

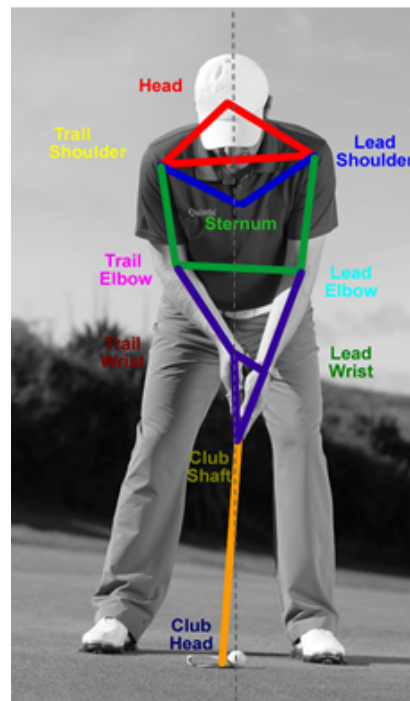
## QUINTIC PUTTING ANALYSIS

Name	Paul Hurrion				
Email	info@quintic.com	Date	02.12.19		
Mass	80 kg	Handicap	2	Height	176 cm

### Summary

Example Single Putt Report

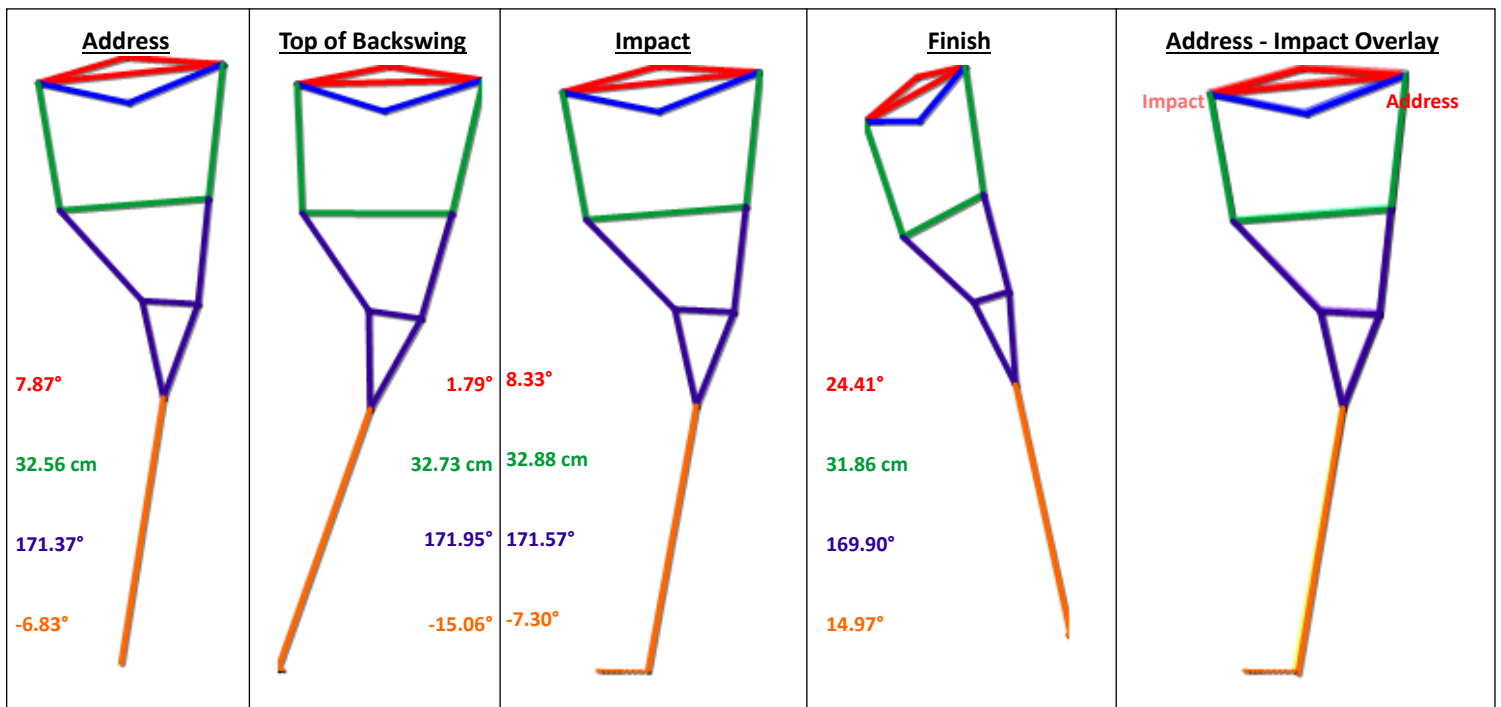
## KEY AND DIAGRAMS



N.B. The above Markers are for Right Handed Golfers. For Left Handers, Trail and Lead will be reversed for the Shoulder, Elbow and Wrist

