# Club Fitting Report

| | |
|---|---|
| Golfer: | Mark Golfer |
| ID: | # 173174 |
| Date: | November 14, 2017 09:16 PM GMT |
| Type: | Cart Fit Iron Fitting |
| Location: | Swing Labs<br>732 Cable Beach Lane suite 1<br>North Palm Beach, FL 33410<br>561-626-0771<br>http://www.swinglabs.com |
| Fitter: | Mark DiMare |

On behalf of the entire team, we would like to thank you for selecting us to assist you in the fitting of your new golf equipment. Please do not hesitate to contact us in the future.

## CUSTOM REPORT

This fitting report contains the following sections:

- **Stock Club Report**
  Displays the stock clubs which will improve your performance, based upon the control club swing data.

**Best Club Report**

Displays details about selected clubs as they performed for you, with specifics regarding the selected best club. **Final length/lie: 37.750 / 62.00 (0.250 / 1.00), option: 1.**

| | | | |
|---|---|---|---|
| Mizuno 2017 JPX 900 Forged | 28.00 | True Temper DG AMT S300 | S |

**After-Market Shaft Report**

Displays the selected after-market shafts which will help to further optimize performance.

**Raw Data**

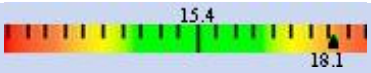
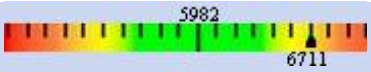
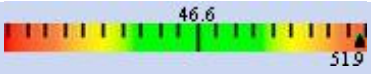
Displays the raw swing data from the fitting.

# Club Report

## Overview

| | | | |
|---|---|---|---|
|  |  |  |  |
| Control Club | Recommended | Recommended | Recommended |
| Mizuno | Titleist | Mizuno | TaylorMade |
| 2016 MP-25 | 2018 AP3 718 | 2017 JPX 900 Forged | 2017 P770 |
| (6I) 30.00 | (6I) 28.00 | (6I) 28.00 | (7I) 33.00 |
| S | S | S | S |
| steel | steel | steel | steel |
| Royal Precision | True Temper | True Temper | True Temper |
| Project X 6.0 | DG AMT S300 | DG AMT S300 | DG AMT S300 |

## Analysis

| Parameter | Units | Actual | Optimum | Diff |
|---|---|---|---|---|
| Club Speed | MPH | 91.0 | 91.0 | --- |
| Ball Speed | MPH | 123.5 | 128.3 | 4.8 |
| Distance | Yards | 162.3 | 182.0 | 19.7 |
| Direction | Yards | 3.0 | 0.0 | -3.0 |
| Launch | DEG |   | | |
| Back Spin | RPM |   | | |
| Descent | DEG |   | | |
| Loft | DEG | 30.0 | 28.0 | -2 |
| Flex | | S | S | --- |

Your analysis is based upon the averages of your control club swings. These averages are compared against the optimals for key ball flight parameters including launch angle, backspin, side spin, deviation, etc. based upon your clubhead speed of 91.0 miles per hour. Because the control club used was a 7-iron, values were converted and normalized against the 6-iron model.

Distance

## Fitting Recommendation

The clubs which have been recommended have the same characteristics which are:

Lower Launch Angle
These clubs were recommended based upon your current launch conditions. They create lower dynamic launch angles. Currently your launch angle is too high for your velocity. By lowering your launch angle you will create a better ball trajectory and increase your overall distance.

Spin Rate Reduction
The current clubs all create a lower ball backspin rate. Your current spin rate is too high based upon your ball velocity. By lowering your spin rate you will increase your distance. Reduced back spin will translate into higher ball velocity.

No Bias
Based upon your combination of launch deviation angle, side spin, and direction, you require clubs which have a neutral bias. Changes with launch angle and spin rate may be needed to hit your optimal.

Based upon your clubhead speed, your optimal distance is 182.0 yards. Your actual distance is 162.3 yards, or 19.7 yards shy of the optimal. Changes in [Launch Angle, Backspin, Ball Flight] can help you reach your optimal performance and improve your distance.

Launch Angle
Your optimal launch angle is 15.40 degrees with an acceptable range from 13.6 to 17.1 degrees. Your actual launch angle is 18.1 degrees, or 2.7 degrees above the optimal.

