

WE INVITED THE LEADING MANUFACTURERS IN GOLF TO BUILD A DRIVER TO THE SPECIFICATIONS OF SENIOR TOUR PLAYER **TONY JOHNSTONE** (AVERAGE SWING-SPEED 106MPH). AND THEN WE WENT OUT TO TEST THEM

Choosing a driver is a very personal thing to all golfers. Along with your favourite putter and a couple of prize wedges, it's a club that you actually get very attached to, and one that's hugely important in terms of your ability to get the ball in play and put yourself in a position to score. A good driver is worth its weight in gold.

The first thing I look for is the head shape – the sex appeal, if you like. It's important that you like the look of a driver. That alone breeds confidence. In that respect I'm a bit biased. I grew up with persimmon drivers and soft balatas, and I do prefer a more traditional look. A pear-shaped head, and preferably on the smaller side. I don't mind if the back of the clubhead is packed with technology – I can live with that. It's the look of the face that matters. I like the face to be square, but then I'm a

professional golfer. For many amateurs a slightly toed-in face can be an obvious benefit for its draw-inducing qualities. Personally, I'm looking for a neutral to slight fade, so I want a club that's neutral, one I can 'work'. These days a growing number of manufacturers can tweak this for you, adjusting the hosel. They have different sleeves they can put in to adjust the face angles, so there's a terrific variety out there.

For the purpose of this exercise, I supplied my current driver specs to the mainline manufacturers invited to take part and the majority have played ball, making up a driver for me. But we need to stress up front that not all manufacturers use the Grafalloy ProLite, which is the shaft I have used for a few years now, and so we're not always comparing like with like.

But all of the drivers on test are available to all golfers – they are not made up on the tour with the sort of components that are simply not on the open market. I want to stress that point. I'm not going to tell you what a great club such and such a model is....then tell you you can't have it!

The Grafalloy ProLite shaft I use suits my swingspeed (around 106mph average) and the way I 'load' the driver. It's a 65 gram shaft, S-flex. I've used that for several years now, although I have recently been testing the Aldila Voodoo shaft in a TaylorMade r9 and really like the feel and performance that gives me. (I actually have two shafts for the r9 – the Grafalloy and the Voodoo – and simply change them as and when I need a different flight. So modern technology is even helping an old fart like me!)



Set up-wise I use a standard length shaft, 44.5 inches, and don't like to see too much loft – 8.5 degrees max. I also like the grip to be a Golf Pride Tour Velvet, size 60 round, with extra layers of tape under the right hand. That feels more comfortable to me and helps me to feel and *release* the right hand. That's something to talk to your pro about. Most amateurs don't take grip thickness into account.

My swing & ball flight

I have always tended to hit the ball pretty low, but I've also tended to be quite steep on it at impact. So I tend to launch low with high spin – a climber, which is not what you need off the tee. I don't generally get a lot of run on the ball. So I'm looking for a club that will launch a little bit higher but with a low spin rate and –

hopefully – come down at an angle that will give me a few yards extra run (the 'Vertical Descent' angle, as it's known). And you know, I've been astonished in recent weeks and months at the difference working with this type of equipment – the Flightscope – actually makes. I could stand on the range hitting drivers all afternoon, then pick out one I think is right, only to use a Flightscope and discover that the spin and the behaviour of the ball at the end of the range is nothing like I thought. These things are invaluable devices.

No third party test can ever really help you to identify precisely the make and model that might best suit your game. But I hope that some of my observations and suggestions do help you to ask the right questions when you go to speak with your pro. That really is the

key to getting fitted with the right gear. And if your pro happens to have a Flightscope system, then you're in for a treat as it's better than any golf lesson.

My current ball is the Titleist Pro V1, and the difference between that and the Pro V1x is I actually hit the Pro V1 slightly further, if anything. I prefer the softer ball for around the greens. When I was with Callaway I preferred the HX rather than the HX Tour. (The ball I loved was the Rule 35 – I nearly had a heart attack when Callaway cancelled that ball six or seven years ago. So did Monty – but I digress.)

Coming up are the results I experienced hitting half a dozen balls with each model. It was a lot of fun, and I hope that you identify a couple of models here that you get to try this summer.