## POSITIONS

	Address	SD	Top of Backswing	SD	Impact	SD	Finish	SD
Shoulder Tilt (degrees)	7.87°	-	1.79°	-	8.33°	-	24.41°	-
Shaft Angle (degrees)	-6.83°	-	-15.06°	-	-7.30°	-	14.97°	-
Lead Wrist Angle (degrees)	171.37°	-	171.95°	-	171.57°	-	169.90°	-
Elbow Distance (cm)	32.56 cm	-	32.73 cm	-	32.88 cm	-	31.86 cm	-
Ball Position Relative to Sternum (cm)	0.61 cm	(For Reference, see Page 1)						

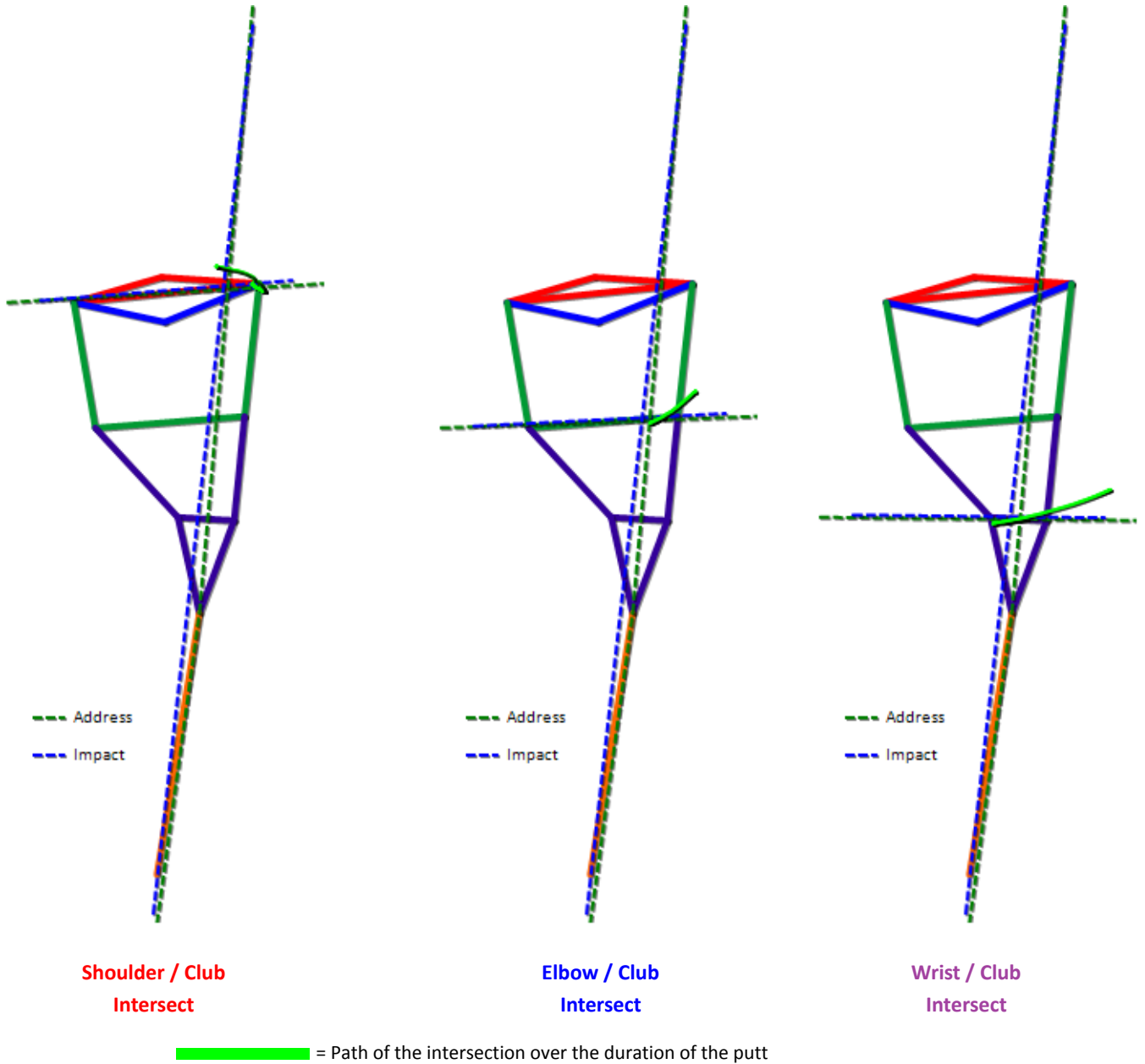


## HEAD KINEMATICS

	Sway	SD	Lift	SD
Head Displacement in the Backswing (cm)	0.90	-	-0.37	-
Head Displacement in the Downswing (cm)	-0.75	-	0.98	-
Head Displacement in the Throughswing (cm)	0.89	-	2.25	-
Head Displacement from Address to Impact (cm)	0.13	-	0.66	-

Positive Lift  
Negative Lift  
Negative Sway  
Positive Sway  
Target

# PENDULUM MOTION OF STROKE

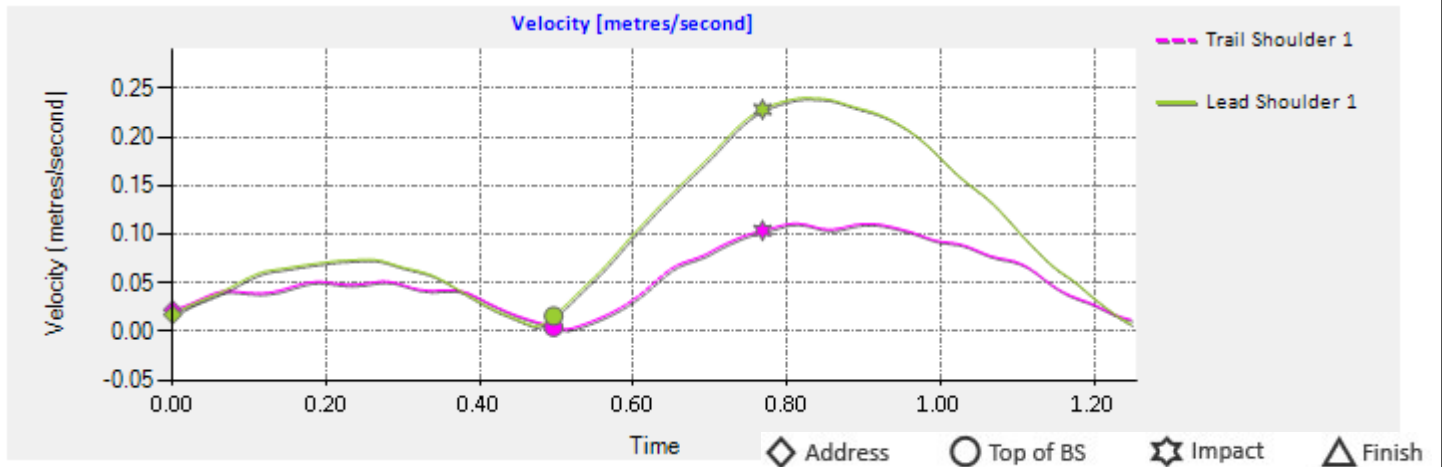


Intersect Angle (degrees):