Descent Angle
Your optimal descent angle is 46.6 degrees with an acceptable range from 43.6 to 49.6 degrees. Your descent angle is 51.9 degrees, or 5.3 degrees above the optimal.

BackSpin
Your optimal backspin is 5982.00 RPM with an acceptable range from 5532 to 6432 RPM. Your actual backspin is 6711.00 RPM, or 729 RPMs above the optimal.

Direction
Your actual average direction or shot deviation is 3.0 yards from the center line. Your Launch Deviation Angle, which is is the vector or degrees that the ball is launched laterally from its position on the tee/ground, is 0.67 degrees with a side spin of 4.00 RPMs. Launch Deviation Angles away from the target line to the left will be negative (-) and to the right of the target line will be positive (+).

Player Preferences
The following preference(s) were utilized as part of this fitting recommendation: .

## Best Club Report

### The Club

Mizuno
2017 JPX 900 Forged
Loft: 28.00
Flex: S

**Final length/lie: 37.750 / 62.00 (0.250 / 1.00), option: 1.**

NO IMAGE AVAILABLE

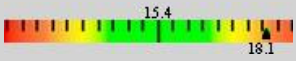
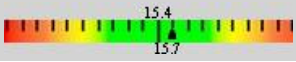
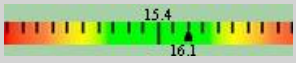
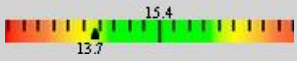
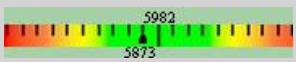
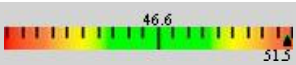
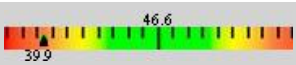
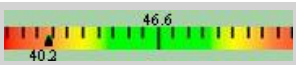
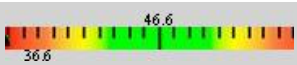
### Recommendation

Based on the overall results from the launch data of the clubs you tested, the Mizuno 2017 JPX 900 Forged provides the best performance for you. Compared with other clubs in the session, the Mizuno 2017 JPX 900 Forged was ranked number one in Shot Efficency,Distance,Launch Angle,Deviation,Backspin,Range, and Clustering Diameter. This club, however, was lower or weaker in Sidespin. Regarding performance against optimums, the Mizuno 2017 JPX 900 Forged qualified for the highest performance rating in Distance,Launch Angle,Deviation,Backspin, and Sidespin. In addition, the club ranked high in Shot Efficiency.

⊘ Best ⊕ Within Range ⊖ Outside Range

### Comparison

| Club Make | Mizuno | Titleist | Mizuno | TaylorMade |
|---|---|---|---|---|
| Club Model | 2016 MP-25 | 2018 AP3 718 | 2017 JPX 900 Forged | 2017 P770 |
| Club/Loft | (30.00) 30.00 | (28.00) 28.00 | (28.00) 28.00 | (33.00) 33.00 * |
| Length from Std | 0.250 | 0.250 | 0.250 | 0.500 |
| Lie from Std | 0.00 | -1.00 | 0.00 | 0.00 |
| Flex | S | S | S | S |
| Shaft | Royal Precision Project X 6.0 | True Temper DG AMT S300 | True Temper DG AMT S300 | True Temper DG AMT S300 |
| Material | steel | steel | steel | steel |
| Type | custom | custom | custom | custom |
| Final Ranking | 4 | 2 | 1 | 3 |
| | ○ | ○ | ◉ | ○ |
| Overall Performance | | | | |
| Clustering Diameter | ⊖ | ⊕ | ⊕ | ⊕ |
| Distance | ⊕ | ⊘ | ⊘ | ⊕ |
| Descent Angle | ⊕ | ⊕ | ⊕ | ⊖ |
| Launch | ⊕ | ⊘ | ⊘ | ⊘ |
| Backspin | ⊕ | ⊘ | ⊘ | ⊕ |
| Deviation | ⊘ | ⊘ | ⊘ | ⊘ |
| Shot Efficiency | ⊕ | ⊕ | ⊕ | ⊘ |
| Shot Efficiency | 2 | 2 | 1 | 4 |
| Average Ball Speed (MPH) | 123.5 | 123.5 | 123.8 | 121.1 |
| Average Clubhead Speed (MPH) | 88.5 | 88.5 | 88.7 | 85.7 |
| Total Distance | 4 | 2 | 1 | 3 * |
| Average (Yards) | 169.0 | 188.3 | 189.7 | 171.4 |
| Best (Yards) | 174.0 | 196.0 | 196.0 | 177.2 |
| Range (Yards) | 9.0 | 13.0 | 13.0 | 11.7 |
| Std Dev (Yards) | 3.1 | 4.4 | 4.2 | 3.8 |
| Carry Distance | 3 | 2 | 1 | 4 * |
| Average (Yards) | 162.3 | 175.2 | 176.3 | 157.8 |

