04:15 | 0:01:42 | 0:04:15 | 0:03:24 | 0:04:15 | 0:01:48 | 0:04:30 | 0:03:36 | 0:04:30 | 0:04:30 | 0:04:30 | 0:04:52 | 0:04:52 | 0:05:52 | 0:04:53 | 0:07:51 | 0:04:54 |
| | 0:06:54 | 0:23:30 | 0:48:49 | 1:48:13 | 3:44:11 | 41.2 | 0:00:52 | 0:04:20 | 0:01:44 | 0:04:20 | 0:03:28 | 0:04:20 | 0:01:50 | 0:04:35 | 0:03:40 | 0:04:35 | 0:04:35 | 0:04:35 | 0:05:00 | 0:05:00 | 0:06:00 | 0:05:00 | 0:08:00 | 0:05:00 |
| 4B | 0:07:03 | 0:24:00 | 0:49:51 | 1:50:31 | 3:28:46 | 40.2 | 0:00:53 | 0:04:25 | 0:01:46 | 0:04:25 | 0:03:32 | 0:04:25 | 0:01:52 | 0:04:40 | 0:03:44 | 0:04:40 | 0:04:40 | 0:04:40 | 0:05:05 | 0:05:05 | 0:06:06 | 0:05:05 | 0:08:10 | 0:05:06 |
| | 0:07:13 | 0:24:30 | 0:50:56 | 1:52:54 | 3:53:32 | 39.2 | 0:00:54 | 0:04:30 | 0:01:48 | 0:04:30 | 0:03:37 | 0:04:31 | 0:01:54 | 0:04:45 | 0:03:49 | 0:04:46 | 0:04:46 | 0:04:46 | 0:05:11 | 0:05:11 | 0:06:13 | 0:05:11 | 0:08:20 | 0:05:13 |
| 4C | 0:07:22 | 0:25:00 | 0:51:57 | 1:55:09 | 3:58:00 | 38.3 | 0:00:54 | 0:04:30 | 0:01:48 | 0:04:30 | 0:03:38 | 0:04:33 | 0:01:56 | 0:04:50 | 0:03:52 | 0:04:50 | 0:04:50 | 0:04:50 | 0:05:16 | 0:05:16 | 0:06:19 | 0:05:16 | 0:08:28 | 0:05:18 |
| | 0:07:31 | 0:25:30 | 0:53:00 | 1:57:29 | 4:02:39 | 37.4 | 0:00:55 | 0:04:35 | 0:01:50 | 0:04:35 | 0:03:40 | 0:04:35 | 0:01:58 | 0:04:55 | 0:03:56 | 0:04:55 | 0:04:55 | 0:04:55 | 0:05:21 | 0:05:21 | 0:06:25 | 0:05:21 | 0:08:36 | 0:05:23 |
| 5A | 0:07:40 | 0:26:00 | 0:53:59 | 1:59:39 | 4:06:56 | 36.6 | 0:00:55 | 0:04:35 | 0:01:51 | 0:04:38 | 0:03:42 | 0:04:38 | 0:01:59 | 0:04:58 | 0:03:58 | 0:04:58 | 0:04:58 | 0:04:58 | 0:05:25 | 0:05:25 | 0:06:31 | 0:05:26 | 0:08:44 | 0:05:28 |
| | 0:07:50 | 0:26:30 | 0:55:08 | 2:02:11 | 4:11:57 | 35.7 | 0:00:56 | 0:04:40 | 0:01:52 | 0:04:40 | 0:03:45 | 0:04:41 | 0:02:00 | 0:05:00 | 0:04:01 | 0:05:01 | 0:05:01 | 0:05:01 | 0:05:31 | 0:05:31 | 0:06:37 | 0:05:31 | 0:08:52 | 0:05:33 |
| | 0:07:59 | 0:27:00 | 0:56:04 | 2:04:14 | 4:15:59 | 35 | 0:00:57 | 0:04:45 | 0:01:54 | 0:04:45 | 0:03:48 | 0:04:45 | 0:02:02 | 0:05:05 | 0:04:04 | 0:05:05 | 0:05:05 | 0:05:05 | 0:05:35 | 0:05:35 | 0:06:42 | 0:05:35 | 0:08:59 | 0:05:37 |
| 5B | 0:08:08 | 0:27:30 | 0:57:10 | 2:06:39 | 4:20:47 | 34.2 | 0:00:58 | 0:04:50 | 0:01:55 | 0:04:48 | 0:03:50 | 0:04:48 | 0:02:03 | 0:05:08 | 0:04:06 | 0:05:08 | 0:05:08 | 0:05:08 | 0:05:40 | 0:05:40 | 0:06:48 | 0:05:40 | 0:09:07 | 0:05:42 |
| | 0:08:17 | 0:28:00 | 0:58:10 | 2:08:50 | 4:25:07 | 33.5 | 0:00:58 | 0:04:50 | 0:01:56 | 0:04:50 | 0:03:53 | 0:04:51 | 0:02:04 | 0:05:10 | 0:04:09 | 0:05:11 | 0:05:11 | 0:05:11 | 0:05:45 | 0:05:45 | 0:06:54 | 0:05:45 | 0:09:15 | 0:05:47 |
| | 0:08:27 | 0:28:30 | 0:59:12 | 2:11:07 | 4:29:37 | 32.8 | 0:00:59 | 0:04:55 | 0:01:58 | 0:04:55 | 0:03:56 | 0:04:55 | 0:02:06 | 0:05:15 | 0:04:12 | 0:05:15 | 0:05:15 | 0:05:15 | 0:05:49 | 0:05:49 | 0:06:59 | 0:05:49 | 0:09:22 | 0:05:51 |
| 5C | 0:08:36 | 0:29:00 | 1:00:17 | 2:13:28 | 4:34:15 | 32.1 | 0:01:00 | 0:05:00 | 0:01:59 | 0:04:58 | 0:03:58 | 0:04:58 | 0:02:07 | 0:05:18 | 0:04:14 | 0:05:18 | 0:05:18 | 0:05:18 | 0:05:54 | 0:05:54 | 0:07:05 | 0:05:54 | 0:09:30 | 0:05:56 |