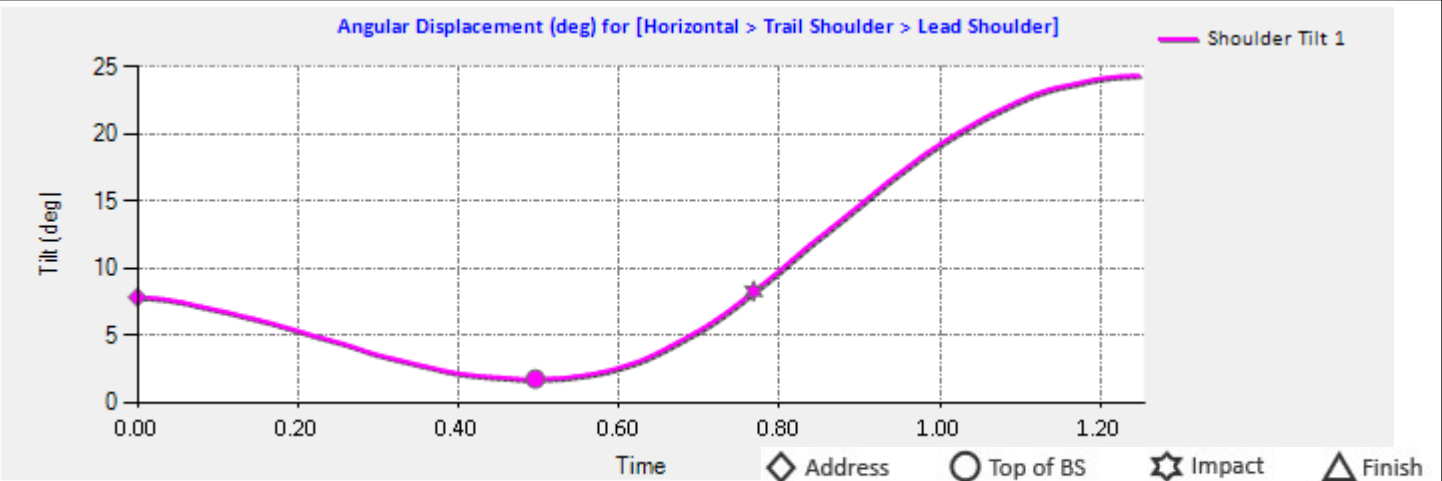
	Address	SD	Top of Backswing	SD	Impact	SD	Finish	SD
Shoulder / Club Intersect	75.31°	-	73.16°	-	74.38°	-	80.51°	-
Elbow / Club Intersect	77.14°	-	75.18°	-	76.20°	-	81.35°	-
Wrist / Club Intersect	87.64°	-	86.24°	-	86.61°	-	91.24°	-
Difference between	Shoulder Intersect Angle	SD	Elbow Intersect Angle	SD	Wrist Intersect Angle	SD		
Address and Top of BS (degrees)	-2.15°	-	-1.96°	-	-1.40°	-		
Top of BS to Impact (degrees)	1.22°	-	1.02°	-	0.37°	-		
Impact and Finish (degrees)	6.14°	-	5.15°	-	4.63°	-		
Address and Impact (degrees)	-0.93°	-	-0.94°	-	-1.02°	-		

# SHOULDER AND UPPER TRUNK KINEMATICS

When Club Head at Maximum Velocity:	Lead Shoulder Velocity	SD	Trail Shoulder Velocity	SD
In the Backswing	0.07 m/s	-	0.05 m/s	-
<i>Percentage Attributable to each Shoulder</i>	60 %	-	40 %	-
In the Downswing	0.22 m/s	-	0.10 m/s	-
<i>Percentage Attributable to each Shoulder</i>	69 %	-	31 %	-
In the Throughswing	0.23 m/s	-	0.11 m/s	-
<i>Percentage Attributable to each Shoulder</i>	68 %	-	32 %	-



Shoulder Tilt (degrees):		SD	
At Address	7.87°	-	<p>Positive Shoulder Tilt</p> <p>Negative Shoulder Tilt</p>
At Top of Backswing	1.79°	-	
At Impact	8.33°	-	
At Impact Relative to Address	0.46°	-	
Degree of Tilt in Backswing	-6.08°	-	
Degree of Tilt in Downswing	6.54°	-	



Angle: Horizontal, Trail Shoulder, Lead Shoulder		SD	
Maximum Angular Velocity of Backswing (deg/s)	21.09	-	
Maximum Angular Velocity of Throughswing (deg/s)	52.03	-	
Ratio of Angular Velocity for BS compared to TS	1 : 2.47 ( 1 : 2= Double the Speed on the TS)		

