



Golf Laboratories, Inc.
Independent Equipment Testing

Date: January 7, 2015
Test: Ball

	Swing Data				Launch Data								Flight Data				Descent Data			Landing Data			Wind	
	A/A	Club Path	Vert. SP	Horiz. SP	Dyn. Loft	F/A	H/S	B/S	Ratio	L/A	H L/A	SPIN	SPIN AXIS	MAX HGHT DR.	MAX HGHT	VERT. LAND	B/S	F TIME	C-DIST	T-DIST	ROLL	VEL		
Ball: Pro V1	Avg. -0.3	-2.6	54.4	-2.5	13.1	0.4	94.4	137.9	1.5	10.8	0.0	3151.3	2.8	135.7	22.1	32.1	63.3	5.5	223.8	256.2	32.4	2.6		
	S/D 0.8	0.8	1.1	0.6	0.2	0.4	0.3	0.3	0.0	0.3	0.3	108.9	1.5	1.7	1.0	1.5	1.7	0.1	2.0	6.1	6.5	0.7		
Ball: Pro V1 X	Avg. -0.1	-2.8	54.5	-2.3	13.2	0.4	94.1	138.4	1.5	11.0	0.0	3125.5	1.1	139.4	24.2	34.4	62.3	5.8	225.7	253.3	27.7	2.5		
	S/D 1.4	0.8	1.5	0.9	0.2	0.6	0.3	0.3	0.0	0.3	0.4	75.6	1.4	1.5	1.2	1.7	1.6	0.2	2.2	3.8	5.3	0.9		
Ball: NXT Tour	Avg. -1.1	-1.6	54.4	-2.4	13.8	0.5	94.3	137.4	1.5	11.3	0.1	2926.3	1.2	137.6	24.0	33.9	62.5	5.7	226.3	254.7	28.4	2.3		
	S/D 0.6	0.6	0.8	0.5	0.9	0.4	0.1	0.4	0.0	0.3	0.3	82.6	2.3	2.0	1.2	1.7	2.4	0.2	1.9	6.7	7.0	0.8		
Ball: DT Solo	Avg. -1.4	-1.8	53.9	-2.8	13.9	0.8	94.2	136.9	1.5	11.4	0.3	2797.6	0.6	135.6	23.4	33.3	62.7	5.6	224.3	251.7	27.3	2.3		
	S/D 0.5	0.6	0.6	0.4	1.0	0.5	0.2	0.4	0.0	0.2	0.4	91.3	1.8	2.2	1.3	1.4	2.1	0.2	1.6	7.4	6.4	0.6		
Ball: Vice Drive	Avg. 0.4	-3.2	54.8	-2.0	13.1	0.7	94.1	135.1	1.4	11.1	0.4	2875.7	2.0	132.6	21.2	31.4	62.4	5.5	221.4	251.8	30.4	2.2		
	S/D 0.6	0.4	1.4	0.9	0.5	0.6	0.3	0.6	0.0	0.4	0.3	104.5	1.7	3.6	1.0	1.2	2.7	0.3	2.7	7.6	8.1	0.7		
Ball: Vice Pro	Avg. -0.3	-2.1	54.7	-2.1	13.3	0.9	94.1	138.0	1.5	11.1	0.5	3065.7	2.2	140.8	25.0	35.1	60.8	6.0	227.2	253.3	26.2	2.5		
	S/D 1.4	1.0	1.2	0.6	0.2	0.5	0.3	0.4	0.0	0.2	0.4	107.9	2.5	8.1	1.4	2.7	2.9	0.5	1.9	7.4	7.1	1.2		
Ball: Vice Tour	Avg. -1.8	-1.5	53.9	-2.8	13.5	0.1	94.3	137.9	1.5	11.5	-0.1	2755.6	1.3	134.6	21.8	31.1	64.1	5.5	224.8	259.1	34.3	2.3		
	S/D 0.4	0.5	0.7	0.5	0.3	0.4	0.1	0.5	0.0	0.3	0.4	93.2	2.4	3.0	1.3	1.5	2.4	0.2	1.6	6.5	6.7	0.8		
Ball: Vice Pro Plus	Avg. 0.4	-3.0	54.5	-2.3	13.2	0.5	94.3	137.3	1.5	11.0	0.0	3055.4	2.4	137.4	23.7	33.9	61.8	5.7	223.7	252.2	28.5	2.4		
	S/D 1.5	1.3	1.3	0.8	0.3	0.4	0.2	0.4	0.0	0.3	0.2	62.3	1.9	2.0	0.9	1.2	1.8	0.2	3.1	5.3	5.2	1.0		

