

# Understanding Flex – What Do R, S, and X Mean?

## Selecting a shaft flex that fits your swing

By Russ Ryden, AGCP Master Fitter, President, Fit2Score

The question I am asked most often is “I know the letter designations don’t truly reflect the stiffness of the shaft. How do I find the flex that is right for me?”

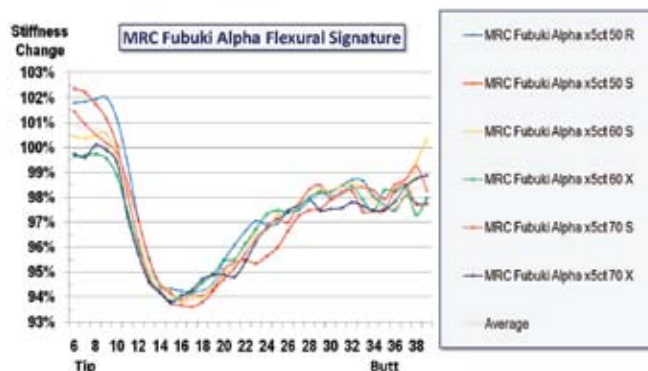
Let’s start with the first statement, the misconception that the letters have little meaning. Today’s golf shafts are technical marvels compared to the wooden shaft of the past. Understanding them is science. Finding the proper shaft for a golfer is a blend of science and art. The golfer sees the labels R, S and X. The competent custom fitter understands the flexural signatures of the shaft models he works with.

The letters on the shafts are a guideline from the shaft or equipment company about the appropriate speed range for that shaft. Golf equipment companies each have their own opinion about what specifications are best for a golfer’s swing speed. Manufacturers don’t necessarily agree with each other. But in general, the letters used by a company represent a benchmark for comparing and matching that company’s products to each other.

Jamie Pipes, Director of Product Development at UST Mamiya’s Fort Worth headquarters says, “We use flex designations to give the golfer a guide to match his speed to our shafts. This is presented at our Web site, [www.ustmamiya.com](http://www.ustmamiya.com). The speeds overlap, so how a golfer loads and unloads a shaft is also an important aspect of shaft selection.”

### Shaft Loading

Clubhead speed comes from how you sequence the acceleration and deceleration of your pelvis, trunk, arms and club. Great ball strikers accelerate each segment, then slow it down as the next segment starts to accelerate. Known as kinematic sequencing, how you overlap the segments creates your acceleration profile. That profile interacts with the flexural signature of a shaft. Finding the best match of loading to the shaft flexural profile is where the art of clubfitting takes over from science.



### Flexural Signature

In the chart above, each of the weights and flexes of the Mitsubishi Fubuki Alpha are charted on the change of stiffness from point to point down the shaft. While each of these shafts has a different weight and flex, they all exhibit the same flexural signature. Ben Grusin of Mitsubishi Golf technical support comments, “MRC offers 12 different driver shaft EI profiles in a wide range of flexes and weights to give our authorized dealers the opportunity to match the many variables of a golf swing with the correct profile.”

### Putting It All together

Back to our original question – what do the R, S and X ratings of a shaft mean? There is no simple answer. The R version of one shaft design may be a better fit to your swing than the S flex of another. The best way to find the right shaft for your swing is to work with a custom fitter that has a system of interchangeable shafts and the equipment to accurately track the clubhead and ball.

A professional custom clubfitter, conducting the informed trial and error process of custom clubfitting, is the fast track to finding the right shaft for your golf swing.



Russ Ryden does custom clubfittings by appointment at the Golden Bear Golf Center in Carrollton and at Bob Moore’s Sports Center in Colleyville. He invented and manufactures the patent-pending Flexural Signature Shaft Measuring Instrument. He is an AGCP Master Club Fitter and is Titleist Performance Institute Certified. Visit his Web site at [www.fit2score.com](http://www.fit2score.com) or call 817-247-3110 for more information about custom golf club fitting.