| | | | | | |
|---|---|---|---|---|---|
| Best | (Yards) | 167.0 | 183.0 | 182.0 | 164.4 |
| Distance Control | (Yards) | 8.0 | 14.0 | 12.0 | 12.8 |
| Std Dev | (Yards) | 3.1 | 4.6 | 3.9 | 3.9 |
| Launch Angle | | 2 | 1 | 1 | 1 * |
| Optimal | (degrees) |  |  |  |  |
| Consistency | (degrees) | 2.72 | 0.30 | 0.75 | 1.68 |
| Std Dev | (degrees) | 0.61 | 0.38 | 0.77 | 0.67 |
| Direction/Deviation | | 4 | 3 | 1 | 2 |
| Clustering Diameter | (Yards) | 22.2 | 17.9 | 16.9 | 17.6 |
| Off Line | (Yards) | 8.1 | 4.6 | 4.0 | 4.5 |
| Lateral Dispersion | (Yards) | -8.8 / 13.4 | -8.0 / 9.9 | -3.2 / 8.7 | -6.8 / 10.7 |
| Lateral Control | (Yards) | 11.2 | 9.8 | 8.3 | 9.6 |
| Side Spin | (RPM) | 4 | 6 | 160 | -91 |
| Back Spin | | 2 | 1 | 1 | 2 * |
| Optimal | (RPM) |  |  |  |  |
| Consistency | (RPM) | 729 | 100 | 109 | 672 |
| Descent Angle | | 2 | 3 | 3 | 4 * |
| Optimal | (degrees) |  |  |  |  |
| Consistency | (degrees) | 4.93 | 6.75 | 6.40 | 9.97 |

* Represents 7-iron data which has been normalized for comparison with 6-iron model.

## Shaft Report


True Temper DG AMT S300

True Temper's Dynamic Gold AMT shafts are designed with what the company is calling "ascending mass technology," creating a set of iron shafts that gets progressively heavier as golfers move from their long irons to wedges. The 3-iron shaft is the lightest in the set, and each subsequent shaft gets three grams heavier as the set progresses. That results in wedge shafts that weigh between 125 and 130 grams, depending on flex, which is the standard weight of True Temper's most popular Dynamic Gold iron shafts: R300, S300 and X100. The AMT shafts use the company's variable wall technology [VWT], which allows engineers to manipulate the wall thicknesses throughout the entirety of a shaft to reach the desired weight. They still maintain what Hall called the "Dynamic Gold DNA," however, meaning that they offer a very similar balance point and trajectory as the original models.

| Flex | Weight | Torque | Bend Point | Tip Dia. | Butt Dia. |
|---|---|---|---|---|---|
| S | 130 gm | 1.7* | High | 0.000 | 0.000 |


KBS C-Taper .355

Inspired by Tour player feedback, the KBS C-TAPER shaft is designed for players requiring a low piercing trajectory and superior shot control. Packed with signature KBS technology, the KBS C-TAPER shaft maximizes energy transfer, for a crisp feel, while optimizing shaft diameters in the taper and tip areas for low trajectory and spin control. Independent testing proves the C-TAPER shaft to average 5% mre distance versus the market leader as well. On Tour, the KBS C-TAPER shaft is preferred by several of the world s top players who favor shot control and crisp feel. Available in five flexes and weight ranging from 110g to 130g -- The KBS C-TAPER shaft is purposed for dialing in quick tempo players. SHAFT FEATURES 5% lwer trajectory 5% lss spin 5% mre distance Available in 5 flexes from 110g : 130g

| Flex | Weight | Torque | Bend Point | Tip Dia. | Butt Dia. |
|---|---|---|---|---|---|
| S | 120 gm | 1.9* | High | 0.000 | 0.000 |


