

DRIVER SHAFTS – Understanding Flex

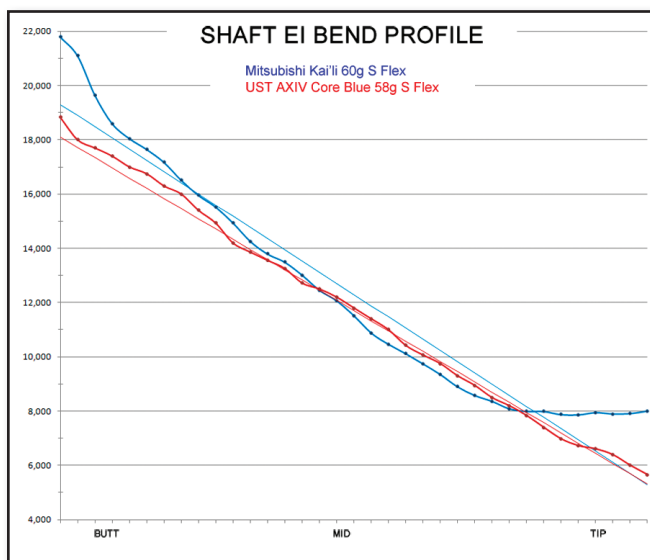
Find out how to select a shaft to fit your swing

By Russ Ryden

WHEN WE LOOK AT DRIVER SHAFT SELECTIONS we see them rated by weight, flex, kick point and torque. What does this mean, and more importantly, how do you pick the right shaft?

There is probably no topic in clubfitting that receives more attention. A complete review of the topic would more than fill this issue. I am going to briefly discuss how a shaft bend profile is matched to a swing.

Shaft manufacturers use a measurement system called EI bend profiling. You can see artist renditions of the profiles on the Mitsubishi Rayon Golf Web site (www.mitsubishirayongolf.com). A few other manufacturers show you these graphics, but all use it for shaft design.



This is what an EI profile comparison looks like to a shaft engineer. The straight line shows the trend. You can see the area of the shaft that is stiffer or softer by looking at its relationship to the trend line.

The UST AXIV Core Blue follows the trend line closely. It will release stored energy like a perfect whip. The Mitsubishi Kai'li illustrates a stiff butt, stiff tip design. Both companies offer a wide range of shaft profiles.

We have all had that day when our friend shows up with a new driver and hits balls into the net at the end of the range. Yet, when

you hit his magic driver it does nothing for you. What gives? He got lucky; he found a shaft that fit his swing. That same shaft will not work with your swing. But all is not lost, as a professional fitter can find a shaft to fit you. These are some of the guidelines he or she should follow:

Transition

How do you change from backswing to downswing – is it smooth or fast? A golfer with a fast, abrupt transition needs a shaft with a stiffer butt section. It will resist that initial loading and not distort. A golfer with a smooth gradual transition needs a softer butt section to begin loading the shaft at the top of his swing.

Acceleration – Tempo

Consistent acceleration loads the shaft and maintains the load. Two golfers with the same swing speed may accelerate differently. The slow accelerating swinger needs a softer shaft than the late accelerating hitter.

Release

The timing of your wrist cock release determines the tip firmness. The later you release, the more you load the smallest and softest part of the shaft, the tip. Release and tempo may be partners, blending into a smooth acceleration all the way to impact. This would call for a steady blend of mid and tip stiffness. Or, the wrist release may be a sudden, strong acceleration requiring a stiff tip to resist this load and deliver the clubhead squarely.

Putting It All Together

Shaft bend profile is one of many aspects of driver fitting. Weight, length, loft, face angle and grip size are also important considerations.

The shaft is the transmission in your golf engine; it needs to be matched to how you accelerate. A custom fitter that understands shaft profiles and has a wide selection of shaft styles, flexes and weights can match your swing to the right shaft.



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