

## Club Fitting...Rubbish or Reality?

Are you an off the rack guy? Have you ever experienced a custom tailored suit? All of you fall into either category, so in this feature I will let you know the "real deal" on Club Fitting and expel the myths.

### Custom golf club fitting can make a huge difference in performance

The golf clubs displayed at golf shops and pro shops are built to standardized specifications. Every golfer is a bit different in size, body shape and the shape of their golf swing, so a custom fitting will result in clubs that are specifically suited to an individual's height, strength, clubhead speed and swing characteristics.

If the customer doesn't fit those specs, the equipment won't fit the customer. Without the proper club fit, no golfer will reach optimal performance. On top of that, the adjustments a golfer makes in his or her game to compensate for an ill-fitting set can make grooving a great swing that much more difficult.

It is a necessity for golfers to receive a custom club fitting, from a trained and experienced club fitter, before making a golf club investment. A club-fitting can be performed by nearly any pro shop or golf pro, although it's best to get with a teaching pro and be certain to hit balls outdoors so that the ball flight can be observed.

By watching the ball flight produced by each variation of a club, and checking chalk marks left on adhesive strips attached to the clubface and sole, a club-fitter can quickly narrow the search and lead the student to the best fit. Fittings can be done for every club in the bag, the most common fittings are done with Drivers and irons, however more recently the importance of fitting wedges and even putters has become popular.

Contrary to the belief of many, club-fitting does not have to be a time-consuming or expensive endeavor. A very basic club-fitting might take as little as 15 minutes, with the average being 30-45 minutes.

More in-depth fittings can take a half day, but are only likely to be necessary for the very best players.

During the fitting, the golfer hits many variations of the same club. For instance, a well-equipped fitting center might have dozens (in some cases, hundreds) of a particular club, say a Mizuno 6-iron. Each of the Mizuno 6-irons will be different from the next in some way.

**A good professional club fitter** will test the following seven interrelated variables during a custom fitting session: shaft length; lie angle; shaft flex; shaft type; grip size; golf club head design; and set make up. Each variable is briefly explained below:

- **Shaft Length:** Among other things, shaft length will impact where on the clubface the ball is consistently struck. The correct shaft length will prevent a golfer from having to alter a natural swing arc in order to make optimal impact.
- **Lie Angle:** This is the angle formed by the shaft and sole of the club. Having a correct lie angle will cause the center of the club-head to touch the ground. If the toe of the club-head is raised, a hooking shot may result. Should the heel be raised, a push or slice may result.

### Golf Club Fitting

If you do this..	Then you may need...
Hook or pull your shots	more of an open face angle (woods)
	a stiffer shaft
	a flatter lie
	a larger grip
	to check your club length
Slice or push your shots	more of a closed face angle (woods)
	a more flexible shaft
	a more upright lie
	a smaller grip
	to check your club length
Hit too high a trajectory	less loft
	a stiffer shaft
	a higher center of gravity club
	to check your club length
Hit too low a trajectory	more loft
	a more flexible shaft
	a lower center of gravity club
	check your club length
have an non-solid feeling when you hit	to adjust our lie angles
	check for proper grip size
	check your club length
	a more flexible shaft
	a heavier club
get a loss of distance when hitting	a lighter golf club
	a more flexible shaft
	a smaller grip
	lower your trajectory
	to check for proper lofts and lies
	check your club length

- **Shaft Flex:** The shaft flex impacts things such as trajectory, accuracy, distance and consistency. During the golf swing, the club "flexes" throughout until squarely meeting the ball at impact. An incorrect shaft flex significantly reduces the chance of making consistently solid contact.
- **Shaft Type:** Here, again, personal characteristics make the decision. The composition of steel and graphite shafts, their kick (or bend) points, swing weights and torque ratings are considerations
- **Grip Size:** The right grip size can impact the golfers ability to return the clubface to a square position and release the wrists through impact. Also, with the variety of grip compositions, personal preference is a determining factor.
- **Club head Design:** With the advent of MOI (moment of inertia) importance, this factor has become a big consideration, particularly with higher handicappers. When shots are struck outside the sweet spot, a high MOI reduces twisting at impact, delivering shots closer to the target area.
- **Set Make Up:** The new hybrid clubs have given golfers a wider range of choices in the clubs they carry in their bag, their set make up. Numerous lofts and designs in woods, hybrids, irons and wedges make the need for professional custom club fitting more important.

