GET STARTED
The industry’s most accurate athletic motion capture sensor integrated with analysis, coaching, communication, and management tools.

While using Blast Golf, you will discover a heavy emphasis on timing, which sets the foundation for consistency and directly affects speed and direction control.

We recommend working through the levels and following our defined path to improvement based on tour data and science. This path will guide you to analyze, train, and challenge yourself at every level.

Make sure to watch the training video for each level before starting the drills.
PUTTING
METRICS

**Backstroke Time**
- Time from address to top of backstroke.

**Forward Stroke Time**
- Time from top of backstroke to impact.

**Total Stroke Time**
- Time from start of stroke to impact.

**Stroke Tempo**
- Ratio between backstroke time and forward stroke time.

**Backstroke Length**
- Distance the putter head travels from address to the top of backstroke.

**Backstroke Rotation**
- Rotation of the putter face during the backstroke.

**Forward Stroke Rotation**
- Rotation of the putter face during the forward stroke.

**Rotation Change**
- Difference in rotation between address and impact.

**Lie Change**
- Difference in lie between address and impact.

**Loft Change**
- Difference in loft between address and impact.
To establish a baseline for backstroke time, start by hitting 9 flat putts.

| 3 PUTTS FROM 3 FEET | 3 PUTTS FROM 6 FEET | 3 PUTTS FROM 12 FEET |

Developing consistent backstroke timing is critical to creating a consistent putting stroke, and contributes to controlling speed and distance.

**01 Analyze**: Examine your metrics for backstroke time. The ideal backstroke time is .60 seconds for putts of all lengths.

**02 Train**: Work on your backstroke time by hitting putts of varying lengths and breaks. Keep your backstroke time consistent within your goal range.

**03 Challenge**: When you’re able to consistently repeat your backstroke time within your goal range, you’re ready to move on to drill 2, forward stroke time.
DRILL 02
FORWARD STROKE TIME

Along with backstroke time, developing consistent forward stroke timing is critical to creating a consistent putting stroke, and contributes to controlling speed and distance.

To establish a baseline for forward stroke time, start by hitting 9 flat putts.

| 3 PUTTS FROM 3 FEET | 3 PUTTS FROM 6 FEET | 3 PUTTS FROM 12 FEET |

01
Analyse: Examine your metrics for forward stroke time. Ideal forward stroke time is 0.30 seconds for putts of all lengths.

02
Train: Work on your forward stroke time by hitting putts of varying lengths and breaks. Keep your forward stroke time consistent within your goal range.

03
Challenge: When you’re able to consistently repeat your forward stroke time within your goal range, you’re ready to move on to drill 3, tempo.
To establish a baseline for tempo, start by hitting 9 flat putts.

<table>
<thead>
<tr>
<th>3 PUTTS FROM 3 FEET</th>
<th>3 PUTTS FROM 6 FEET</th>
<th>3 PUTTS FROM 12 FEET</th>
</tr>
</thead>
</table>

**DRILL 03 TEMPO**

Establishing a consistent tempo ensures that stroke timing remains repeatable, and eliminates timing as a variable throughout the stroke.

**01 Analyze**: Examine your metrics for tempo. The ideal ratio is 2.0:1, meaning your back-stroke time should take twice as long as your forward stroke time.

**02 Train**: Work on your tempo by hitting putts of varying lengths and breaks. Keep your tempo consistent within your goal range.

**03 Challenge**: When you’re able to consistently repeat your tempo, you’re ready to move on to level 2, speed.
Establishing consistent speed while repeating your timing will allow you to control distance. Stroke speed will vary based on the conditions of a given putt, which you’ll discover while training putts of a particular length and lie.

To establish a baseline for stroke speed, start by hitting 9 flat putts.

| 3 PUTTS FROM 3 FEET | 3 PUTTS FROM 6 FEET | 3 PUTTS FROM 12 FEET |

**Analyze**: Examine your impact stroke speed to identify ideal speed for each distance.

**Train**: Work with the speed metric to develop the proper speed for putts of varying lengths. Repeat the ideal stroke speed for each putt while maintaining stroke timing.

**Challenge**: When you’re able to consistently maintain timing while adjusting speed for the conditions of a putt, you are ready for level 3, direction.
To establish a baseline for stroke direction, start by hitting 9 flat putts.

**DRILL 01 STROKE DIRECTION**

Directional control is established by minimizing excess putter face rotation, and is largely the result of consistent timing and speed.

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**Analyze**:
Examine your putter face rotation metrics to identify stroke rotation tendencies. Your backstroke and forward stroke rotation will vary depending on stroke length. Strive for equal rotation in the back and forward stroke resulting in a rotation change of **0.0 deg**.

**Train**:
Work to keep rotation metrics consistent by hitting putts of various distances with various green scenarios.

**Challenge**:
When you're able to consistently repeat your rotation metrics within your goal range, you're on your way to becoming a putting master!
Maintenance: Staying Sharp

Once you have completed Levels 1, 2, and 3, you will see a significant improvement in your putting.

To maintain performance, work with your Blast technology for 10-15 minutes per day, ensuring that your metrics remain within your goal range.