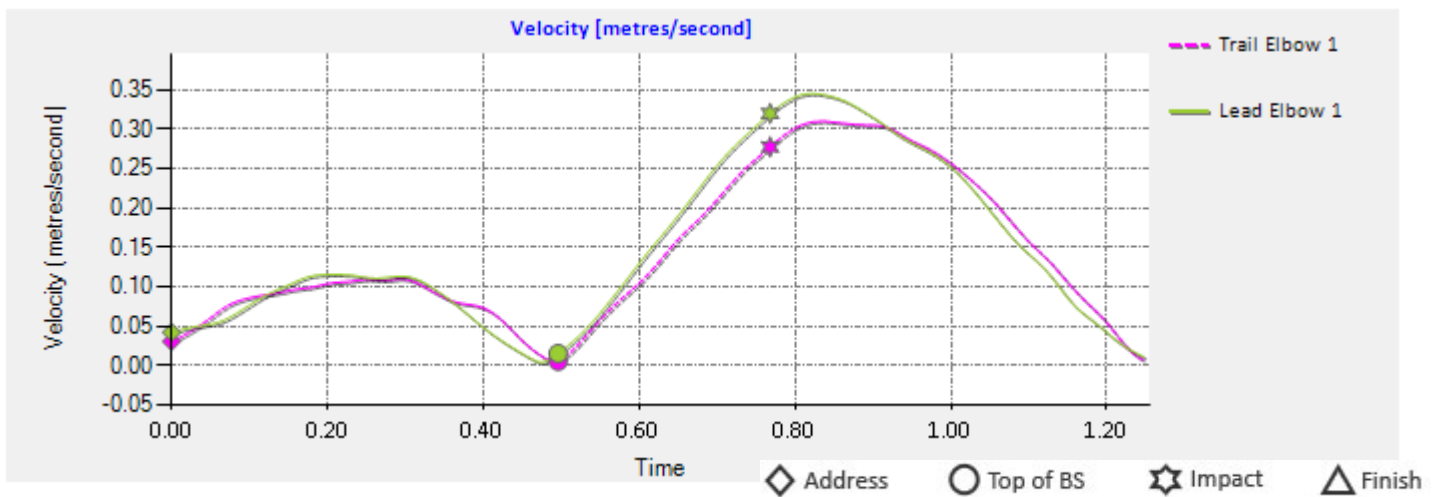
## TRUNK KINEMATICS

	Sway	SD	Lift	SD
in the Backswing (cm)	-0.76	-	-0.13	-
in the Downswing (cm)	0.45	-	0.80	-
in the Throughswing (cm)	1.39	-	2.19	-
from Address to Impact (cm)	-0.30	-	0.67	-

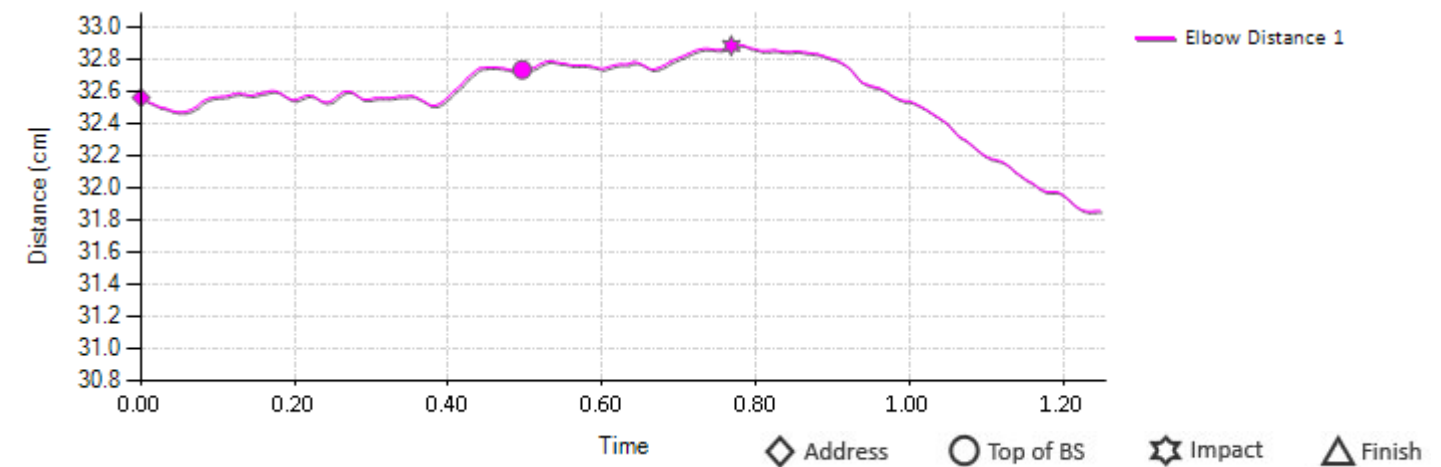


## ELBOW KINEMATICS

When Club Head at Maximum Velocity:	Lead Elbow Velocity	SD	Trail Elbow Velocity	SD
In the Backswing	0.11 m/s	-	0.11 m/s	-
<i>Percentage Attributable to each Elbow</i>	51 %	-	49 %	-
In the Downswing	0.31 m/s	-	0.26 m/s	-
<i>Percentage Attributable to each Elbow</i>	54 %	-	46 %	-
In the Throughswing	0.32 m/s	-	0.31 m/s	-
<i>Percentage Attributable to each Elbow</i>	51 %	-	49 %	-

