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FIN FIGHT, P. 72

MANUFACTURER/MODEL/CONTACT	PRICE	MADE IN	WARRANTY	FIN STYLE	FOOT POCKET	SIZES	POWER VS. STRESS	STABILITY	MANEUVERABILITY	ACCELERATION	FIT & COMFORT	ALT. KICKS	SURFACE SWIM	DONNING/DOFFING	ADJUSTING FOR FIT	NONSKID	ADJUSTED ERGO TOTAL*
		FEATURES					ERGO PERFORMANCE										
							MOST IMPORTANT				MODERATELY IMPORTANT			CONVENIENCE ELEMENTS			
OPEN-HEEL																	
APOLLO SPORTS Bio-Fin Pro XT/C-Series www.diveapollo.com	$260	Japan	1 Year	Split	Open toe	3	5	4	4	4	4	4	4	5	5	4	89
APOLLO SPORTS Bio-Fin Pro Yellow www.diveapollo.com	$225	Japan	1 Year	Split	Open toe	4	5	4	4	5	4	4	4	4	4	4	90
ATOMIC AQUATICS Reef Red www.atomicaquatics.com	$199	Taiwan	1 Year	Split	Open toe	4	4	4	4	4	4	4	4	5	4	4	85
MARES Volo Power www.mares.com	$189	Italy	2 Years	Paddle	Closed toe	3	4	4	4	4	4	4	4	4	4	4	84
TUSA Imprex Tri-Ex www.tusa.com	$89	Taiwan	3 Years	Paddle	Closed toe	3	4	4	4	4	4	4	4	4	4	3	83
AERIS Velocity Duo www.diveaeris.com	$129.95	Italy	2 Years	Split	Closed toe	4	3	4	4	4	3	4	4	4	4	4	79
VERY GOOD — GENESIS SCUBA Response www.genesisscuba.com	$75	Italy	2 Years	Paddle	Closed toe	3	3	4	4	3	4	3	3	4	4	3	73
GOOD — H2ODYSSEY F-14 Thruster www.h2odyssey.com	$59.95	China	1-Yr.	Paddle	Closed toe	2	3	4	3	3	4	3	3	4	4	4	71
GOOD — SHERWOOD SCUBA Impact www.sherwoodscuba.com	$99	Taiwan	Ltd.	Paddle	Open toe	3	3	3	3	3	3	4	3	4	3	3	66
GOOD — H2ODYSSEY / TILOS Mach II Turbo www.h2odyssey.com / www.tilos.com	$139.95/ $100	Taiwan	2 Years	Horizontal Split	Closed toe	4	3	3	3	3	3	3	3	4	4	3	65
GOOD — TILOS Magnifica www.tilos.com	$70	Italy	1-Yr.	Paddle	Closed toe	3	3	3	3	3	2	3	3	4	4	4	64
FAIR — SCUBAPRO Razor www.scubapro.com	$108	Italy	Ltd.	Paddle	Closed toe	3	3	3	3	3	3	3	3	3	3	3	63
FULL-FOOT																	
TUSA X-Pert Zoom FF-9 www.tusa.com	$50	USA	1-Yr. Ltd.	Split	Open toe	6	4	4	5	4	4	4	4	4	N/A	3	82
ATOMIC AQUATICS Full-Foot SplitFin** www.atomicaquatics.com	$89	Taiwan	Ltd. Lifetime	Split	Open toe	6	4	4	4	4	3	4	3	4	N/A	3	75
GOOD — TILOS Feather www.tilos.com	$37	Italy		Paddle	Open toe	6	3	3	3	3	5	3	3	4	N/A	2	64

5=Excellent, 4=Very Good, 3=Good, 2=Fair, 1=Poor

*HOW WE DETERMINE TESTERS' CHOICES ScubaLab Testers' Choices are based on the adjusted scores for ergonomic performance (actual scores x 3 for "Most Important" categories, actual scores x 2 for "Moderately Important" categories, and actual scores x 1 for "Convenience Elements"), plus numerical scores for speed, slalom and efficiency course runs.

