

# Club Report

## Overview



Control Club	Recommended	Recommended	Recommended
Mizuno	Mizuno	Titleist	Mizuno
MP-60	MP-52	AP2-710	MP-53
(I6) 31.00	(I6) 31.00	(I6) 31.00	(I6) 30.00
S	S	S	S
steel	steel	steel	steel
True Temper	True Temper	Titleist	True Temper
Dynamic Gold S300	Dynalite Gold XP S300	TriSpec Steel	Dynalite Gold XP S300

### Analysis

Parameter	Units	Actual	Optimum	Diff
Club Speed	MPH	88.7	88.7	---
Ball Speed	MPH	119.0	125.5	6.5
Distance	Yards	169.7	173.7	4.0
Direction	Yards	-8.0	0.0	8.0
Launch	DEG	15.3	19.1	
Back Spin	RPM	5651	5913	
Descent	DEG	41.7	50	
Loft	DEG	31.0	33.0	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 88.7 miles per hour. Distance

Based upon your clubhead speed, your optimal distance is 173.7 yards. Your actual distance is 169.7 yards, or 4 yards shy of the optimal. Changes in [ Launch Angle, Ball Flight] can

**Length Change Recommendation: No Change; Lie: No change**

### Fitting Recommendation

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

#### Higher Launch Angle

These clubs were recommended based upon your current launch conditions. They create higher dynamic launch angles. Currently your launch angle is too low for your velocity. By increasing your launch angle you will create a better ball trajectory and increase your overall distance. An increase in launch angle is one of the fundamental ways for a player to improve their driving distance.

#### Maintain Current Spin Rate

These clubs were recommended based upon your current launch conditions. Currently your spin rate is within the range which is appropriate for your velocity. No change is required with your spin rate; Changes with launch angle and direction may be needed to hit your optimal.

#### No Bias

Based upon your combination of launch

help you reach your optimal performance and improve your distance.

#### Launch Angle

Your optimal launch angle is 19.10 degrees with an acceptable range from 16.3 to 21.8 degrees. Your actual launch angle is 15.3 degrees, or 3.8 degrees below the optimal.

#### Descent Angle

Your optimal descent angle is 50.0 degrees with an acceptable range from 44.0 to 56.0 degrees. Your descent angle is 41.7 degrees, or 8.3 degrees below the optimal.

#### BackSpin

Your optimal backspin is 5912.50 RPM with an acceptable range from 5275 to 6550 RPM. Your actual backspin is 5651.00 RPM, or 262 RPMs below the optimal.

#### Direction

Your actual average direction or shot deviation is -8.0 yards from the center line. Your Launch Deviation Angle, which is the vector or degrees that the ball is launched laterally from its position on the tee/ground, is 0.33 degrees with a side spin of -638.00 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 (+).

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.

#### Player Preferences

No preferences were selected as part of this fitting recommendation..

## Best Club Report

The Club	Recommendation
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Mizuno
MP-60
Loft: 31.00
Flex: S

Based on the overall results from the launch data of the clubs you tested, the Mizuno MP-60 provides the best performance for you. Compared with other clubs in the session, the Mizuno MP-60 was ranked number one in Launch Angle, Backspin, Distance Control, and Descent Angle. In addition, the club ranked high in Shot Efficiency, Distance, Deviation, Sidespin, and Clustering Diameter. This club, however, was lower or weaker in Accuracy.

**Length Change Recommendation: No Change; Lie: No change**

Best  
  Within Range  
  Outside Range

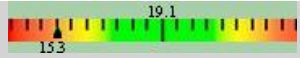
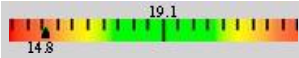


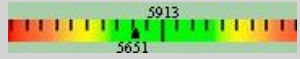
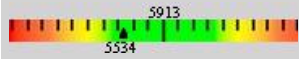

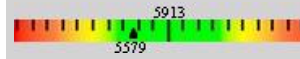
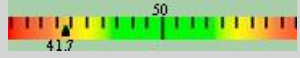





### Comparison

Club Make	Mizuno	Mizuno	Titleist	Mizuno
Club Model	MP-60	MP-52	AP2-710	MP-53
Club/Loft	(31.00) 31.00	(31.00) 31.00	(31.00) 31.00	(30.00) 30.00
Flex	S	S	S	S
Shaft	True Temper Dynamic Gold S300	True Temper Dyalite Gold XP S300	Titleist TriSpec Steel	True Temper Dyalite Gold XP S300
Material	steel	steel	steel	steel
Type	stock	custom	custom	custom
Final Ranking	1	4	3	2