True Temper Dynamic Gold S300

The #1 shaft in golf. This high-flex, tour weight shaft is designed for skilled players seeking a low, penetrating ball flight for optimum control and accuracy. Dynamic Gold woods are now available with a .350" tip for clubs with oversize hosel diameters. Available in tapered irons, parallel woods and parallel irons.

| Flex | Weight | Torque | Bend Point | Tip Dia. | Butt Dia. |
|---|---|---|---|---|---|
| S | 124 gm | 1.6* | Mid/High | 0.000 | 0.000 |

# Control Club Data

**Mizuno 2016 MP-25 30.00 S**

| Swing | Club Speed | Ball Speed | PTI | Total | Carry | Dev | Launch | Launch Dev | Back Spin | Side Spin |
|---|---|---|---|---|---|---|---|---|---|---|
| | (MPH) | (MPH) | | (Yards) | (Yards) | (Yards) | (degrees) | (degrees) | (RPM) | (RPM) |
| 1 | 91.0 | 128.0 | 1.40 | 174.0 | 167.0 | -8.8 | 18.10 | -0.20 | 6855 | -497 |
| 2 | 88.0 | 121.0 | 1.37 | 167.0 | 160.0 | -2.2 | 17.40 | 0.80 | 6645 | -370 |
| 3 | 86.0 | 121.0 | 1.39 | 167.0 | 160.0 | -5.2 | 17.70 | 0.00 | 6631 | -358 |
| 4 | 90.0 | 127.0 | 1.41 | 172.0 | 166.0 | 13.4 | 18.60 | 1.90 | 6515 | 350 |
| 5 | 87.0 | 121.0 | 1.39 | 165.0 | 159.0 | 6.4 | 19.20 | 0.00 | 6840 | 466 |
| 6 | 89.0 | 123.0 | 1.37 | 169.0 | 162.0 | 12.4 | 17.70 | 1.50 | 6781 | 433 |
| Avg* | 88.50 | 123.50 | 1.39 | 169.00 | 162.33 | 8.07 | 18.12 | 0.73 | 6711.17 | 412.33 |
| Range | 5.00 | 7.00 | 0.04 | 9.00 | 8.00 | 22.20 | 1.80 | 2.10 | 340.00 | 963.00 |
| Std. Dev | 1.71 | 2.93 | 0.01 | 3.11 | 3.09 | 8.57 | 0.61 | 0.80 | 123.46 | 416.16 |

# Stock Club Data

**Mizuno 2017 JPX 900 Forged 28.00 S**

| Swing | Club Speed | Ball Speed | PTI | Total | Carry | Dev | Launch | Launch Dev | Back Spin | Side Spin |
|---|---|---|---|---|---|---|---|---|---|---|
| | (MPH) | (MPH) | | (Yards) | (Yards) | (Yards) | (degrees) | (degrees) | (RPM) | (RPM) |
| 7 | 88.0 | 125.0 | 1.41 | 190.0 | 178.0 | 0.4 | 16.50 | -1.30 | 5844 | 318 |
| 8 | 91.0 | 128.0 | 1.41 | 196.0 | 182.0 | 8.7 | 15.00 | 0.10 | 5991 | 435 |
| 9 | 87.0 | 121.0 | 1.39 | 186.0 | 173.0 | 4.7 | 16.30 | 1.70 | 5845 | -92 |
| 10 | 90.0 | 125.0 | 1.39 | 192.0 | 178.0 | 5.2 | 15.20 | -0.50 | 6131 | 409 |
| 11 | 87.0 | 120.0 | 1.38 | 183.0 | 170.0 | -3.2 | 16.50 | -1.80 | 5819 | 198 |
| 12 | 89.0 | 124.0 | 1.39 | 191.0 | 177.0 | -1.9 | 14.60 | 0.90 | 6037 | -305 |
| Avg* | 88.67 | 123.83 | 1.39 | 189.67 | 176.33 | 4.02 | 15.68 | 1.05 | 5944.50 | 292.83 |
| Range | 4.00 | 8.00 | 0.03 | 13.00 | 12.00 | 11.90 | 1.90 | 3.50 | 312.00 | 740.00 |
| Std. Dev | 1.49 | 2.67 | 0.01 | 4.19 | 3.86 | 4.22 | 0.77 | 1.21 | 116.37 | 271.96 |

