

SpinScan®: Smoother is Faster

RacerMate®
one

*Training for a smooth pedal stroke contributes to consistent speeds and unlocks peak potentials. How do you improve your pedal stroke? **SpinScan®**.*

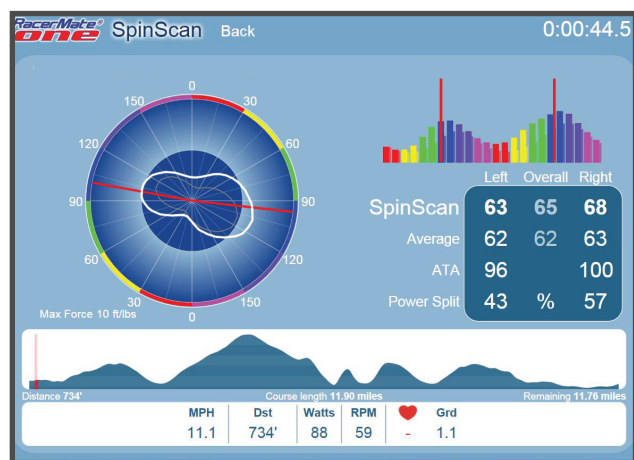
SpinScan® is a key piece of the CompuTrainer and Velotron software suite that analyzes pedaling efficiency with pinpoint accuracy. SpinScan measures the direct torque exerted on the pedal at every angle of its rotation, allowing for precise rider analysis. The more efficient you are, the faster you can be.

SpinScan® Values

SpinScan values represent your total pedal stroke smoothness and efficiency. The smoother your pedal strokes, the higher the SpinScan values, and the flatter (bar graph) and rounder (polar) the SpinScan torque profiles will become (see examples below).

Average Torque Angles (ATA)

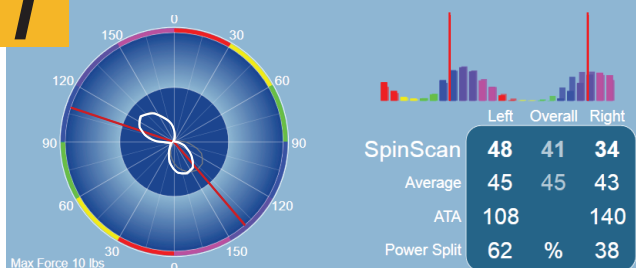
Your ATA is a single angle, represented by the red lines on the polar and bar graphs, which summarizes torque generation for each leg. The ideal ATA reading is 90 degrees, where each leg puts out the most torque at the most effective point in your pedal stroke.



Power Split

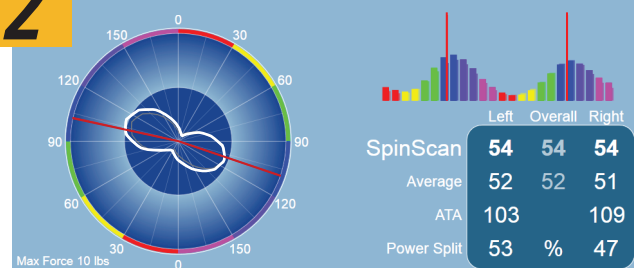
The Power Split is the percentage of your total power output produced by each leg. A 50-50 split contributes to smooth riding and maximum efficiency. This makes it an ideal feature for tracking leg injury rehabilitation progress.

1



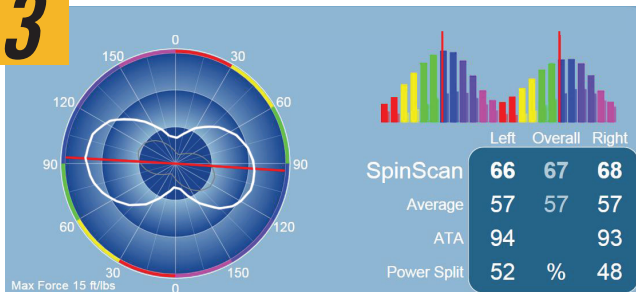
For an untrained rider, low SpinScan values, high ATA readings, and an uneven Power Split indicate inefficiency. This is reflected in a slim peanut shape on the polar graph and dramatic highs and lows in the bar graph.

2



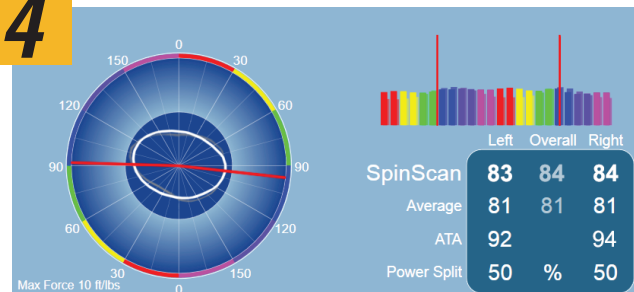
With some training, the SpinScan values will increase, resulting in a more rounded peanut shape. ATA values approaching 90 degrees bring the polar graph closer to horizontal, and the power split is more even.

3



Further training yields an even higher SpinScan score, ATA values closer to 90 degrees, and a consistently balanced power split.

4



Finally, an ideal pedal stroke yields consistently high SpinScan values, producing a rounded polar graph and a flat bar graph. This represents consistent torque throughout the entire pedal stroke. ATA readings are approximately 90, and there is an even power split.