

Six Shaft Shootout - Part 1 Launch Monitor

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Towards the end of last year, Golf Gear did an extensive shootout involving six high end JDM shafts. They shafted all six shafts with the same Winbird Vertex 450cc 9.5* component head and hit balls outdoors and indoors on an Accusport Launch monitor and compiled stats and personal impressions. The launch monitor testing was done by Golf Gear pro Kenji Tanaka who has a 105-110mph swing. Club length was 45" and all shafts weighed in and around 60grams. The six shafts were:

Graphite Design Tour AD PT-6

Fujikura Rombax 6V05

Mamiya Op Axiv V 6070

Daiwa Roddio W6BA

Mitsubishi Diamana D63

Mizuno Quad 6Butt Standard

All shafts were stiff flex shafts and all clubs were put together with swingweights between D1.2 and D2. They used the same brand of ball for all tests, the Titleist Pro V1x.

Golf Gear decided they would start off with indoor launch monitor testing first then move outdoors to see if real life performance would live up to the numbers. Looking at the launch monitor results gives us some understanding of each shaft's characteristics. Keep into account that Tanaka Pro is not a hitting robot and there will be some variance in his swing speed. He took 8 swings with each club setup and chose the one that felt best as the results to be used for each shaft.

After finishing the launch monitor session they provided the following interesting results (these are

NOT averages but the results from the best feeling shot Tanaka pro had):

Head Speed (In Japan they measure the head speed at the moment of impact which can be considered swing speed)

Graphite Design Tour AD PT-6 = 109.6mph

Fujikura Rombax 6V05 = 108.9mph

Mamiya Op Axiv V 6070 = 105.5mph

Daiwa Roddio W6BA = 108.9mph

Mitsubishi Diamana D63 = 107.1mph

Mizuno Quad 6Butt Standard = 108.2mph

Basic feedback on the swing feel of these shafts from Tanaka pro during the launch monitor sessions had him praising the Rombax and Roddio for feel. As you can see from the results, when the shaft feels good, head speed is up. He felt like he had to work harder to swing the PT-6 and Quad 6Butt to achieve similar speeds. Tanaka pro pointed out that even though the Axiv had lower head speed compared to the other shafts, its performance results overall were still pretty good.

Ball Speed

Graphite Design Tour AD PT-6 = 159.5mph

Fujikura Rombax 6V05 = 160.0mph

Mamiya Op Axiv V 6070 = 154.6mph

Daiwa Roddio W6BA = 160.4mph

Mitsubishi Diamana D63 = 158.2mph

Mizuno Quad 6Butt Standard = 158.6mph

The speed at which the ball leaves the face, obviously has a strong connection to head speed, but you must also take into consideration that this test is done by a pro and his ability to hit the sweetspot is much better than an amateur whose ball speed will vary greatly depending on how close he is to the sweetspot.

Back Spin

Graphite Design Tour AD PT-6 = 2962rpm

Fujikura Rombax 6V05 = 2758rpm

Mamiya Op Axiv V 6070 = 2581rpm

Daiwa Roddio W6BA = 1833rpm

Mitsubishi Diamana D63 = 1401rpm

Mizuno Quad 6Butt Standard = 2372rpm

The amount of spin created on impact depends where on the club face the ball is struck as well as the angle. Faster swingers tend to create more spin with the flexing of the shaft. The PT-6 is a good example, as Tanaka-san pointed out, swinging harder with the shaft caused the shaft to shift more and created more spin on the other hand the Diamana bends upwards at impact and the upwards angle created the least spin.

Left Right Movement

Graphite Design Tour AD PT-6 = 5.6y Right

Fujikura Rombax 6V05 = **3.4y Right**
 Mamiya Op Axiv V 6070 = **3.8y Right**
 Daiwa Roddio W6BA = **1.5y Left**
 Mitsubishi Diamana D63 = **1.6y Left**
 Mizuno Quad 6Butt Standard = **1.1y Left**

The landing angle of the shot affects the left or right movement of the ball and side spin is a big factor. The PT-6 had difficulty going left. The Rombax and Axiv shafts also took the left side out of play. The Quad would go pretty much straight on a perfect hit.

Distance and Launch Angle (Carry in brackets, launch angle in degrees)



You can get an overview of total performance by looking at the distance. As the distance increases it shows the shaft and head combo are a good match for that player. In this case, the Roddio was the best match for Tanaka pro. Considering the lower head speed of the Axiv, the overall result was pretty good. Roddio had the highest launch with the second lowest spin which gained a lot of distance and is ideal for users looking for extra carry. Tanaka considered the Axiv to be the shaft with the ideal launch angle.

Bend Profile



Inpakuto.com Conclusion: So, bottom line is, finding a shaft that fits your game is not easy. There are many factors to take into account including your swing speed, swing style, your level of ability, the type of head it's matched to. Hopefully some launch monitor data like this can help you find your way. All these shafts are great performers, you just have to find the right one that matches your swing. Stay tuned for live testing of the same 6 shafts in Part 2.

DOWNLOAD THE LAUNCH MONITOR SESSION (it's all in Japanese but you can watch Tanaka hit the ball in slow motion ^^)

Download the 150mb Xvid file [here](#). I encoded the video in Xvid so if doesn't work for you please download the codec [here](#).