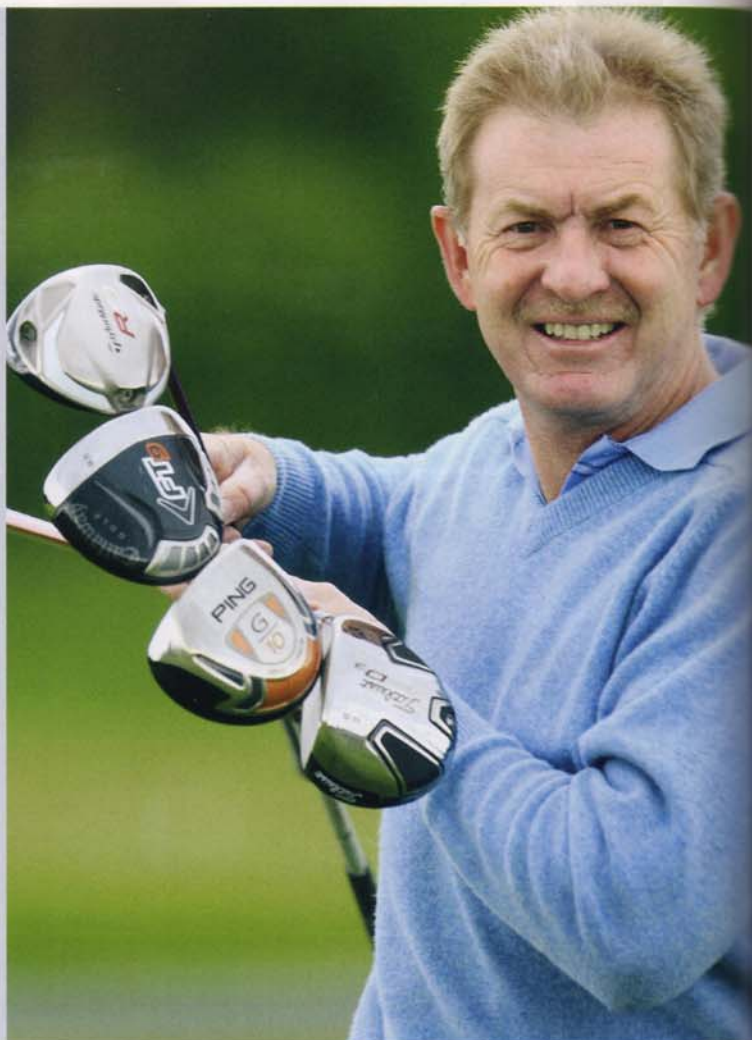
THE TOP PERFORMERS BUT ONLY BY A WHISKER

The TaylorMade r9, the Titleist, the Ping G10 and the Callaway FT9 – these are the drivers that topped the overall stats table. Which just shows that at the premium end of the market you do get what you pay for.

The surprise, however, is just how closely these manufacturers are being pushed by the other companies. That, to me, says everything you need to know about the state of play in modern club-making. All of the manufacturers these days are using quality components and – rather like the car market – it's actually tough to buy a poor model.

At the premium end you will always be paying for R&D budgets and promotion on tour, that's the way of the world. But isn't it interesting that of all the drivers tested, the four models that came out on top, for me, are probably the ones you would have nominated as being 'tour-standard'. But, most telling of all, they were also the clubs that were made up exactly to the specifications I requested, while the ones just behind – such as the Cobra S9, the Wilson Smooth, the Nicklaus Dual Point and the Benross Innovator – were all made up for me. In other words, they were all fitted with the shaft that I know suits my swing characteristics, they featured the loft that I like and the grip was built up to give me the feel I am used to.

The only conclusion to be drawn from this is that if you are really serious about your golf you get in touch with a pro or a retailer who can offer you this type of analysis and a full custom-fit service. You know, the shaft really is the key. At the end of the day, all of the figures that you see on the accompanying Flightscope read-outs relate to my swing characteristics, and have no bearing on your game. Our intention has not been to identify a specific club that will work for you, rather to highlight the questions and the issues you need to address when buying a new driver. So get down to your pro shop, and tell them TJ sent you!



FlightScope Report

for Tony Johnstone best of on May 5, 2009

Rated by carry distance

Club	Distance (yds)		Speed (mph)		Efficiency		Spin (rpm)		Ball Angle (°)			Height (ft)	Flight (s)	Classification	Rating
	Carry	Lateral	Club	Ball	Smash	DCOR	Back	Side	Launch Vert	Launch Horz	Descent				
FT9	236	8.9 R	101.6	153.2	1.51	0.89	4292	121	12.0	1.2 R	41.4	97	6.6	fade	*****
R9	234	3.5 L	101.5	152.9	1.51	0.86	4414	-370	11.1	1.1 R	37.4	83	6.2	draw	****
Ping G10	228	6.1 L	106.7	151.4	1.43	0.80	3681	-292	11.3	0.1 R	35.1	75	5.9	draw	*
Titleist	226	7.2 R	105.7	150.4	1.42	0.69	4765	71	10.3	1.6 R	38.9	81	6.2	straight	0