Due to the interrelatedness and number of variables, it is difficult, if not impossible for anyone aside from a professional to conduct a proper club fitting. Online golf retailers offer club fitting, but often all factors aren't considered. Club fitters should be able to give golfers personal attention and many often use technology in the form of launch monitors as one means of assessment.

A launch monitor typically measures clubhead speed, ball speed, launch angle, spin rate, carry distance and overall distance. Measuring these characteristics, along with others, will help the club fitter select the proper clubs for each golfer. Many golf shops will offer club fitting without requiring club purchase, albeit for a fee.

After a custom club fitting, golfers will feel confident that they have made a good decision in their investment. The added confidence will enhance performance almost as much as the custom fitting itself.

## Custom Fitting Myths

I'm just starting out...I'm not good enough for Custom Fit Clubs. False, You probably aren't as good as you can be!

### **I've been golfing for a while, I don't need to be fitted.**

Maybe not, but depending on the brand you have been using and perhaps taking into consideration some physical attributes you should be re-fit before buying another set of clubs.

### **I don't need to get fitted in person, I can do it over the Web!**

Not all measurements are those that can gathered by yourself. The Custom Fitting process is broken down into 2 distinct phases: Static and Dynamic. Some of the static measurements you can obtain yourself, but the dynamic fitting is where your natural form is analyzed under the keen eye of your skilled fitter to determine the "your" clubs!

### **It is more expensive to have clubs custom fitted.**

Actually, not true. Mizuno charges you no more to create you "your" perfect equipment. You may be charged a fitter's fee but most likely this can be applied to your new purchase.

### **Custom Fitting takes a lot of time and will delay my order.**

Definitely not. The actual fitting can take anywhere from 20 minutes to several hours - depending on how long it takes the fitter to collect all the information. Once all the information has been obtained by us your new set of clubs will ship out between 5 to 10 business days.

<b>Length</b>	The ability of the golfer to strike the ball consistently on the sweet spot is the determining factor when deciding on the desired club length.
<b>Shaft</b>	Shaft flex can affect distance, ball flight, trajectory and feel. Club head speed and tempo are key measurements
<b>Lie Angle</b>	Lie Angle influences both the set up position and how the ground affects the angle of the clubface through impact.
<b>Loft</b>	Ball trajectory is the primary influence of loft.
<b>Grip</b>	Small or Large hands and grip size are not the only determining factor for grip size.

Club fitting will take into account several characteristics of the golf club when determining which club setup is for you. The main ones are as follows:

**Length of club** - This is very important on a couple of levels, one is that you want the proper length club so that you feel comfortable with it in your hand. You won't feel the need to choke up on the shaft or feel like you are reaching for the ball. The proper length of club also lets the club maker assemble your club to have the correct flex in the shaft. If you choke up on the club you are in essence moving the kick point which in turn stiffens the shaft. Think of a telephone pole, when the pole is long, it can sway in the wind, cut it shorter and it is extremely stiff.

**Loft issues** - For some players, loft fitting becomes a factor. If you hit the ball too high, you may be told that you need stronger lofted clubs or low trajectory clubs, if you just don't get the ball up, you may be told that you need higher trajectory clubs. This is more of an advanced kind of fitting as most clubs can't be adjusted this way, they have to be cast or forged strong or weak. Some companies offer lines of clubs this way, usually designated as pro versions for lower trajectory, or ht for higher trajectory.

**The following are some points to consider when discussing Club fitting:**

**GRIP SIZE**




Grip fitting - The size of the grip is important if you have very big hands or very small hands, or arthritis or some other medical reason that needs to be addressed. This is usually determined by your glove size.

The Size is the most important factor to consider when choosing a grip. The wrong size can affect the directional outcome of the shot. Too small a grip could promote pulling the ball, and too big a grip could promote a slice.

There is no exact science to fitting a grip. However, it is generally considered by clubmakers that the fingertips of the upper hand should just be touching the pad of the upper hand whilst holding the golf club. Other considerations to grip size could be arthritis or tennis elbow where a larger grip would be fitted to aid gripping.

As well as standard, midsize and jumbo grips from manufacturers, custom sizes can also be achieved with the use of build up tape under the grip. A size change of as little as 1/64" can be made by the club-maker.



