

# Smash Factor



## Smash Factor is ball speed divided by club speed

**Smash Factor relates to the amount of energy transferred from the club head to the golf ball.**

The higher the smash factor the better the energy transfer. A golfer would hope to achieve a smash factor near 1.50 on driver shots.

That means for a 100 mph club speed the ball speed would be 150 mph. The higher the loft of the club, the lower the smash factor is expected to be. A PW should have a smash factor near 1.25.

### DRIVER EXAMPLE

Golfer A has a club speed of 100 mph and a smash factor of 1.40. Golfer A's ball speed is 140 mph.

Golfer B has a club speed of 100 mph and a smash factor of 1.50. Golfer B's ball speed is 150 mph.

The 10 mph difference in ball speed between Golfer A and Golfer B equates to approximately 20 yards in distance between the two golfers even though they have the same club speed.

#### Technical Definition:

*Smash Factor – The ratio between the Ball Speed and the Club Speed*

## Tour Averages

### PGA TOUR

Driver – 1.49

6 iron – 1.38

### LPGA Tour

Driver – 1.49

6 iron – 1.39

### Male Amateur (Driver)

Scratch or Better – 1.49

5 HCP – 1.45

10 HCP – 1.45

Average Golfer (14.5) – 1.44

Bogey Golfer – 1.43

The standard assumption for smash factor comes from the TrackMan Optimizer. For the driver, a club speed of 94 mph, attack angle of 0 degrees, and optimized carry results in a smash factor of 1.46. For a 6-iron, a club speed of 80 mph and mid-trajectory results in a smash factor of 1.38. For a PW, a club speed of 72 mph and mid-trajectory results in a smash factor of 1.19.