

**NATIONAL PLAYER  
DEVELOPMENT PROGRAM**

# Custom Fitting - Key Information for Competitive Golfers

Henry Brunton, Men's National Team  
Coach and Equipment Fitting Specialist



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# Custom Fitting - Key Information for Competitive Golfers

## WHAT IS CUSTOM FITTING?

- A series of tests conducted to discover your optimal golf club specifications.
- A Custom Fitting Professional facilitates this exercise utilizing specialized tools and fitting clubs.
- You are active in the discovery process of determining your optimal equipment specifications. You will hit golf shots and provide feedback as requested by the Custom Fitting Professional.
- It is imperative to be able to observe ball flight in order to be reliably fit.
- Equipment variables such as shaft length, shaft flex, shaft composition, grip size, lie angle, bounce angles (wedges), club head design, loft, and set make-up can be determined reliably using high-tech equipment and specialized fitting procedures and tools.



# Custom Fitting - Key Information for Competitive Golfers

## WHY IS CUSTOM FITTING SO IMPORTANT?

- Properly fitted equipment gives you the best chance for success, enjoyment and improvement.
- When you use properly fitted equipment you will not be forced to compensate your fundamentals or swing technique to get desired results.
- The clubs will work with you, not against you and will facilitate your development.
- You will become comfortable with your equipment and confident knowing that a sound swing is likely to produce desirable results.
- It educates you on ball flight and performance variables



# Custom Fitting - Key Information for Competitive Golfers

## STATIC FITTING VS. DYNAMIC FITTING

### Static Fitting:

- Determining equipment specifications for a golfer after calculating static measurements without considering dynamic swing motion, ball flight, or other motor skill performance variables.
- Usually, a measuring tape and other like tools are utilized in this process. For example, taking finger tip to floor measurements. Static fitting is considered to be better than no fitting; however, it is not reliable.



# Custom Fitting- Key Information for Competitive Golfers

## STATIC FITTING VS. DYNAMIC FITTING

### Dynamic Fitting:

- Determining equipment specifications for a golfer after measuring and observing a golfer's swing style, impact conditions and ball-flight tendencies.
- State of the art custom-fitting tools are utilized in this process to accurately measure and assess your performance characteristics. The knowledge, experience and leadership of a trained professional are integral to the success of this process.



# Custom Fitting - Key Information for Competitive Golfers

## RCGA HP PHILOSOPHY

- To provide recognized high performance golfers with the opportunity to select their optimally fitted equipment and golf balls based on education, testing and feedback using state-of-the art equipment such as the Titleist Performance Monitor and professional consultation.
- To collect objective data.
- To have a Fitting Professional assist players in interpreting the data



# Custom Fitting - Key Information for Competitive Golfers

## RCGA HP PHILOSOPHY

- To provide golfers with the opportunity to test equipment and balls in simulated competitive conditions. I.E. tight turf, rough, and sand.
- To provide players and coaches with an optimal equipment testing and educational environment that facilitates players making informed equipment and golf ball decisions.
- To simulate competitive golf conditions in a testing environment by utilizing high performance golf balls and known target distances.



# Custom Fitting - Key Information for Competitive Golfers

## THE ANATOMY OF A FITTING SESSION

- Players warm up 15 minutes before session is scheduled.
- Fitting Professional provides player with overall goals and objectives of the fitting session.
- Players are asked about their personal objectives for the fitting session
- Players are fit as follows:
  - Driver
  - Fairway metals and hybrids
  - Irons
  - Wedges
  - Putters



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## DRIVER FITTING

- The performance characteristics of the players current driver are tested using a launch monitor – baseline driver performance data is established.
- With the guidance of a Fitting Professional, players test other possibilities to maximize the overall performance of their tee shots - carry distance, roll, and shot dispersion optimized.
- Players will hit many shots during the testing with the guidance of a Fitting Professional.
- Key performance factors such as: **ball speed**, **launch angle**, **spin rate**, **dispersion** and **attack angle** will be monitored



# Custom Fitting - Key Information for Competitive Golfers

## DRIVER FITTING

Key controllable variables in the driver fitting process include:

- Golf Ball
- Clubhead design
- Loft
- Shaft Flex
- Shaft Length
- Shaft Torque



# Custom Fitting - Key Information for Competitive Golfers

## EXAMPLE – ELITE JUNIOR BOY

- **Baseline / Current Driver:** 905R 9.5 Fujikura Vista 60 Stiff Flex
- **Ball Speed:** 155.0
- **Launch Angle:** 12.9 degrees
- **Spin Rate:** 3764 rpm
- **Carry Distance:** 248.9
- **Total Distance:** 255.9