Equipment Info.

Club: Taylor Made
Head: 10.5° RBZ
Shaft: Matrix Ozik Xcon R

Robot Parameters

Amps: 30
Initial Percent: 60
Ramp Distance: 24
Release Point: 160
Lie Angle: 54
Tee Table Position: 12

Weather

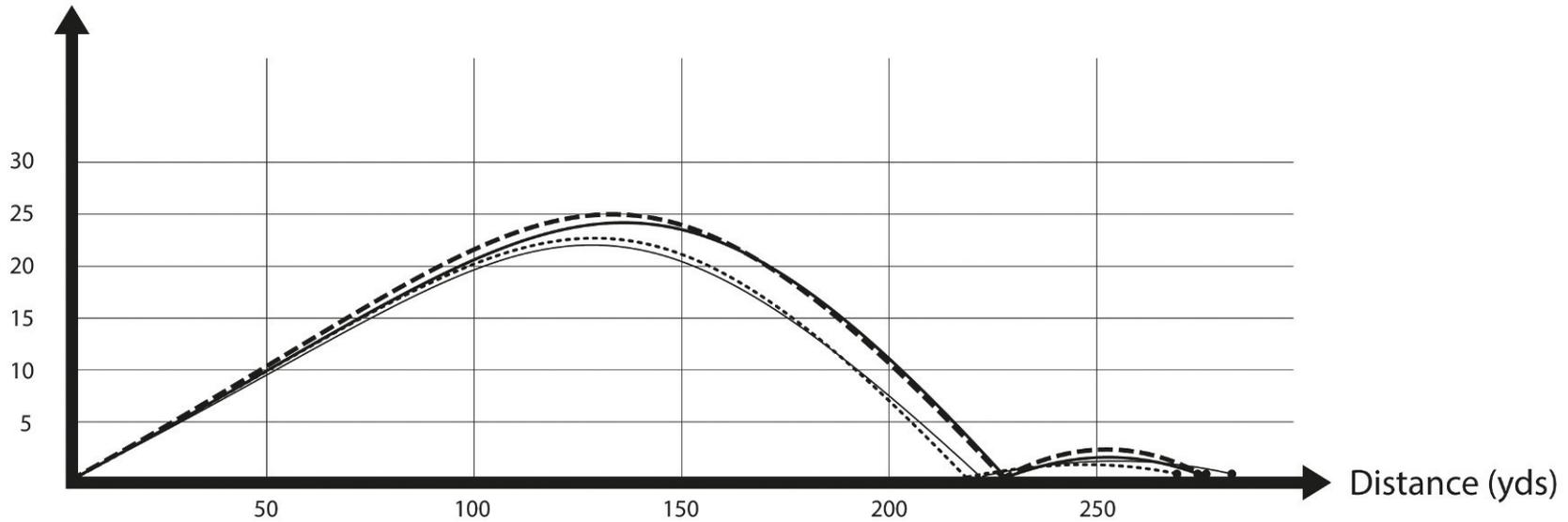
Temp: 61° - 68°
Wind: 1-5 mph
Direction: L-R Tail
Humidity: 36% - 32%
Bar: 30.06
Ground Cond.: Soft & damp
Weather Cond: Cloudy & cool