Grips also come with differing inside core diameters, the usual being .580" and .600". If the core size does not match the butt size of the shaft, this will also change the size of the grip. Description: Grips size is very important in a custom golf club fitting. An improper grip size can cause the following:

<p><b>Too Large</b></p> <ul style="list-style-type: none"> <li>• Tend to block shots to right</li> <li>• Reduces swing weight because of more weight to the grip end of the club</li> <li>• Loss of feel</li> </ul>	
<p><b>Too Small</b></p> <ul style="list-style-type: none"> <li>• Tend to hook or pull shot left of target</li> <li>• Loss of feel</li> </ul>	
<p><b>Correct Grip Size</b></p> <ul style="list-style-type: none"> <li>• More accurate shots</li> <li>• Better feel</li> </ul>	

**SHAFT FLEX**

Flex of the shaft - This is determined by the club speed. Too flexible of a shaft makes accuracy a problem as the club head will not square up, too stiff of a shaft means distance problems as you will lose the power of the shaft in the swing because your speed will not be enough to get it to flex.

Description: The "Shaft Flex" is an important part of a custom golf club fitting. As a golfer swings the club, the shaft will bend. Shaft deflection is measured by how much the shaft bends to the individual golfer's swing speed, or by the distance in which he hits the golf ball.

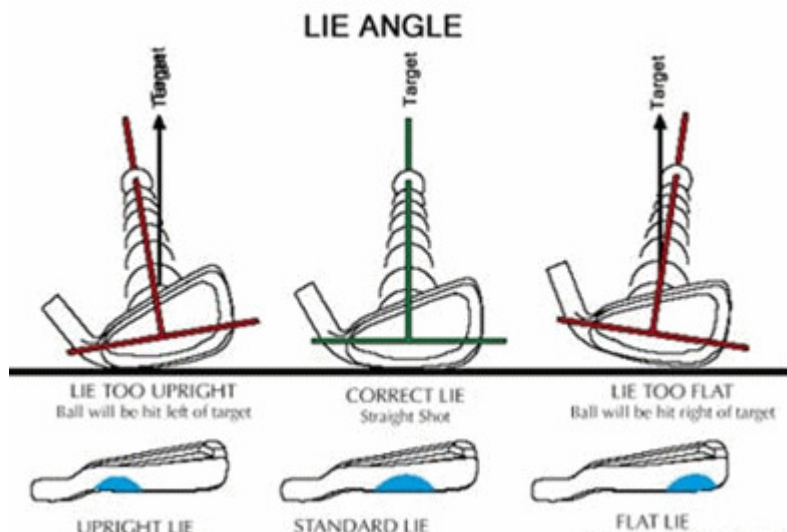
<p><b>Shaft is too Stiff</b></p> <ul style="list-style-type: none"> <li>• Loss of distance and feel</li> <li>• Ball tends to go low and right</li> <li>• Loss of ball spin and consistency</li> </ul>	
<p><b>Shaft is too soft</b></p> <ul style="list-style-type: none"> <li>• Ball tends to hook with inside out swing</li> <li>• Ball tends to slice with outside in swing</li> <li>• Loss of accuracy</li> </ul>	
<p><b>Correct shaft flex</b></p> <ul style="list-style-type: none"> <li>• Straighter and more accurate shots</li> <li>• Better Consistency.</li> </ul>	

## LIE ANGLES

Description:

The Lie Angle is a very important part of a custom golf club fitting. The Lie Angle determines the direction or accuracy of which the ball travels based upon how the sole of the golf club hits the ground at impact.

Lie angle of the head - The lie angle affects the heel and toe of the head. If the club is too flat, the toe will hit first, too upright the heel hits first. You want the middle of the club, below the sweet spot to make contact with the ground first.



### **How to test your lie:**

Place a 1/2" wide piece of masking tape on the sole of a mid iron. Set golf ball up on a flat, hard surface such as piece of flat plywood. Take a normal swing and hit the club on the surface until there is a mark on the masking tape.

### **Results:**

- If the mark on the tape is on the center of the club, your lie is correct.
- If the mark on the tape is towards the toe of the club, your lie is too flat, and needs to be more upright.
- If the mark on the tape is toward the heel of the club, your lie is too upright, and needs to be flatter.

If you would like further info on this and where to get fitted in Tokyo please drop me a line.

**Tom Fielding**