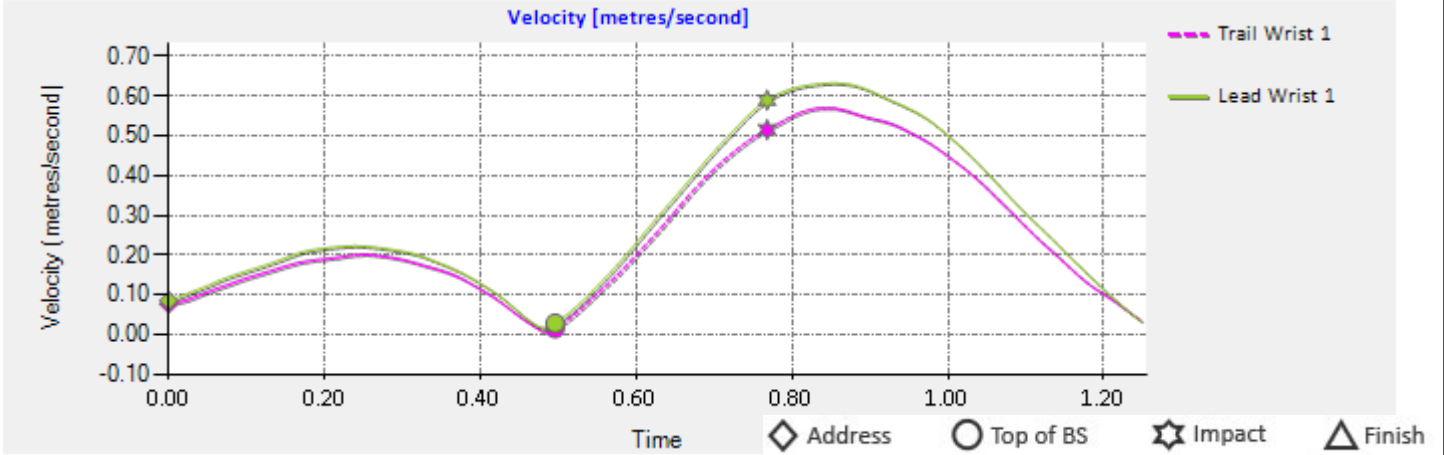


Distance of Elbows Relative	Address	SD	Top of Backswing	SD	Impact	SD	Finish	SD
	32.56	-	32.73	-	32.88	-	31.86	-