Legend

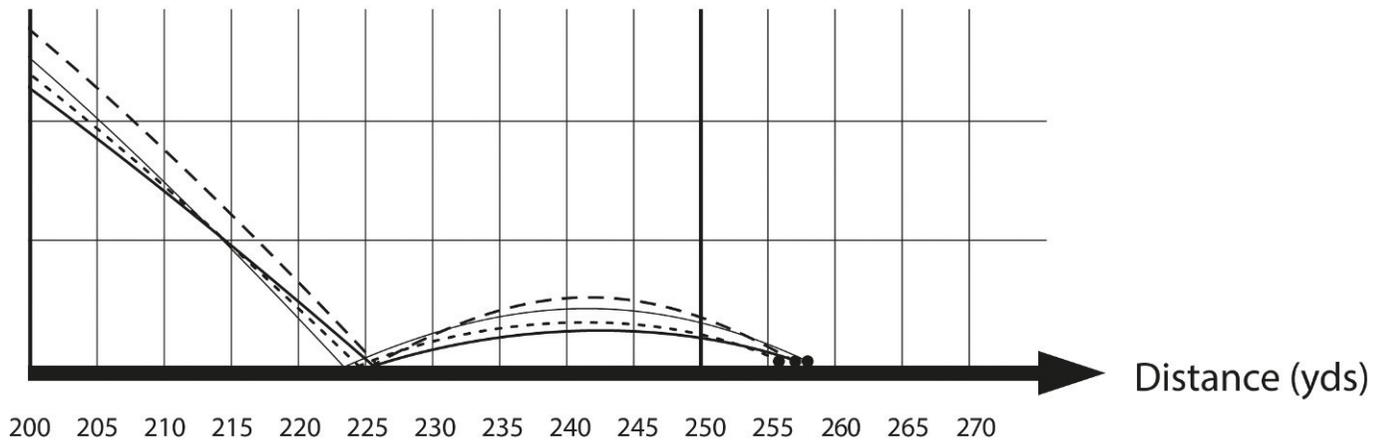
A/A Attack Angle-Degrees
Club Path Degrees
Vert. SP Vertical Swing Plane-Degrees
Horiz. SP Horizontal Swing Plane-Degrees
Dyn. Loft Dynamic Loft-Degrees
F/A Face Angle-Degrees
H/S Head Speed-MPH
B/S Ball Speed-MPH
Ratio Ratio of Ball Speed to Head Speed
L/A Launch Angle-Degrees
H L/A Horizontal Launch Angle-Degrees
Spin BackSpin-RPM
Spin Axis Side Spin Rotation
Max. Hght Dr. Down Range Distance Ball Reaches Peak-Yards
Max Height Yards
Vert. Land Descent Angle of Golf Ball-Degrees
B/S Ball Velocity at Impact-MPH
F Time Flight Time of Ball-Seconds
C-Dist Carry Distance (Ball Landing)-Yards
T-Dist Total Distance (Ball Stop)-Yards
Roll Distance From Carry to Total-Yards

Flight height (yds)