#### Overall Performance

Clustering Diameter	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Distance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Descent Angle	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Launch Angle	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Backspin	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Deviation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Shot Efficiency	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Shot Efficiency	2	3	3	1
Mean Ball Speed (MPH)	119.0	117.0	117.5	120.0
Mean Clubhead Speed (MPH)	89.0	90.0	90.0	92.0
Total Distance	2	3	4	1
Mean (Yards)	175.0	171.3	169.5	176.7
Best (Yards)	178.0	178.0	177.0	187.0
Range (Yards)	6.0	17.0	17.0	21.0
Std Dev (Yards)	2.5	7.4	6.3	8.6
Carry Distance	2	3	4	1
Mean (Yards)	169.7	165.7	164.3	170.7
Best (Yards)	172.0	172.0	171.0	180.0
Range (Yards)	5.0	17.0	14.0	20.0
Std Dev (Yards)	2.1	7.6	5.1	8.2
Launch Angle	1	3	2	4

Optimal (degrees)				
Consistency(degrees)	3.83	4.33	4.27	4.70
Std Dev (degrees)	0.12	1.17	0.43	0.16
Direction/Deviation	2	1	3	4
Clustering Diameter (Yards)	21.3	18.4	22.2	29.1
Spread (Yards)	-20.8 / 0.3	-13.9 / -7.0	-13.9 / 6.4	-20.2 / 0.9
Range (Yards)	21.1	6.9	20.3	21.1
Back Spin	1	2	3	3
Optimal (RPM)				
Consistency (RPM)	262	379	402	402
Descent Angle	1	4	2	3
Optimal (degrees)				
Consistency(degrees)	8.30	9.50	8.45	9.20

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

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## Control Club Data

### Mizuno MP-60 31.00 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	88.0	119.0	1.35	178.0	172.0	-3.7	15.40	-1.7	5504	-616
2	89.0	119.0	1.34	175.0	170.0	0.3	15.30	-1.9	5728	-405
3	89.0	119.0	1.34	172.0	167.0	-20.8	15.10	2.6	5721	-892
Avg*	88.67	119.00	1.34	175.00	169.67	8.27	15.27	2.07	5651.00	637.67
Range	1.00	0.00	0.01	6.00	5.00	21.10	0.30	4.50	224.00	487.00
Std. Dev	0.47	0.00	0.00	2.45	2.05	9.15	0.12	2.08	103.98	199.41

## Stock Club Data

### Mizuno MP-52 31.00 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)
4	82.0	110.0	1.34	161.0	155.0	-7.0	16.40	-1.7	5320	-944
5	90.0	120.0	1.34	175.0	170.0	-7.3	13.70	-2.4	5685	-1066
6	90.0	121.0	1.35	178.0	172.0	-13.9	14.20	-0.1	5597	-981
Avg*	87.33	117.00	1.34	171.33	165.67	9.40	14.77	1.40	5534.00	997.00
Range	8.00	11.00	0.01	17.00	17.00	6.90	2.70	2.30	365.00	122.00
Std. Dev	3.77	4.97	0.00	7.41	7.59	3.18	1.17	0.96	155.53	51.08

### Mizuno MP-53 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)
7	92.0	122.0	1.33	177.0	172.0	-5.0	14.60	-1.3	6015	-659
8	86.0	115.0	1.34	166.0	160.0	-20.2	14.40	2.1	5518	-1068
9	89.0	123.0	1.37	187.0	180.0	0.9	14.20	-0.9	5203	-120
Avg*	89.00	120.00	1.35	176.67	170.67	8.70	14.40	1.43	5578.67	615.67
Range	6.00	8.00	0.04	21.00	20.00	21.10	0.40	3.40	812.00	948.00
Std. Dev	2.45	3.56	0.02	8.58	8.22	8.89	0.16	1.52	334.26	388.23

### Titleist AP2-710 31.00 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)
10	87.0	118.0	1.36	173.0	166.0	-13.9	14.50	-0.9	5334	-1178
11	87.0	116.0	1.33	168.0	163.0	2.4	15.20	-2.1	5783	-298
12	90.0	116.0	1.28	160.0	157.0	6.4	15.30	1.8	6628	1036
13	90.0	120.0	1.34	177.0	171.0	-9.5	14.30	0.7	5730	-513
Avg*	88.50	117.50	1.33	169.50	164.25	8.05	14.83	1.38	5868.75	756.25
Range	3.00	4.00	0.08	17.00	14.00	20.30	1.00	3.90	1294.00	2214.00
Std. Dev	1.50	1.66	0.03	6.34	5.07	8.32	0.43	1.49	471.44	804.04

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