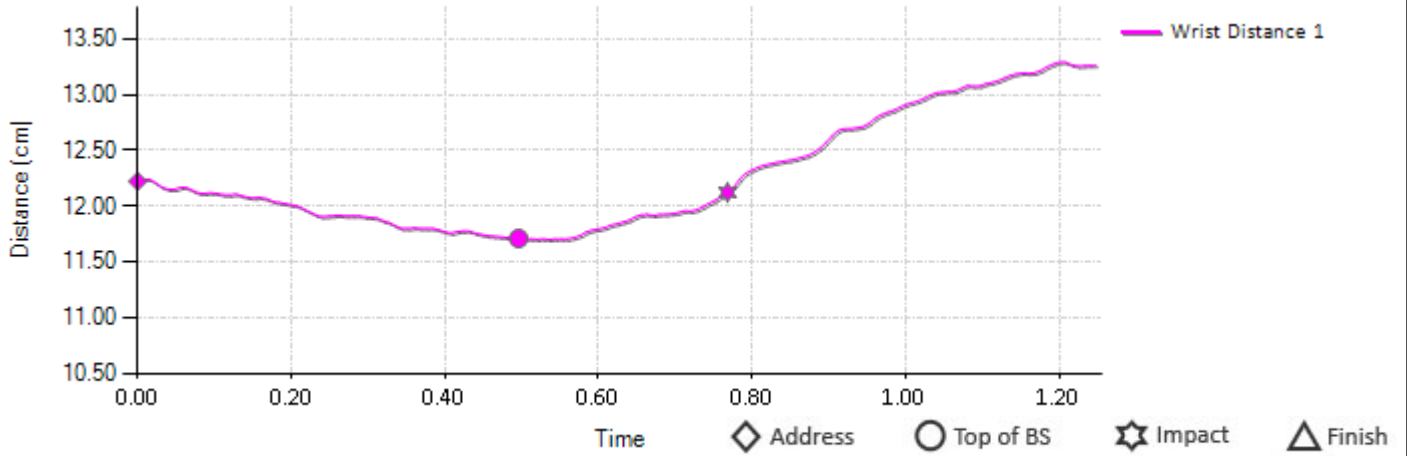


# WRIST KINEMATICS

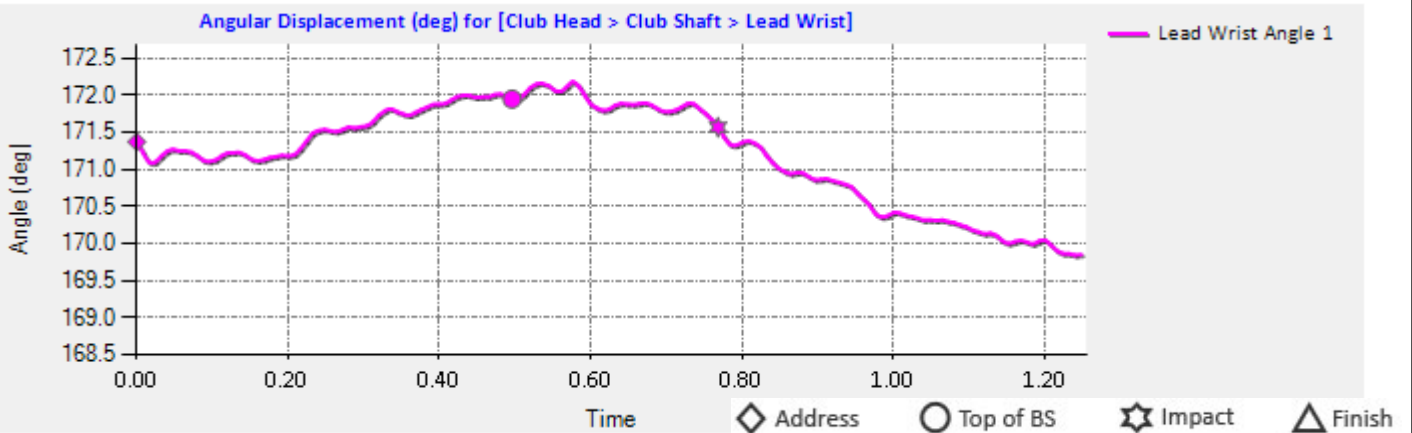
When Club Head at Maximum Velocity:	Lead Wrist Velocity	SD	Trail Wrist Velocity	SD
In the Backswing	0.22 m/s	-	0.20 m/s	-
<i>Percentage Attributable to each Wrist</i>	52 %	-	48 %	-
In the Downswing	0.57 m/s	-	0.50 m/s	-
<i>Percentage Attributable to each Wrist</i>	53 %	-	47 %	-