**TaylorMade 2017 P770 33.00 S** **(note: 7-iron data is normalized to 6i values for comparison reports; this raw data is not normalized)**

| Swing | Club Speed | Ball Speed | PTI | Total | Carry | Dev | Launch | Launch Dev | Back Spin | Side Spin |
|---|---|---|---|---|---|---|---|---|---|---|
| | (MPH) | (MPH) | | (Yards) | (Yards) | (Yards) | (degrees) | (degrees) | (RPM) | (RPM) |
| 13 | 84.0 | 115.0 | 1.37 | 164.0 | 151.0 | 10.7 | 16.10 | 1.90 | 5821 | 328 |
| 14 | 84.0 | 114.0 | 1.35 | 161.0 | 148.0 | 2.8 | 14.20 | 1.40 | 5971 | -121 |
| 15 | 81.0 | 111.0 | 1.37 | 157.0 | 145.0 | 2.7 | 14.60 | 0.50 | 6027 | 93 |
| 16 | 80.0 | 110.0 | 1.37 | 155.0 | 142.0 | -2.4 | 14.30 | 0.80 | 6090 | -413 |
| 17 | 82.0 | 115.0 | 1.39 | 162.0 | 149.0 | -6.8 | 13.90 | -0.60 | 5920 | -382 |
| 18 | 85.0 | 117.0 | 1.37 | 166.0 | 154.0 | -5.0 | 15.00 | -1.40 | 6165 | -24 |
| 19 | 83.0 | 112.0 | 1.35 | 159.0 | 146.0 | 1.1 | 15.50 | 0.80 | 5905 | -116 |
| Avg* | 82.71 | 113.43 | 1.37 | 160.57 | 147.86 | 4.50 | 14.80 | 1.06 | 5985.57 | 211.00 |
| Range | 5.00 | 7.00 | 0.04 | 11.00 | 12.00 | 17.50 | 2.20 | 3.30 | 344.00 | 741.00 |
| Std. Dev | 1.67 | 2.32 | 0.01 | 3.58 | 3.68 | 5.43 | 0.73 | 1.05 | 108.83 | 240.18 |

## Titleist 2018 AP3 718 28.00 S

| Swing | Club Speed | Ball Speed | PTI | Total | Carry | Dev | Launch | Launch Dev | Back Spin | Side Spin |
|---|---|---|---|---|---|---|---|---|---|---|
| | (MPH) | (MPH) | | (Yards) | (Yards) | (Yards) | (degrees) | (degrees) | (RPM) | (RPM) |
| 20 | 88.0 | 122.0 | 1.38 | 186.0 | 173.0 | 9.9 | 15.50 | 1.40 | 5920 | 275 |
| 21 | 86.0 | 120.0 | 1.38 | 183.0 | 169.0 | -3.8 | 14.80 | -0.10 | 5793 | -202 |
| 22 | 88.0 | 123.0 | 1.38 | 187.0 | 174.0 | -8.0 | 16.10 | -1.50 | 5968 | -143 |
| 23 | 90.0 | 126.0 | 1.39 | 192.0 | 179.0 | 4.2 | 15.60 | -0.80 | 5782 | 413 |
| 24 | 91.0 | 128.0 | 1.41 | 196.0 | 183.0 | 1.4 | 15.60 | 0.40 | 6035 | -13 |
| 25 | 88.0 | 122.0 | 1.37 | 186.0 | 173.0 | -0.1 | 15.40 | 1.30 | 6062 | -292 |
| Avg* | 88.50 | 123.50 | 1.38 | 188.33 | 175.17 | 4.57 | 15.50 | 0.92 | 5926.67 | 223.00 |
| Range | 5.00 | 8.00 | 0.04 | 13.00 | 14.00 | 17.90 | 1.30 | 2.90 | 280.00 | 705.00 |
| Std. Dev | 1.61 | 2.69 | 0.01 | 4.35 | 4.56 | 5.68 | 0.38 | 1.05 | 108.47 | 255.81 |