| | 0:08:45 | 0:29:30 | 1:01:15 | 2:15:34 | 4:38:22 | 31.5 | 0:01:00 | 0:05:00 | 0:02:00 | 0:05:00 | 0:04:01 | 0:05:01 | 0:02:08 | 0:05:20 | 0:04:17 | 0:05:21 | 0:05:21 | 0:05:21 | 0:05:58 | 0:05:58 | 0:07:10 | 0:05:58 | 0:09:37 | 0:06:01 |
| | 0:08:55 | 0:30:00 | 1:02:24 | 2:18:05 | 4:43:20 | 30.8 | 0:01:01 | 0:05:05 | 0:02:02 | 0:05:05 | 0:04:04 | 0:05:05 | 0:02:10 | 0:05:25 | 0:04:20 | 0:05:25 | 0:05:25 | 0:05:25 | 0:06:04 | 0:06:04 | 0:07:17 | 0:06:04 | 0:09:45 | 0:06:06 |
| 6 | 0:09:04 | 0:30:30 | 1:03:26 | 2:20:19 | 4:47:44 | 30.2 | 0:01:01 | 0:05:05 | 0:02:03 | 0:05:08 | 0:04:06 | 0:05:08 | 0:02:11 | 0:05:28 | 0:04:22 | 0:05:28 | 0:05:28 | 0:05:28 | 0:06:08 | 0:06:08 | 0:07:22 | 0:06:08 | 0:09:52 | 0:06:10 |
| | 0:09:22 | 0:31:30 | 1:05:24 | 2:24:36 | 4:56:10 | 29.1 | 0:01:03 | 0:05:15 | 0:02:06 | 0:05:15 | 0:04:12 | 0:05:15 | 0:02:13 | 0:05:33 | 0:04:27 | 0:05:34 | 0:05:34 | 0:05:34 | 0:06:17 | 0:06:17 | 0:07:32 | 0:06:17 | 0:10:06 | 0:06:19 |
| | 0:09:41 | 0:32:30 | 1:07:30 | 2:29:10 | 5:05:07 | 28 | 0:01:04 | 0:05:20 | 0:02:08 | 0:05:20 | 0:04:16 | 0:05:20 | 0:02:16 | 0:05:40 | 0:04:32 | 0:05:40 | 0:05:40 | 0:05:40 | 0:06:26 | 0:06:26 | 0:07:43 | 0:06:26 | 0:10:20 | 0:06:28 |
| | 0:09:59 | 0:33:30 | 1:09:33 | 2:33:33 | 5:13:45 | 27 | 0:01:05 | 0:05:25 | 0:02:10 | 0:05:25 | 0:04:20 | 0:05:25 | 0:02:18 | 0:05:45 | 0:04:36 | 0:05:45 | 0:05:45 | 0:05:45 | 0:06:34 | 0:06:34 | 0:07:53 | 0:06:34 | 0:10:34 | 0:06:36 |
| | 0:10:19 | 0:34:30 | 1:11:42 | 2:38:13 | 5:22:53 | 26 | 0:01:06 | 0:05:30 | 0:02:12 | 0:05:30 | 0:04:25 | 0:05:31 | 0:02:20 | 0:05:50 | 0:04:41 | 0:05:51 | 0:05:51 | 0:05:51 | 0:06:43 | 0:06:43 | 0:08:04 | 0:06:43 | 0:10:49 | 0:06:46 |
| 7 | 0:10:37 | 0:35:30 | 1:13:46 | 2:42:39 | 5:31:35 | 25.1 | 0:01:07 | 0:05:35 | 0:02:15 | 0:05:38 | 0:04:30 | 0:05:38 | 0:02:23 | 0:05:58 | 0:04:46 | 0:05:58 | 0:05:58 | 0:05:58 | 0:06:52 | 0:06:52 | 0:08:14 | 0:06:52 | 0:11:02 | 0:06:54 |
| | 0:10:37 | 0:36:30 | 1:13:46 | 2:42:39 | 5:31:35 | 24.3 | 0:01:08 | 0:05:40 | 0:02:17 | 0:05:43 | 0:04:34 | 0:05:43 | 0:02:25 | 0:06:03 | 0:04:50 | 0:06:03 | 0:06:03 | 0:06:03 | 0:06:59 | 0:06:59 | 0:08:23 | 0:06:59 | 0:11:15 | 0:07:02 |
| | 0:11:13 | 0:37:30 | 1:17:46 | 2:51:11 | 5:48:18 | 23.5 | 0:01:09 | 0:05:45 | 0:02:19 | 0:05:48 | 0:04:38 | 0:05:48 | 0:02:27 | 0:06:08 | 0:04:54 | 0:06:08 | 0:06:08 | 0:06:08 | 0:07:08 | 0:07:08 | 0:08:33 | 0:07:08 | 0:11:28 | 0:07:10 |
| | 0:11:33 | 0:38:30 | 1:19:55 | 2:55:47 | 5:57:19 | 22.7 | 0:01:11 | 0:05:55 | 0:02:21 | 0:05:53 | 0:04:42 | 0:05:53 | 0:02:29 | 0:06:13 | 0:04:58 | 0:06:13 | 0:06:13 | 0:06:13 | 0:07:16 | 0:07:16 | 0:08:43 | 0:07:16 | 0:11:42 | 0:07:19 |
| | 0:11:50 | 0:39:30 | 1:21:54 | 3:00:01 | 6:05:36 | 22 | 0:01:11 | 0:05:55 | 0:02:23 | 0:05:58 | 0:04:46 | 0:05:58 | 0:02:31 | 0:06:18 | 0:05:02 | 0:06:18 | 0:06:18 | 0:06:18 | 0:07:24 | 0:07:24 | 0:08:53 | 0:07:24 | 0:11:54 | 0:07:26 |