In the Throughswing	0.62 m/s	-	0.55 m/s	-
<i>Percentage Attributable to each Wrist</i>	53 %	-	47 %	-



Distance of Wrist Relative to each other (cm)	Address	SD	Top of Backswing	SD	Impact	SD	Finish	SD
	12.22	-	11.71	-	12.12	-	13.26	-

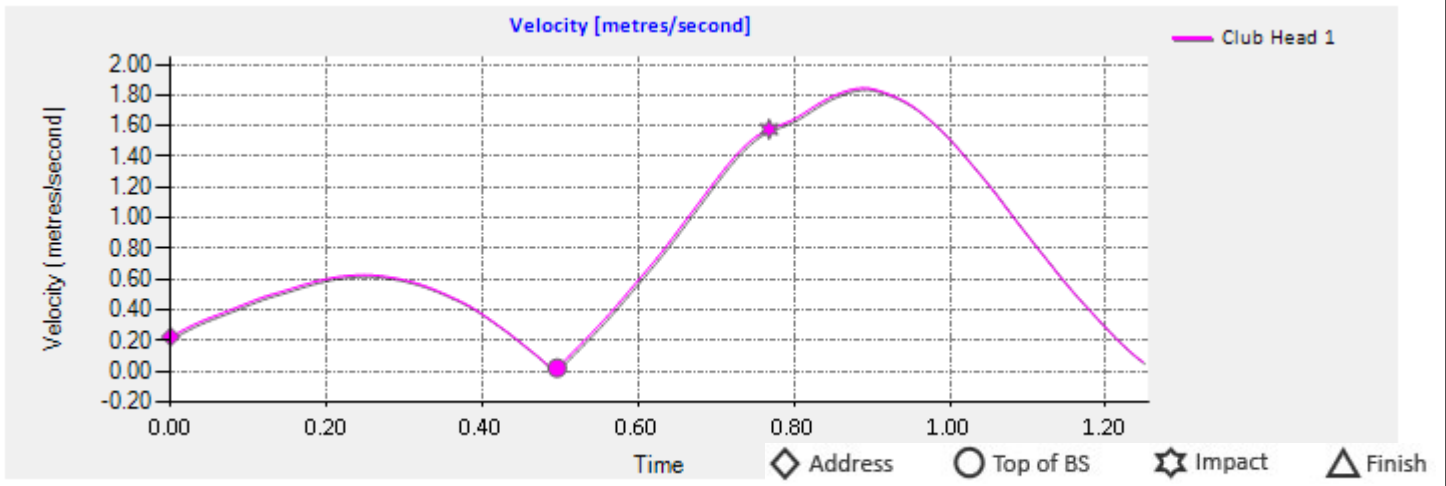


	Address	SD	Impact	SD	Difference
Lead Wrist Angle (degrees)	171.37°	-	171.57°	-	0.20°



