

## **Stryd 25 vs. Stryd 27: Comparing Running Metrics Between a Predecessor and “The Next Gen Stryd”**

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### **ABSTRACT**

Wearable technology has claimed the top spot in the Worldwide Survey of Fitness Trends in all but two years since 2016. A popular wearable among runners is the Stryd power meter. The company markets its latest model, the Stryd 27, as 5x more responsive in measuring running power. Yet, it is unclear whether the new model performs differently than its predecessor. **PURPOSE:** This study aimed to compare running metrics of the Stryd 25 and Stryd 27 in self-paced and interval runs. **METHODS:** Participants consented ( $N = 16$ ; 50% female; height =  $174.1 \pm 8.1$  centimeters [cm]; mass =  $73.0 \pm 12.4$  kilograms) and were equipped with the Stryd 25 and Stryd 27, attached randomly to the left and right shoelaces. Each Stryd was paired with a separate mobile device using the Stryd app. Researchers started and stopped recording on each Stryd simultaneously. Participants ran for 10 minutes at a self-selected pace counterclockwise around an indoor track (10 laps/mile) before resting for five minutes. Then participants ran 10 more minutes, alternating between fast and slow intervals: 120 seconds (s)  $\times$  2, 60 s  $\times$  2, 30 s  $\times$  4, and 15 s  $\times$  8. Fast and slow intervals were 20% faster and 20% slower, respectively, than the participant's mean pace of the first run. The Stryd app recorded power in watts (W), cadence in steps per minute (spm), vertical oscillation (VO) in cm, and stride length in meters (m). Four independent  $t$ -tests were run to compare these measurements between the two Stryd models for the self-paced and interval runs. The alpha level was .05, and the effect size was Cohen's  $d$  (0.2 small, 0.5 medium, 0.8 large). **RESULTS:** See Table 1. **CONCLUSION:** Four running metrics were statistically similar between the Stryd 25 and Stryd 27 during two indoor runs. Runners using the predecessor indoors can be confident it returns similar data to the newest model.

**Table 1.** Measurements by the Stryd 25 vs. Stryd 27.

	Self-Paced			Interval		
	Stryd 25	Stryd 27	Statistics	Stryd 25	Stryd 27	Statistics
Running Power (W)	210 $\pm$ 40	208 $\pm$ 39	$t(30) = 0.16$ $p = 0.87, d = 0.06$	216 $\pm$ 43	215 $\pm$ 43	$t(30) = 0.08$ $p = 0.94, d = 0.03$
Cadence (spm)	165 $\pm$ 11	164 $\pm$ 11	$t(30) = 0.28$ $p = 0.78, d = 0.10$	166 $\pm$ 11	165 $\pm$ 11	$t(30) = 0.34$ $p = 0.74, d = 0.12$
VO (cm)	7.1 $\pm$ 1.3	6.9 $\pm$ 1.4	$t(30) = 0.38$ $p = 0.71, d = 0.13$	6.7 $\pm$ 1.5	6.6 $\pm$ 1.6	$t(30) = 0.15$ $p = 0.88, d = 0.05$
Stride Length (m)	0.97 $\pm$ 0.16	0.96 $\pm$ 0.15	$t(30) = 0.17$ $p = 0.87, d = 0.06$	1.00 $\pm$ 0.15	0.99 $\pm$ 0.16	$t(30) = 0.09$ $p = 0.93, d = 0.03$