

Properly Fit Longer Clubs = Lower Scores

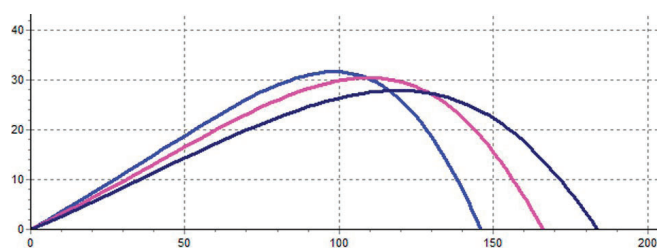
How do you determine the appropriate mix of fairway clubs and hybrids?

By Russ Ryden

For many golfers, finding the appropriate mix of hybrids and fairway clubs is a hit or miss proposition. We know we will benefit from head designs that are easier to hit, but without the assistance of a professional fitter, we usually miss finding the right mix of long clubs. Dialing in the right mix to deliver a sensible progression of distances can be an expensive trial and error process.

Ballistic Modeling

There are a number of software packages that model the flight of a golf ball. They vary in complexity and features, but the basic factors are speed and launch angle. If you want to explore this, you can download a free calculator at www.trajectoware.com.



To get the greatest distance for a given ball speed, there is an optimum launch angle. Head loft, head weight and angle of attack determine how your clubhead speed gets transformed into ball speed. That is where the science and art of clubfitting intersect.

Club Speed

Generally, as a golf club gets longer, the clubhead speed increases. But for amateur golfers there is a point of diminishing return. Increases in length add very little speed and also increase the likelihood of off-center impacts. With an off-center impact, the head speed is not fully transformed into ball speed. This is when we move from iron heads to hybrid or fairway heads. These clubs' heads are more forgiving on toe and heel off-center impacts.

Custom Profile Fitting

The first step in filling out the long end of your bag is to determine your club/ball speeds and clublength profile. Then that profile is fit to the appropriate launch angles to create consistent increases in distance from club to club.

Let's do a simple example. For this example, the golfer's swing speed increment on the long end of the bag is two miles per hour per length increment. The table below shows the distances he/she would get with a typical set of hybrids and what is possible with optimal lofts properly matched to the club speed increments.

Speed MPH	Hybrid Lofts	Carry Distance	Optimal Lofts	Carry Distances
84	18	183	14	190
82	21	166	18	180
80	24	146	19.5	170

Strategic Considerations

Do you prefer high flying, high spinning shots that drop out of the air and stop dead at impact? Or, do you like low, boring trajectories that bump and run, adding distance? Your long clubs can be fit to deliver either. That high spinning shot could contribute to a few pars, while the bump and runner only gets you a shorter iron shot into a green you cannot reach anyway.

I have barely scratched the surface of long iron fitting in this article. Find a custom fitter with the equipment to track club and ball speed and get your long clubs properly fit to your game. An experienced fitter will streamline the fitting process and determine the right mix of long clubs. Your end result will be more predictable shot-making and lower scores.



Russ Ryden does clubfittings by appointment at the Golden Bear Golf Center in Carrollton and at Bob Moore's Sports Center in Colleyville. He is an AGCP Master Clubfitter and is Titleist Performance Institute Certified. He can be reached at 817-247-3110. Visit his Web site at www.Fit2Score.com for more information about custom fit golf clubs.