DRIVER



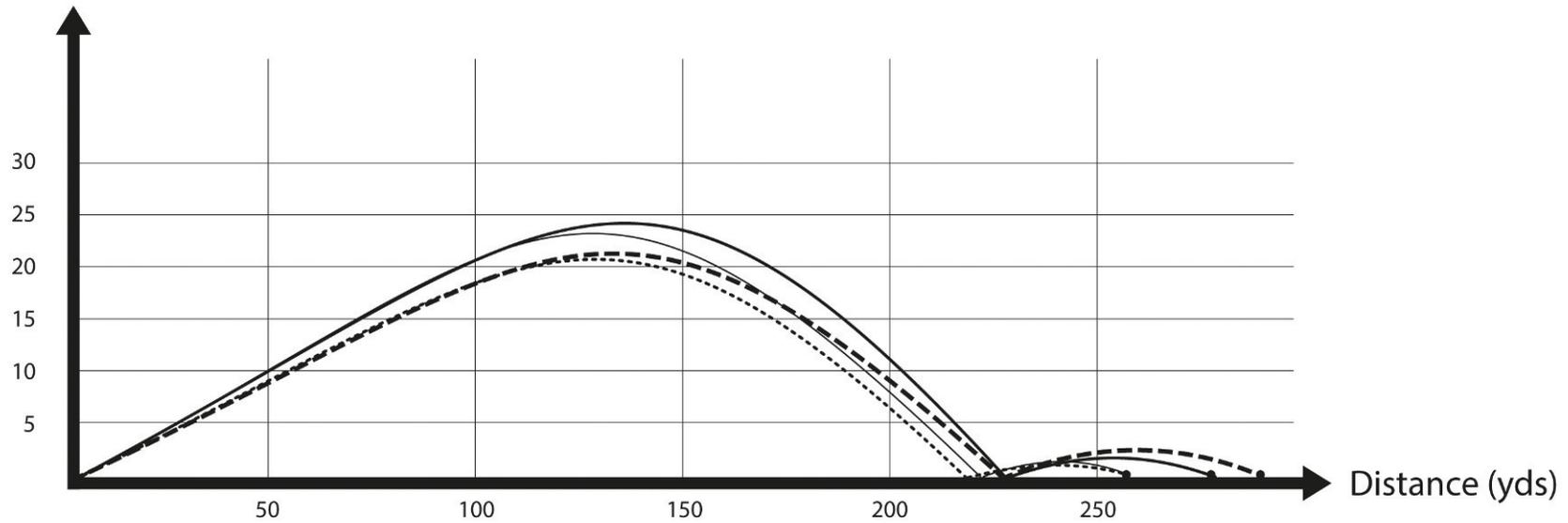
- Vice Pro
- Titleist ProV1X
- Titleist ProV1
- Vice Pro Plus



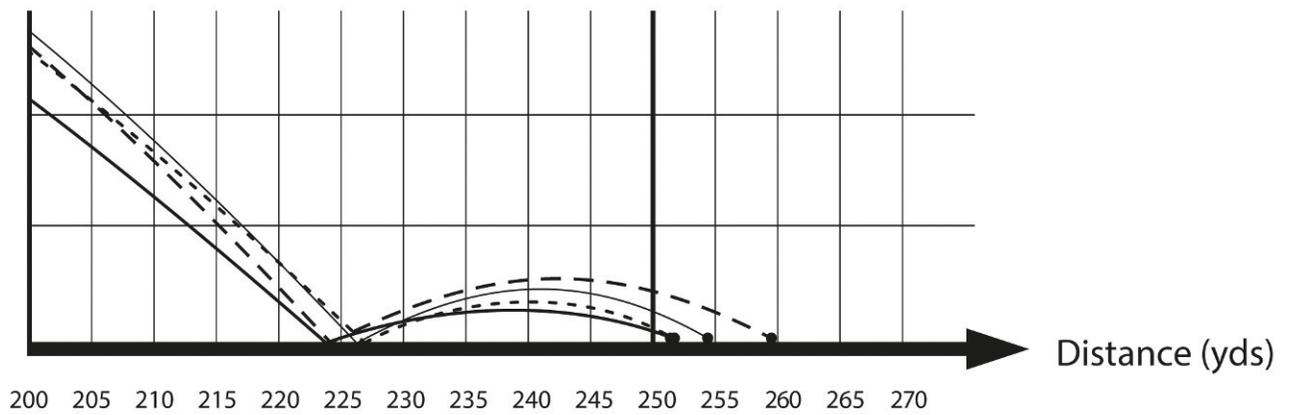
- Vice Pro
- Titleist ProV1
- Vice Pro Plus
- Titleist ProV1x

Flight height (yds)