For an additional challenge, tighten your goal range for each metric and repeat each level with your new goals.
<table>
<thead>
<tr>
<th>METRIC</th>
<th>GOAL</th>
<th>RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BACKSTROKE TIME</td>
<td>.60 sec</td>
<td>.54 to .66 sec</td>
</tr>
<tr>
<td>FORWARD STROKE TIME</td>
<td>.30 sec</td>
<td>.26 to .34 sec</td>
</tr>
<tr>
<td>TOTAL STROKE TIME</td>
<td>.90 sec</td>
<td>.80 to 1.0 sec</td>
</tr>
<tr>
<td>STROKE TEMPO</td>
<td>2.0:1 ratio</td>
<td>1.6:1 to 2.5:1 ratio</td>
</tr>
<tr>
<td>BACKSTROKE LENGTH</td>
<td>VARIABLE</td>
<td></td>
</tr>
<tr>
<td>BACKSTROKE ROTATION</td>
<td>VARIABLE</td>
<td></td>
</tr>
<tr>
<td>FORWARD STROKE ROTATION</td>
<td>VARIABLE</td>
<td></td>
</tr>
<tr>
<td>ROTATION CHANGE</td>
<td>0.0 deg</td>
<td>1° open to 1° closed</td>
</tr>
<tr>
<td>LIE CHANGE</td>
<td>0.0 deg</td>
<td>1° decreased to 1° increased</td>
</tr>
<tr>
<td>LOFT CHANGE</td>
<td>0.0 deg</td>
<td>1° decreased to 1° increased</td>
</tr>
</tbody>
</table>

FULL SWING
METRICS

BACKSWING TIME
Time from address to top of swing.

DOWNSWING TIME
Time from top of swing to impact.

TOTAL SWING TIME
Time from start of swing to impact.

SWING TEMPO
Ratio between backswing time and downswing time.

SWING SPEED
Speed of the clubhead’s sweet spot at impact.
To establish a baseline for backswing time, start by hitting 9 shots.

<table>
<thead>
<tr>
<th>3 WEDGES</th>
<th>3 7-IRONS</th>
<th>3 DRIVERS</th>
</tr>
</thead>
</table>

**DRILL 01**  
**BACKSWING TIME**

Developing consistent backswing timing is critical to creating a consistent swing, with the proper time varying depending on the club in use.

**Analyze**: Examine your metrics for backswing time. Ideal time for club types: wedges to 8 iron: .60 sec. | 7-iron to 5-iron: .68 sec. | 4-iron to driver: .75 sec.

**Train**: Work on your backswing time by hitting shots of various distances. Keep timing consistent within your goal for each club.

**Challenge**: When you can consistently maintain the desired backswing time for each club, you are ready for drill 2, downswing time.
To establish a baseline for downswing time, start by hitting 9 shots.

| 3 Wedges | 3 7-Irons | 3 Drivers |

**01** Analyze: Examine your metrics for downswing time. Ideal time for club types: wedges to 8 iron: .30 sec. | 7-iron to 5-iron: .27 sec. | 4-iron to driver: .25 sec.

**02** Train: Work on your downswing time by hitting shots of various distances. Keep timing consistent within your goal for each club.

**03** Challenge: When you can consistently maintain the desired downswing time for each club, you are ready for drill 3, tempo.
To establish a baseline for backswing time, start by hitting 9 shots.

**DRILL 03 TEMPO**

Establishing a consistent swing tempo ensures that timing remains repeatable and ensures that you properly store and release energy throughout the swing.

**Analyze**: Examine your metrics for tempo. Ideal tempo for club types: wedges to 8 iron: **2.0:1** | 7-iron to 5-iron: **2.5:1** | 4-iron to driver: **3.0:1**

**Train**: Work on your tempo by hitting shots of various distances. Keep tempo consistent within your goal for each club.

**Challenge**: When you’re able to consistently maintain the desired tempo for each club, you’re ready for level 2, timing and speed.
To establish a baseline for swing speed, start by hitting 9 shots.

3 WEDGES | 3 7-IRONS | 3 DRIVERS

**DRILL 01 TIMING & SPEED**

Establishing consistent speed for each club while controlling timing will allow you to control your shot distance and knock down your targets.

**Analyze:** Examine your metrics for swing speed to identify ideal speed for the desired distance.

**Train:** Work with the speed metric to develop feel for shots at various distances. Repeat your swing speed for each shot while maintaining your swing timing.

**Challenge:** When you can consistently hit shots, maintain swing timing, and adjust speed for the shot condition, you are on your way to becoming a master of distance control.
### METRIC RANGES

<table>
<thead>
<tr>
<th>METRIC</th>
<th>GOAL</th>
<th>RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>8-IRON - WEDGES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BACKSWING TIME</td>
<td>.60 sec</td>
<td>.55 to .65 sec</td>
</tr>
<tr>
<td>DOWNSWING TIME</td>
<td>.30 sec</td>
<td>.25 to .30 sec</td>
</tr>
<tr>
<td>SWING TEMPO</td>
<td>2.0:1 ratio</td>
<td>2.2:1 to 1.9:1 ratio</td>
</tr>
<tr>
<td><strong>7-IRON - 5-IRON</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BACKSWING TIME</td>
<td>.68 sec</td>
<td>.65 to .75 sec</td>
</tr>
<tr>
<td>DOWNSWING TIME</td>
<td>.27 sec</td>
<td>.25 to .30 sec</td>
</tr>
<tr>
<td>SWING TEMPO</td>
<td>2.5:1 ratio</td>
<td>2.4:1 to 2.6:1 ratio</td>
</tr>
<tr>
<td><strong>4-IRON - DRIVER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BACKSWING TIME</td>
<td>.75 sec</td>
<td>.70 to .78 sec</td>
</tr>
<tr>
<td>DOWNSWING TIME</td>
<td>.25 sec</td>
<td>.24 to .28 sec</td>
</tr>
<tr>
<td>SWING TEMPO</td>
<td>3.0:1 ratio</td>
<td>2.8:1 to 3.2:1 ratio</td>
</tr>
</tbody>
</table>