FlightScope Report

for Tony Johnstone best of on May 5, 2009

Rated by grouping radius

Club	Distance (yds)		Speed (mph)		Efficiency		Spin (rpm)		Ball Angle (°)			Height (ft)	Flight (s)	Classification	Rating
	Carry	Lateral	Club	Ball	Smash	DCOR	Back	Side	Launch Vert	Launch Horz	Descent				
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New Session

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Club Comparison Center

Name Tony Johnstone

Load History

GO

Results

Carry Distance

Club	Distance (yds)		Speed		Smash	Spin (rpm)		Ball Angles (°)			Height (ft)	Time Flight (s)	R	Classification	Rating
	Carry	Lateral	Club (mph)	Ball (mph)		Back	Side	Launch Vert.	Horz.	Descent Vert.					
Callaway FT9 8.5	229	8.4 R	100.6	151.9	1.51	4779	-154	9.7	2.7 R	36.3	76	6.1	straight	*****	
Ping G10 Pro-lite	226	8.9 R	103.7	150.6	1.44	4764	-448	10.6	4.5 R	37.0	79	6.1	push/draw	*****	
Callaway Diablo 8.5	223	12.7 R	99.2	149.3	1.50	4463	-41	11.3	3.2 R	43.5	93	6.5	straight	****	
Ftiq 8.5	221	0.8 L	98.8	149.2	1.51	4725	-760	9.9	3.5 R	35.8	72	5.9	draw	****	
Wilson Smooth	217	24.8 R	104.4	149.6	1.43	4562	107	11.0	5.7 R	47.4	102	6.8	push/fade	***	
Nicklaus 8.5	216	11.2 R	100.2	150.6	1.50	3489	-431	10.7	4.2 R	40.9	83	6.1	push/draw	***	
Mizuno MX 700	211	3.5 L	99.3	147.5	1.49	4030	-721	10.4	4.0 R	48.6	96	6.7	push/draw	**	
Nike sqDymo	208	17.8 R	100.0	147.6	1.48	4837	-139	11.4	5.7 R	53.5	108	7.1	push	**	
Yonex	201	10.4 L	103.9	145.9	1.41	4422	-14	8.1	3.0 L	37.5	68	5.7	straight	*	
Cobra L5V	198	6.7 L	101.3	146.8	1.45	4232	-1189	9.3	2.8 R	29.7	54	5.0	draw		

DECIPHERING THE NUMBERS Richard Blamey tells you what to look for to optimise performance

As more and more golf professionals invest in radar-based equipment that tracks the ball in flight, so there's a greater opportunity for you to invest in real game-improvement. Once you have identified three or four models that suit your eye, FlightScope (or Trackman) analysis will help you to fine-tune your selection as it provides valuable data on the key performance factors of spin, ball speed, launch angle and the Descent Vertical measurement (the angle at which the ball falls to the ground from its apex – ideally 35 degrees) that determines the overall combination of carry and roll.

Ultimately, it's a case of using this technology to get real consistency off the tee. These days, with manufacturers offering so many different shafts, and the facility to alter face angles, loft and lie, or change the centre of gravity to get a spin bias, there is just so much scope. And one thing this exercise will certainly do is make your bad shots better!

For the amateur golfer it's about optimising launch angle and backspin. These numbers are a factor of your clubhead speed and the way you strike the ball (and indeed the type of ball used). Loft and clubhead design

are the key features you need to match up with your speed and favoured type of shaft/flex to optimise these numbers. Another important number is ball-speed – the speed of the ball off the clubface. Increasing your ball speed gives you the potential for more distance, and this can be achieved via experimentation of shaft and club-head. The tour average is around 115mph clubhead speed, a launch angle of 10-11 degrees and around 2,000-2,500 rpm. Optimising launch and spin will maximise your carry and distance potential.

So you have your work cut out!

Due to the quality of the range ball used on this test the data on spin needs to be moderated by up to 1,500 rpm. Tony also asked us to stress that he was hitting into a pretty strong headwind!

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Grouping Radius (Minimize)

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Histogram for CarryDist

Yonex

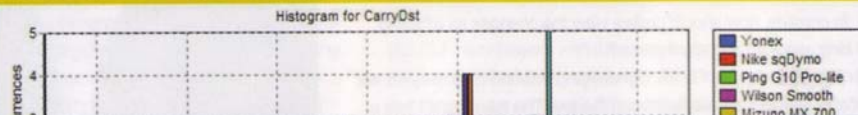
Nike sqDymo

Ping G10 Pro-lite

Wilson Smooth

Mizuno MX 700

Resume



Resume

© would like to thank Callaway Golf and Richard Blamey – PGA Golf Professional & Callaway Demo Day coordinator in the UK & Ireland – for the use of the FlightScope equipment and his expert analysis. For information on Callaway Demo Days please visit www.mycallway.eu