DRIVER



- Vice Tour
- Titleist NXT Tour
- Titleist DT Solo
- Vice Drive



- Vice Tour
- Titleist NXT Tour
- Vice Drive
- Titleist DT Solo



**Golf
Laboratories, Inc.**
Independent Equipment Testing

Date: January 14, 2015
Test: Ball

	Swing Data				Launch Data				Flight Data				Descent Data			Landing Data			Wind			
	A/A	Club Path	Vert. SP	Horiz. SP	Dyn. Loft	F/A	H/S	B/S	Ratio	L/A	H L/A	SPIN	SPIN AXIS	MAX HGHT DR.	MAX HGHT	VERT. LAND	B/S	F TIME	C-DIST	T-DIST	ROLL	VEL
Ball: Pro V1																						
	Avg.				40.1	1.0	50.6	59.4	1.2	28.1	1.1	7154.8	-0.4	32.6	10.4	38.8	41.5	3.1	59.2	65.5	6.3	0.0
	S/D				1.0	0.5	0.4	0.2	0.0	0.5	0.2	136.0	1.5	0.3	0.2	1.2	1.3	0.0	0.4	0.9	0.6	0.0
Ball: Pro V1 X																						
	Avg.				40.4	1.1	50.5	59.3	1.2	27.7	1.0	7435.6	0.2	32.3	10.1	38.3	41.4	3.1	58.7	64.6	5.9	0.0
	S/D				0.2	0.3	0.4	0.2	0.0	0.3	0.3	141.9	0.6	0.3	0.2	0.8	1.3	0.1	0.5	0.6	0.4	0.0
Ball: NXT Tour																						
	Avg.				43.9	0.4	50.6	58.4	1.2	32.0	0.6	5417.6	-0.5	32.6	11.9	41.4	42.8	3.3	60.1	66.3	6.1	0.0
	S/D				4.8	0.3	0.5	0.2	0.0	0.9	0.3	292.9	1.3	0.3	0.4	0.9	0.8	0.1	0.6	3.4	3.3	0.0
Ball: DT Solo																						
	Avg.				43.8	0.6	50.5	58.4	1.2	34.0	0.6	5021.9	-0.3	32.5	12.8	43.0	43.0	3.3	60.2	67.1	6.9	0.0
	S/D				3.5	0.4	0.4	0.3	0.0	1.5	0.2	384.2	1.3	0.2	0.6	0.9	0.7	0.0	0.4	2.3	2.4	0.0
Ball: Vice Drive																						
	Avg.				42.2	0.4	50.4	56.8	1.1	35.1	0.6	3943.6	-1.0	31.7	13.0	44.0	43.7	3.3	59.0	67.7	8.7	0.0
	S/D				0.4	0.3	0.7	0.5	0.0	0.6	0.4	304.9	2.1	1.1	0.6	1.7	1.4	0.1	2.2	3.4	1.6	0.0
Ball: Vice Pro																						
	Avg.				37.8	0.8	50.6	59.3	1.2	27.7	1.2	7301.0	-1.5	32.5	10.3	38.7	40.5	3.1	58.8	66.4	7.6	0.0
	S/D				3.5	0.3	0.3	0.3	0.0	0.4	0.3	148.0	1.6	0.4	0.2	0.3	0.3	0.0	0.5	2.9	2.9	0.0
Ball: Vice Tour																						
	Avg.				43.8	1.0	50.9	58.4	1.1	35.9	0.8	5247.2	0.8	32.8	13.8	44.6	43.8	3.4	61.0	68.7	7.7	0.0
	S/D				2.1	0.6	0.3	0.2	0.0	1.6	0.3	957.8	2.1	0.3	0.5	1.0	1.0	0.0	0.5	1.8	1.7	0.0
Ball: Vice Pro Plus																						
	Avg.				39.4	0.8	50.5	59.3	1.2	27.9	1.0	7275.3	-0.8	32.2	10.4	39.2	40.2	3.1	58.3	64.5	6.2	0.0
	S/D				2.4	0.3	0.3	0.2	0.0	0.4	0.2	156.1	1.0	0.2	0.2	0.5	0.3	0.0	0.3	2.1	2.0	0.0

Equipment Info.