# CLUB KINEMATICS

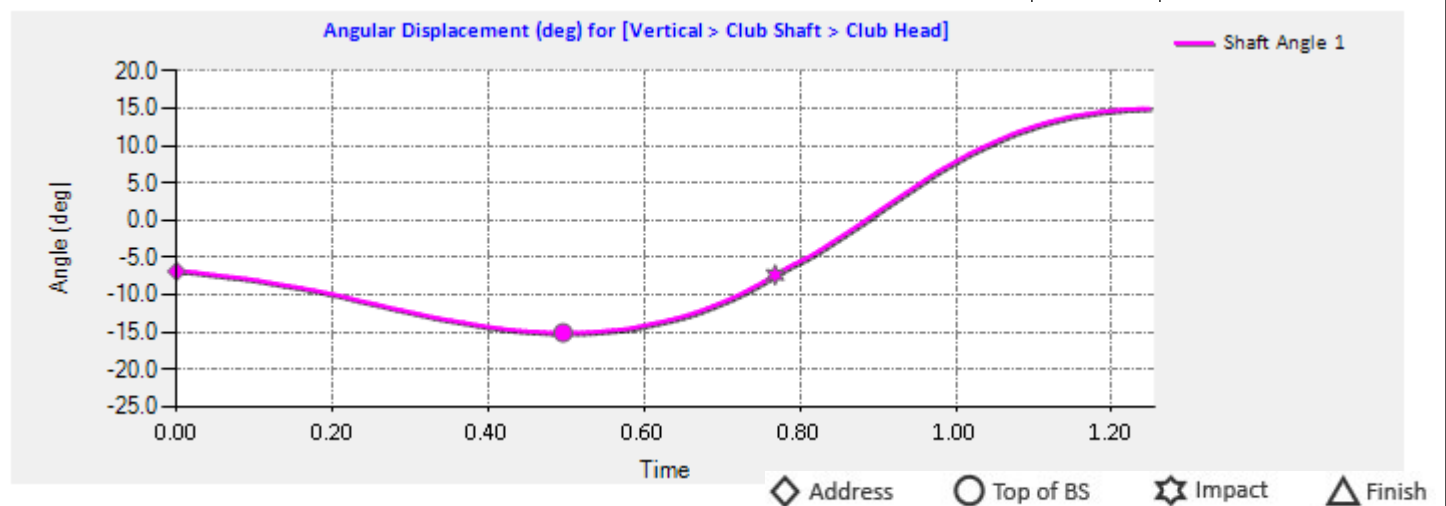
	Backswing	SD	Downswing	SD	Throughswing	SD
Maximum Velocity of Club (m/s)	0.63	-	1.53	-	1.85	-
Location of Club at Max. Velocity (m)	0.21 (Positive = After Impact, Negative = Before Impact)					



	Backswing	SD	Downswing	SD	Throughswing	SD
Path Length of Club Head (m)	0.22	-	0.20	-	0.60	-
Ratio of DS to TS (Length)	1 : 2.95 (Ratio 1 : 1 = DS and TS same length)					

Tempo (Time):		SD		
Time of the Backswing (s)	0.49	-	-	-
Time of the Downswing (s)	0.27	-	-	-
Time of the Throughswing (s)	0.49	-	-	-
Ratio of BS to DS (Time)	1 : 0.56 (Ratio 1 : 0.5 = DS is half the time of the BS)			
Ratio of BS to DS + TS (Time)	1 : 1.56 (Ratio 1 : 1 = Same time BS as DS + TS)			

	Address	SD	Top of Backswing	SD	Impact	SD	Finish	SD
Shaft Angle (degrees)	-6.83°	-	-15.06°	-	-7.30°	-	14.97°	-



	5 Frames Pre Impact	5 Frames Post Impact
Attack Angle / Rise Angle of Club (degrees)	0.11°	3.47°

## ABOUT PLAYER