# Custom Fitting - Key Information for Competitive Golfers

## EXAMPLE – ELITE JUNIOR BOY

- **Recommended Driver:** 907D2 8.5 degree YS-6 Stiff Flex
  - **Ball Speed:** 158.0
  - **Launch Angle:** 14.6
  - **Spin Rate:** 2412
  - **Carry Distance:** 266.8
  - **Total Distance:** 278.1
- 
- His carry distance increased an average of 17.9 yards.
  - His overall distance increased by an average of 22.2 yards.
  - The ball flight and trajectory became more penetrating.
  - The shot dispersion tightened



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Session Analysis Database System

## Equipment Comparison

	A	B	C	club
Club Speed	95.1	97.0	97.1	mph
Loft Angle	13.7	14.7	12.1	deg
Attack Angle	1.2	3.7	3.2	deg
Ball Speed	142.1	143.9	145.4	mph
Launch Angle	11.8	14.4	13.8	deg
Backspin	2561	2380	1954	rpm
Sidespin	-550	-291	-119	rpm

**A**

905S DRIVER 9.5°  
BLUE S 45.00" 57.0°  
PROV1-1V

**B**

905T DRIVER 9.5°  
SPEEDER S 45.00" 57.0°  
PROV1-1V

**C**

905T DRIVER 9.5°  
SPEEDER S 45.00" 57.0°  
PROV1-1V

**CARRY PLOT**

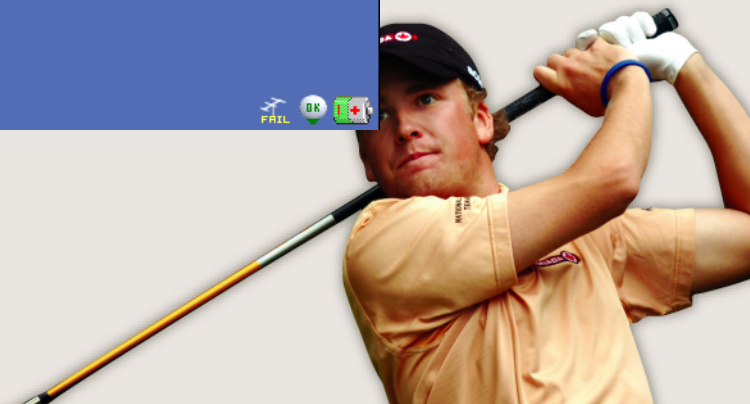
**Recommended:**

**A** 905S 9.5° DRIVER □  
BLUE S 45.00" 57.0°  
PROV1-1V

**Baseline:**

**C** 905T 9.5° DRIVER □  
SPEEDER S 45.00" 57.0°  
PROV1-1V

Using FAIRHAVEN HQ clubs  
08/05/2005 9:15am PITTS



# Custom Fitting - Key Information for Competitive Golfers

## FAIRWAY METALS AND HYBRIDS

- Players test fairway metals and hybrids to determine the best possibilities for distance, trajectory, and shot dispersion.
- It is imperative that players are able to produce a “playable trajectory” with all of their fairway metals and hybrids.
- “Playable trajectory” is a ball flight that allows the ball land and stop on a green under normal conditions.
- Players are tested and educated on establishing appropriate yardage intervals in the long game – “Long Game Gap Fitting”.



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## IRON FITTING

- The players optimal iron specifications are determined through testing - shaft length, shaft flex, shaft compositions, lie angle, head design, and grip size.
- Players carry yardages are determined through testing using the launch monitor.
- Players have the opportunity to test different iron models.
- The Fitting Professional educates the player on how each variable (shaft length, shaft flex, shaft composition, lie angle, and grip size) affects ball flight and performance.



# Custom Fitting - Key Information for Competitive Golfers

## WEDGES FITTING

- Players are educated about the importance of establishing their optimal wedge combination – incremental lofts, complimentary sole designs, bounce angles, and aesthetics.
- The Fitting Professional tests to determine if a player is a slider/sweeper or driver/digger wedge style player.
- Players are educated about the wedge performance characteristics as it relates to turf conditions and specialty shot selection based on their style of play.
- It is crucial to determine the correct lie angles for all wedges. The more loft the club has the more important the variable of lie angle becomes.



