SAM PuttLab Report

Data Comparison

Date: 16.3.2018
**Data Summary**

**Player:** Amateur HC-15  
**Session:** Amateur HC-15  

**Project:** Examples  
**Description:** Example Project with 14 Player.  
**Player:** Amateur HC-15  
**Handicap:** 15  
**Lefthand:** Comment: Amateur Handicap 15: Performance, etc.  
**Putter:** Custom  
**Length:** 35.0  
**Loft:** 3.0  
**Lie:** 71.0  
**File:** 001 - Amateur HC-15  
**Date:** 10.03.2010  
**Putts:** 7

**Tendency** 72.5%  
**Timing** 79.8%  
**Consistency** 60.3%  
**Overall** 68.2%

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**Player:** Tour Player Swing  
**Session:** Swing putting stroke

**Project:** Examples  
**Description:** Example Project with 14 Player.  
**Player:** Tour Player Swing  
**Handicap:** +4  
**Lefthand:** Comment: Tour player with a "swing putt" technique  
**Putter:** Odyssey Twoball  
**Length:** 34.0  
**Loft:** 3.0  
**Lie:** 71.0  
**File:** 001 - Swing putting stroke  
**Date:** 18.08.2012  
**Putts:** 6

**Tendency** 88.7%  
**Timing** 84.0%  
**Consistency** 86.5%  
**Overall** 86.4%
Inconsistent aim is a problem of most amateurs

Tour player: Aim slightly left but highly consistent
### Amateur HC-15 Session

**Face at impact**
-0.77 0.20 -0.81 0.87 0.61 1.26 1.52

**Path at impact**
-0.77 0.20 -0.81 0.87 0.61 1.26 1.52

**Consistency**
73% 70%

- **Face at impact is rather neutral but shows a lack of consistency**
- **Path is pointing 2 deg to the left**
- **Ball direction**

### Tour Player Swing Session

**Face at impact**
0.4° open

**Path at impact**
2.0° left

**Consistency**
75% 75%

- **Face at impact is rather neutral but shows a lack of consistency**
- **Path is pointing 2 deg to the left**
- **Ball direction**

**Tour player: Left aim corrected till impact**

**All direction aspects neutral and consistent**

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### Tour Player Swing Session

**Face at impact**
0.1° open

**Path at impact**
2.0° left

**Consistency**
89% 93%

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### Tour Player Swing Session

**Face at impact**
0.1° open

**Path at impact**
0.2° left

**Consistency**
94% 92%
**Player:** Amateur HC-15  
**Session:** Amateur HC-15

Path at Impact

- Fluctuating curvature of path with poor end position

Path: 2.0° left

- Path at impact
  - 2.0° left
- Path arc impact
  - Straight: 15.5 °/m arc
- Backswing ratio
  - 0.30
- Followthrough long: 75%
- Backswing long: 75%

**Player:** Tour Player Swing  
**Session:** Swing putting stroke

Path at Impact

- Tour player: Very natural and consistent path

Path: 0.2° left

- Path at impact
  - 0.2° left
- Path arc impact
  - Straight: 7.3 °/m arc
- Backswing ratio
  - 0.36
- Followthrough long: 94%
- Backswing long: 92%
<table>
<thead>
<tr>
<th>Impact Spot</th>
<th>Player: Amateur HC-15</th>
<th>Session: Amateur HC-15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impact spot at the toe</strong></td>
<td>55%</td>
<td>79%</td>
</tr>
<tr>
<td>6.5 mm toe</td>
<td>Spot</td>
<td>Consistency</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Impact Spot</th>
<th>Player: Tour Player Swing</th>
<th>Session: Swing putting stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Very consistent spot, as typically for Tour players up on the face</strong></td>
<td>89%</td>
<td>98%</td>
</tr>
<tr>
<td>1.6 mm toe</td>
<td>Spot</td>
<td>Consistency</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Impact</th>
<th>Height on Face</th>
<th>Lie impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impact spot</strong></td>
<td>6.5 mm toe</td>
<td>55%</td>
</tr>
<tr>
<td><strong>Height on Face</strong></td>
<td>13.6 mm</td>
<td>79%</td>
</tr>
<tr>
<td><strong>Lie impact</strong></td>
<td>2.8 toe up</td>
<td>6.5 mm toe</td>
</tr>
</tbody>
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<th>Height on Face</th>
<th>Lie impact</th>
</tr>
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<tr>
<td><strong>Impact spot</strong></td>
<td>1.6 mm toe</td>
<td>89%</td>
</tr>
<tr>
<td><strong>Height on Face</strong></td>
<td>17.6 mm</td>
<td>98%</td>
</tr>
<tr>
<td><strong>Lie impact</strong></td>
<td>0.9 toe up</td>
<td>1.6 mm toe</td>
</tr>
</tbody>
</table>
Player: Amateur HC-15
Session: Amateur HC-15

