Custom Club Fitting -

Key Information for Competitive Golfers

By: Henry Brunton, PGA of Canada Class “A” Master Professional
Custom Club Fitting

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.
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.
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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.
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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.
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GOLF CANADA HIGH PERFORMANCE 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.
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GOLF CANADA HIGH PERFORMANCE 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.
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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 player's 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.
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**DRIVER FITTING**

Key controllable variables in the driver fitting process include:

- Golf Ball
- Clubhead design
- Loft
- Shaft Flex
- Shaft Length
- Shaft Torque
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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
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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
### Equipment Comparison

<table>
<thead>
<tr>
<th>Club</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Club Speed</td>
<td>95.1</td>
<td>97.0</td>
<td>97.1</td>
</tr>
<tr>
<td>Loft Angle</td>
<td>13.7</td>
<td>14.7</td>
<td>12.1</td>
</tr>
<tr>
<td>Attack Angle</td>
<td>1.2</td>
<td>3.7</td>
<td>3.2</td>
</tr>
<tr>
<td>Ball Speed</td>
<td>142.1</td>
<td>143.9</td>
<td>145.4</td>
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<tr>
<td>Launch Angle</td>
<td>11.8</td>
<td>14.4</td>
<td>13.8</td>
</tr>
<tr>
<td>Backspin</td>
<td>2561</td>
<td>2380</td>
<td>1954</td>
</tr>
<tr>
<td>Sidespin</td>
<td>-550</td>
<td>-291</td>
<td>-119</td>
</tr>
</tbody>
</table>

- **Recommended:**
  - **A**
    - 9055 3.5° DRIVER
    - BLUE'S 56.0° 57.0°
    - PROV1-V
  - **Baseline:**
    - **C**
      - 9055 3.5° DRIVER
      - SPIDER'S 56.0° 57.0°
      - PROV1-V

Using FAIRHAVEN HQ clubs
08/03/2005 9:15am PITTS
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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 Trackman launch monitor or similar.

• 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.
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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
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FITTING RESULTS – WORLD CLASS MALE

Carry Yardages on All Clubs

<table>
<thead>
<tr>
<th>Club</th>
<th>Yardage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driver</td>
<td>295</td>
</tr>
<tr>
<td>3 WD</td>
<td>261</td>
</tr>
<tr>
<td>2 Iron</td>
<td>241</td>
</tr>
<tr>
<td>4 Iron</td>
<td>223</td>
</tr>
<tr>
<td>5 Iron</td>
<td>213</td>
</tr>
<tr>
<td>6 Iron</td>
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<td>8 Iron</td>
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<tr>
<td>SW</td>
<td>113</td>
</tr>
<tr>
<td>LW</td>
<td>99</td>
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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, TOMI, SAM Putt Lab and others for high-speed filming and review
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KEY POINTS OF INTEREST

• Golf Canada 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 139 mph.

• Optimal driver launch angle is between 10 and 14 degrees.

• Optimal driver spin rate is between 2500 and 3500 rpm.
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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 5 or 6 iron.

• Many top females use lofted fairway metals – 7, 9 and 11 woods.

• 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
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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
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GOLF CANADA HIGH PERFORMANCE PARTNERS

All Golf Canada High Performance club fittings are provided by:

• Acushnet / Titleist Canada (www.titleist.ca)
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Titleist National Fitting Center at Eagles Nest

• 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
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Titleist National Fitting Center at Eagles Nest

Trackman Equipment

Fitting Center