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## **IRON AND WEDGES FITTING - ELITE FEMALE**

**Current Irons:** Callaway X-16

**Shaft Length:** Good

**Lie Angle:** Good

**Shaft Flex:** Good

**Grips:** Good

**Recommended Ball:** PRO V1

**Current Wedges:**

**Callaway X-16 PW:** Adjust +1' upright

**Vokey TC 254.10:** Good

**Vokey TC 260.08:** Adjust +1' upright



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## WEDGES FITTING - ELITE MALE

**Initial Wedge Combination: PW, 54, 60**

PW 132 yards

254.10 115

260.04 97

**Revised Wedge Combination: PW, 52, 56, 60**

PW 132

252.08 121

SM56.10 109

SM60.04 97



# Custom Fitting - Key Information for Competitive Golfers

## **FITTING RESULTS – WORLD CLASS MALE**

### Carry Yardages on All Clubs

Driver	295
3 WD	261
2 Iron	241
4 Iron	223
5 Iron	213
6 Iron	198
7 Iron	178
8 Iron	164
9 Iron	149
PW	135
GW	125
SW	113
LW	99



# Custom Fitting - Key Information for Competitive Golfers

## PUTTER FITTING

- Putting accounts for 40% of all shots taken
- Putter fitting has lagged behind other club fitting
- The standard loft on putters for elite players is 4%
- Players are fit for putters by measuring for proper length in order to optimize roll of the ball
- Players may test putters with various shaft lengths, styles, lofts, etc
- Players are encouraged to use putting labs such as Scotty Cameron, Hotstix and others for high-speed filming and review



# Custom Fitting - Key Information for Competitive Golfers

## KEY POINTS OF INTEREST

- RCGA HP players benefit greatly from their experience with a Fitting Professional
- It is educational and helps build performance confidence.
- Athletes are free to select equipment that facilitates their optimal performance.
- Players gain objective knowledge of the 14 clubs and golf ball type that best suit their game and style of play.
- PGA TOUR average ball speed is 166 mph.
- LPGA TOUR average ball speed is 135 mph.
- Optimal driver launch angle is between 10 and 14 degrees.
- Optimal driver spin rate is between 2500 and 3500 rpm.



# Custom Fitting - Key Information for Competitive Golfers

## KEY POINTS OF INTEREST

It is often discovered through testing that players have:

- A redundant iron in the bag – 3 & 4 iron travel approximately the same distance.
- The longest iron that female team members typically create a playable trajectory with is a 4 or 5 iron.
- Wedges are very often ill fitted. I.E. lie angles, loft increments, and uncomplimentary sole characteristics and bounce angles.
- Often Players have come to the Fitting Centre with equipment that they have chosen to use through trial and error. Much of this equipment has not been formally fitted.
- Players benefit greatly from education and testing to determine the golf ball type that best matches their playing style



# Custom Fitting - Key Information for Competitive Golfers

## CURRENT TRENDS

- 460 CC high MOI Drivers
- Project X Precision Shafts
- Lightweight steel shafts
- Hybrids and lofted metals replacing long irons
- Progressive design iron sets



# Custom Fitting - Key Information for Competitive Golfers

## RCGA HP PARTNERS

- Acushnet / Titleist Canada ([www.titleist.ca](http://www.titleist.ca))
  - Eagles Nest GC – Toronto
  - Satellite locations – Vancouver, Edmonton, Montreal
- TaylorMade ([www.taylormadegolf.com](http://www.taylormadegolf.com))
  - Toronto
  - Calgary



# Custom Fitting - Key Information for Competitive Golfers

## Titleist National Fitting Center at Eagles Nest

- Access to the Fitting Centre is available to all RCGA National Team Players by appointment.
- The Fitting Center may be accessed by any competitive golfer for a nominal fitting fee determined by Acushnet Canada.
- The Fitting Centre is very active and it is necessary to book appointments in advance.
- More information is available at: [www.fittingworks.com](http://www.fittingworks.com)



# Custom Fitting - Key Information for Competitive Golfers

## Titleist National Fitting Center at Eagles Nest

Performance Monitor



Fitting Center



# Custom Fitting - Key Information for Competitive Golfers

## Motion Analysis Technology by TaylorMade (MATT)

MATT gathers vital swing information and statistics using multiple high-speed cameras. MATT distills that information to create a remarkably sophisticated three-dimensional computer-animated image of your swing viewable from every angle. MATT also executes a multitude of calculations and measurements to develop a data-driven personal club recommendation. More information is available at: [www.taylormadegolf.com/matt.asp](http://www.taylormadegolf.com/matt.asp)