Club: Cleveland
Head: 56° CG-15
Shaft: True Temper

Robot Parameters

Amps: 8
Initial Percent: 60
Ramp Distance: 100
Release Point: 160
Lie Angle: 63
Tee Table Position: 18.5

Weather

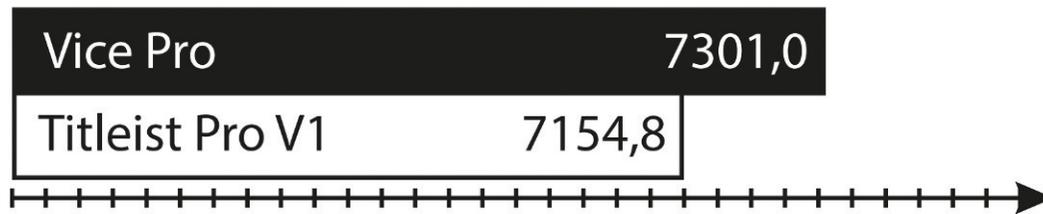
Temp: 62° - 66°
Wind: None
Direction: n/a
Humidity: 43% - 36%
Bar: 30.12 - 30.11
Ground Cond.: Soft & damp
Weather Cond: Clear & warm

Legend

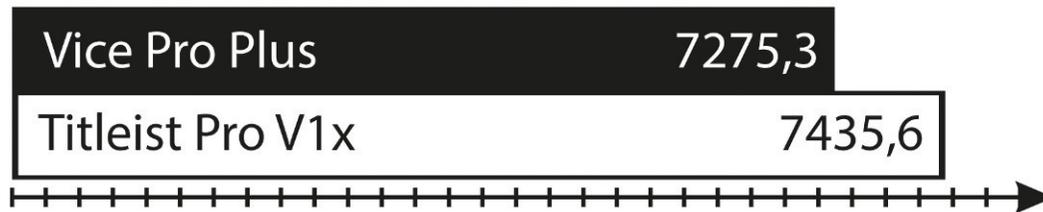
A/A Attack Angle-Degrees
Club Path Degrees
Vert. SP Vertical Swing Plane-Degrees
Horiz. SP Horizontal Swing Plane-Degrees
Dyn. Loft Dynamic Loft-Degrees
F/A Face Angle-Degrees
H/S Head Speed-MPH
B/S Ball Speed-MPH
Ratio Ratio of Ball Speed to Head Speed
L/A Launch Angle-Degrees
H L/A Horizontal Launch Angle-Degrees
Spin BackSpin-RPM

Spin Axis Side Spin Rotation
Max. Hght Dr. Down Range Distance Ball Reaches Peak-Yards
Max Height Yards
Vert. Land Descent Angle of Golf Ball-Degrees
B/S Ball Velocity at Impact-MPH
F Time Flight Time of Ball-Seconds
C-Dist Carry Distance (Ball Landing)-Yards
T-Dist Total Distance (Ball Stop)-Yards
Roll Distance From Carry to Total-Yards

Vice Pro / Titleist Pro V1



Vice Pro Plus / Titleist Pro V1x



DRIVER TEST RESULTS

EXPLAINED BY VICE GOLF

VICE Golf balls exhibit top performance in 2015 independent testing

Independent ball tests conducted at SAN DIEGO Golf Laboratories Inc. have proven that Germany based VICE Golf are on par with and even outperform the #1 ball in Golf Titleist in several categories. The outcome of these tests combined with VICE Golf's more affordable prices will surely make golfers reconsider their ball of choice.

The sample of balls tested include:

VICE Golf	Titleist
VICE Drive	DT Solo
VICE Tour	NXT Tour
VICE Pro	Pro V1
VICE Pro Plus	Pro V1X

(Rows indicate comparable ball models)

To achieve accurate results, many elements of the testing were held constant across all ball models. The testing used a TaylorMade RBZ 10.5° driver, swung by computer-controlled robot at 94MPH – a typical club head speed for an average male golfer. This club head speed achieved an average ball speed for both VICE and Titleist models of 137.4MPH. The ratio of ball to club head speed, otherwise known as SMASH Factor, averaged around 1.46 – a typical result for a high-level amateur with a driver. Additional to this, attack angle, club path, launch angle and vertical as well as horizontal swing plane were held constant with minimal variance during testing.