Launch conditions in the preferred range

Pred. Launch: 2.4° up
Rise angle: 1.5° up
Pred. Spin: neutral

Shaft: 0.4° deloft
Eff. Loft: 2.6° pos.
(Putter Loft: 3.0°)

Effective loft
Rise angle
Predicted Launch

Player: Tour Player Swing
Session: Swing putting stroke

Slightly more loft than recommended on the Tour

Pred. Launch: 3.5° up
Rise angle: 3.0° up
Pred. Spin: neutral

Shaft: 0.6° addloft
Eff. Loft: 3.6° pos.
(Putter Loft: 3.0°)

Effective loft
Rise angle
Predicted Launch
Increased and inconsistent rotation in the followthrough, oscillations at/after impact are related to active hands.

Tour player: Very smooth and consistent rotation.
**Face rel to Path**

### Amateur HC-15 Session

**Face rel to Path**
- Open face on path, but good coupling of face and path

- **Face/Path Consistency**
  - 76% for Amateur HC-15
  - 92% for Amateur HC-15

- **Rotation rel to path**
  - 2.4° open
  - 0.4° opening

- **Face rel to path (at impact)**
  - -10.0 to 10.0
  - Closed to Open

- **Rotation rel to path (inside of impact zone)**
  - -10.0 to 10.0
  - Closing to Opening

### Swing putting stroke Session

**Face rel to Path**
- Tour Player: Perfectly neutral and consistent coupling of face and path

- **Face/Path Consistency**
  - 97% for Tour Player Swing
  - 99% for Swing putting stroke

- **Rotation rel to path**
  - 0.1° opening

- **Face rel to path (at impact)**
  - -10.0 to 10.0
  - Closed to Open

- **Rotation rel to path (inside of impact zone)**
  - -10.0 to 10.0
  - Closing to Opening

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Colors: | = open | = square | = closed
Smooth stroke until impact, inconsistent and increasing acceleration after impact

Tour player: Very smooth velocity & acceleration curves, smoothly hitting through impact

Stroke Dynamics

Player: Amateur HC-15
Session: Amateur HC-15

- Backswing -
  Speed [mm/s]
  Acceleration [mm/s²]

- Forward swing -
  Speed [mm/s]
  Acceleration [mm/s²]

53% Speed Consistency

Back swing time: 755 ms
Forward swing time: 1010 ms
Speed at impact: 1277 mm/s

Player: Tour Player Swing
Session: Swing putting stroke

- Backswing -
  Speed [mm/s]
  Acceleration [mm/s²]

- Forward swing -
  Speed [mm/s]
  Acceleration [mm/s²]

80% Speed Consistency

Back swing time: 712 ms
Forward swing time: 969 ms
Speed at impact: 1574 mm/s
Average Timing in the preferred range, overall slow

Tour player: Rhythm and timing in the preferred range, forward swing slightly slow

Backswing | To impact | Forward swing
-----------|-----------|-----------
755 ms     | 363 ms    | 1010 ms

Rhythm Consistency
59%

Backswing Rhythm
1.20 | 1.65 | 2.10 | 2.55 | 3.00
(Backswing time / Impact time)
Fast | Slow

Impact Timing
0.00 | 0.20 | 0.40 | 0.60 | 0.80
(Impact time / fwd. swing time)
Early | Late

712 ms
369 ms
969 ms

Rhythm Consistency
91%

Backswing Rhythm
1.20 | 1.65 | 2.10 | 2.55 | 3.00
(Backswing time / Impact time)
Fast | Slow

Impact Timing
0.00 | 0.20 | 0.40 | 0.60 | 0.80
(Impact time / fwd. swing time)
Early | Late

0.36
0.38