

Push Off Strength



WHAT IT IS

It is a measure of Total Acceleration based on multiple data points, summed up as the swimmer pushes off the wall.

It is related to Speed, but influenced by gravity and turn type.

OUTPUT

A relative number, starting from 0, increasing as strength improves. Peak athletes typically max out in the 40's.

Highlights issues with turning too early, or too late; head position after turn; position when exiting the wall

The key is to combine the resulting relative number with other key metrics, comparing changes during a set and over time.



IMPACTS

Gravity - Sharp upward angles, or looking forward will produce a higher (not better) number. Sharp downward angles return a lower (not always worse) result. Slight angles are expected, with no impact on results.

Turn Type - Open turns always register a lower result, due to downward angle on exit for extended kick/pull-out

ADVICE

High stroke count on previous lap, with low Push Off Strength - try turning earlier, allowing room to position

Low Push Off Strength with low underwater time - try building more force on wall before pushing off

All other metrics OK, Push Off Strength score still low - try focusing on applying same pressure to both feet on the wall.



BENEFITS

Maintain speed accumulated during push off for as long as possible during length

Conserve energy for stroking during length

Use Push Off Strength to really dig into the turn exit, and capitalize on this velocity.