

Wedgie^{TM/MC}

in the Wind, independent aerodynamic testing at the A2 Wind Tunnel LLC. In North Carolina, USA

The Testing Protocol: Compare the aerodynamics of a typical race set-up to the Wedgie with speeds up to 30 mph and Yaw angles from 0° to 25°

Race Requirements: Bicycle plus: one 28 oz. water bottle and storage for one spare tube, two CO² cartridges, one air chuck and three tire irons

The Bike: Cervelo P2C equipped with ZIPP wheels (808 front / Disk rear). We purposely chose a “slippery” bicycle as the benchmark knowing that adding anything to it will increase the aerodynamic drag.

The Typical Set-up: Water bottle mounted on the bicycle frame’s down tube and tool bag mounted behind the saddle at the end of a common aero mounting device (that allows for tool and water bottle cage attachments) typically seen in triathlons.

Wedgie: ▼ The Wedgie is an integrated water bottle and tool kit holder designed especially for the competitive triathlete and cyclist

▼ **The Wedgie will save you on average 14.4 Watts to 17.7 Watts** (at a Yaw angle of 10 degrees) over the typical race set-up

▼ The Wedgie mirrors the bicycle’s aerodynamics complimenting the bicycle’s handling characteristics

▼ The Wedgie is fastest with the water bottle in place allowing the wind to flow smoothly across the bicycle’s frame during a cross wind



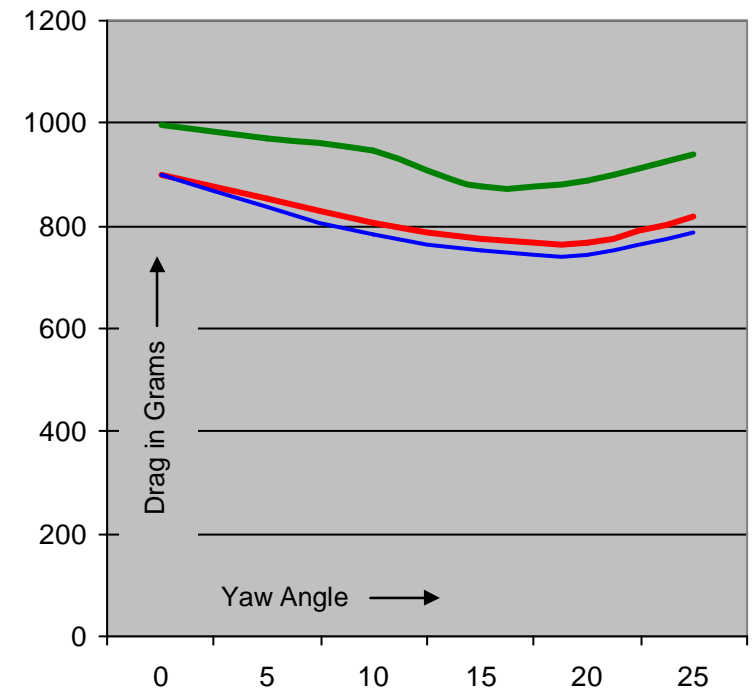
Yaw Angle	BodyAxis C _D A	BodyAxis C _D	Drag lbs.	Drag grams	Aero Watts
Typical Set-up					
0°	.955	.282	2.20	998	131
5°	.927	.274	2.14	969	127
10°	.899	.265	2.07	939	124
15°	.840	.248	1.93	877	115
20°	.852	.251	1.96	890	117
25°	.894	.264	2.06	934	123



Yaw Angle	BodyAxis C _D A	BodyAxis C _D	Drag lbs.	Drag grams	Aero Watts
Wedgie					
0°	.861	.254	1.98	900	118
5°	.819	.242	1.89	855	113
10°	.770	.227	1.77	805	106
15°	.742	.219	1.71	775	102
20°	.757	.223	1.74	791	104
25°	.790	.233	1.82	826	109



Yaw Angle	BodyAxis C _D A	BodyAxis C _D	Drag lbs.	Drag grams	Aero Watts
“Naked” Bike					
0°	.862	.254	1.98	900	118
5°	.803	.237	1.85	839	110
10°	.751	.222	1.73	785	103
15°	.721	.213	1.66	753	99
20°	.713	.210	1.64	745	98
25°	.754	.222	1.74	788	104



Yaw Angle: Difference between the bicycle's direction and the direction of air stream
 BodyAxis C_DA: Coefficient of Drag Area - measure of the area which the air stream feels
 BodyAxis C_D: Coefficient of Drag - measure of the aerodynamic efficiency of a shape
 Drag lbs.: Friction drag - measured in Pounds
 Drag grams: Friction drag - measured in Grams
 Aero Watts: Power required to move the shape through the air at a specified velocity
 Neglects any rolling resistance and losses through drive train

For more information please visit: myWedgie.com