Results show that for three of the four comparable balls tested, the VICE models achieved ball lower spin rates.

	VICE (in RPM)	Titleist (in RPM)
VICE Drive / DT Solo	2875.7	2797.6
VICE Tour / NXT Tour	2755.6	2926.3
VICE Pro / Pro V1	3065.7	3151.3
VICE Pro Plus / Pro V1X	3055.4	3125.5

Additional to the lower spin rates, VICE balls' peak height averaged a yard lower than Titleists'. As a result of this lower flight height, vertical angle of descent of the VICE balls was almost 1° lower than the Titleist's (32.8° vs. 33.5°). These flight characteristics combined to allow greater roll out results for VICE balls, with distances ranging between 26.2 yards and 34.3 yards; the maximum achieved by the Titleist range was 32.4 yards. As a tradeoff to the additional roll exhibited by VICE balls, the Titleist balls tended to carry slightly further than the VICE balls; Titleist ranged from 223.8 to 226.3 yards, VICE from 221.4 to 227.2 yards.

In terms of total distance however, the extra roll achieved by the VICE balls compensated for the slightly shorter carry. Overall the VICE balls achieved distances ranging from 251.8 to 259.1 yards whereas Titleist balls achieved less, between 251.7 and 256.2 yards.

In summary, lower ball spin rates and general lower ball flight pattern of VICE Golf balls make them a serious competitor relative to the market leaders, Titleist. Having long been described as the '#1 Ball in Golf', perhaps Titleist have finally found their main rival – a fresh, new influence in the golfing world, supporting not only golfer's games but also their wallets.

HALF WEDGE TEST RESULTS

EXPLAINED BY VICE GOLF

VICE Golf balls exhibit top performance in 2015 independent testing

Independent ball tests conducted at SAN DIEGO Golf Laboratories Inc. have proven that Germany based VICE Golf are on par with and even outperform the #1 ball in Golf, Titleist, in several categories. The outcome of these tests combined with VICE Golf's more affordable prices will surely make golfers reconsider their ball of choice.

For many high level amateur and professional golfers, choice of ball will be determined predominantly by how the ball performs around the greens. The testing conducted therefore compared current market leading Titleist flagships, ProV1 and ProV1x against their VICE Golf competitors, VICE Pro and Pro Plus with a half-wedge style shot. The premium VICE Pro and ProV1 models are both marketed as slightly softer, and slightly higher spinning than their VICE Pro Plus and ProV1x counterparts.

To achieve accurate and comparable results, many elements involved in the testing were held constant. The computer-controlled robot used a Cleveland 56° CG-15 Wedge at a club head speed of 50MPH – this resulted in a consistent ball speed of 59.3MPH and SMASH Factor of 1.2. Other variables including attack angle, club path, launch angle and vertical as well as horizontal swing plane were held constant.

The results show ball spin rates of:

	VICE (in RPM)	Titleist (in RPM)
VICE Pro / Pro V1	7301.0	7154.8
VICE Pro Plus / Pro V1X	7275.3	7435.6

(Rows indicate comparable ball models)

The testing reveals that VICE balls are highly comparable to the market leading Titleist balls. It is possible to add that VICE balls even marginally outperform their competitors given the marketed characteristics of the balls. Of the softer, higher spinning models, the VICE Pro spins almost 150RPM more than the Titleist ProV1; furthermore, of the longer, lower spinning balls, the VICE Pro Plus spins roughly 160RPM less than the Titleist ProV1x.

All balls tested had near identical peak heights indicating very consistent ball flights, resulting in very similar carry distances.

In summary, there is little to distinguish between VICE and Titleist ball models in terms of performance for the high-level golfer in the market for the highest quality, flagship balls. It may even be possible to suggest that VICE outperform Titleist when considering the USP of the individual ball. Having long been described as the '#1 Ball in Golf', perhaps Titleist have finally found their main rival – a fresh, new influence in the golfing world, supporting not only golfer's games but also their wallets.