Variety: Pace Reps and Strides

Intensity: Reps are fast, but not necessarily "hard," because work bouts are relatively short and are followed by relatively long recovery bouts. Recoveries are to be long enough that each run feels no more difficult than the previous run, because the purpose of Reps is to improve speed and economy and you can not get faster (nor more economical) if you are not running relaxed. If it takes 3 minutes recovery between Rep 400s, then that is what is needed. Reducing rest time between individual work bouts does not make for a better workout, in fact it probably makes for a worse workout because the short rests could increase the stress and lead to poor economy. Think of Reps as similar to current 1500 race pace.

Purpose: To improve your speed and economy.

Variety: VO2max Intervals

Intensity: Generally in the range of 95-100% of VO2max or 98-100% of HRmax. Intervals are "hard" but not all-out running by any means. Usually at a pace that you could maintain for about 10-15 minutes in a serious race. Intervals are best if they involve runs of 3 to 5 minutes each (800m and 1000m workouts are typical), with jog recoveries of similar duration (not necessarily, equal distance); relative to the runs they follow. If a workout calls for "hard" runs, then go by feel and imagine 5k race pace, as he intensity of each run.

Purpose: Stress your aerobic power (VO2max). It takes about two minutes for you to gear up to functioning at VO2max so the ideal duration of an "Interval" is 3-5 minutes each. The reason not to go past 5-minutes is to prevent anaerobic involvement, which can result in blood-lactate build-up.

Variety: Steady, prolonged or tempo runs or intermittent runs, also called cruise intervals

Intensity: Generally in the range of 83-88% of VO2max or 88-92% of HRmax. Threshold pace is comfortably hard running for either a steady 3-4 miles (or 5 to 6km) or repeated runs of 5 to 15 minutes each, with 1 to 3 minutes of rest between the runs.

Purpose: To improve endurance.