MOST IMPORTANT

Power vs. Stress: The perception of power produced vs. effort required. > Stability: How much the fins wobble, slice from side to side or hit each other during the kick cycle. > Maneuverability: The ease of turning, as well as getting in and out of tight places using fin power; i.e., backing up, changing or reversing directions, using small fin movements. > Acceleration: During an underwater swim, the ability to quickly pick up speed.

MODERATELY IMPORTANT

Fit & Comfort: Of foot pocket. > Alternate Kicks: Ease and effectiveness of frog and dolphin kicks. > Surface Swim: Both face-down and while on the back.

CONVENIENCE ELEMENTS

Donning/doffing: Prior to dive, after the dive. > Adjusting for fit: Ease of using buckles and straps, both in and out of the water. > Nonskid: The sense of security on a wet boat deck geared up while wearing fins.

LAURA C.S. WALKER

** Please see editor's note, page 79.

OBJECTIVE PERFORMANCE

	SPEED	SLALOM	EFFICIENCY	OBJECTIVE TOTAL	OVERALL TOTAL
	5	5	5	15	104
	4	5	5	14	104
	4	4	5	13	98
	4	3	4	11	95
	3	3	4	10	93
	3	4	4	11	90
	3	3	4	10	83
	3	2	2	7	78
	3	2	2	7	73
	3	1	2	6	71
	2	3	2	7	71
	2	2	2	6	69
	4	4	4	12	94
	4	4	4	12	87
	3	2	3	8	72

THE SPEED COURSE

Six test divers, using the flutter kick at an average depth of 10 feet, took each fin on three speed runs. The highest sustained speed, as measured by digital underwater speedometers, for each fin, was taken from each diver, then averaged for the following speeds. In addition, test divers did one run each using the frog kick and the dolphin kick to get a sense of the fin's relative speeds using these alternate kicks.

When applied to real-world diving, the difference of 1/10th mph is insignificant. Speed data should be used in conjunction with maneuverability, efficiency and ergonomic results for a complete picture of a fin's performance.

MPH	FLUTTER KICK	MPH	FROG KICK*	MPH	DOLPHIN KICK*
	OPEN-HEELS				
3.0	Apollo Bio-Fin Pro XT/C-Series	2.3	Apollo Bio-Fin Pro XT/C-Series	2.4	Apollo Bio-Fin Pro XT/C-Series
2.7	Apollo Bio-Fin Pro Yellow	2.0	Apollo Bio-Fin Pro Yellow		Apollo Bio-Fin Pro Yellow
2.6	Atomic Aquatics Reef Red	1.9	Atomic Aquatics Reef Red	2.2	Atomic Aquatics Reef Red
	Mares Volo Power		Mares Volo Power		Genesis Scuba Response
2.5	H2Odyssey Thruster		Tusa Imprex Tri-Ex		Mares Volo Power
	Tusa Imprex Tri-Ex	1.8	Genesis Scuba Response	2.1	H2Odyssey Thruster
2.4	Aeris Velocity Duo		H2Odyssey F-14 Thruster		Tusa Imprex Tri-Ex
	Genesis Scuba Response	1.7	Aeris Velocity Duo	2.0	Sherwood Scuba Impact
	H2Odyssey/Tilos Mach II Turbo		H2Odyssey/Tilos Mach II Turbo	1.9	Aeris Velocity Duo
	Sherwood Scuba Impact		Sherwood Scuba Impact		H2Odyssey/Tilos Mach II Turbo
2.2	Scubapro Razor		Tilos Magnifica		Tilos Magnifica
	Tilos Magnifica	1.6	Scubapro Razor	1.8	Scubapro Razor
	FULL-FOOTS				
2.8	Atomic Aquatics Full-Foot SplitFin**	2.1	Atomic Aquatics Full-Foot SplitFin**	2.4	Tusa X-Pert Zoom FF-9
	Tusa X-Pert Zoom FF-9	1.9	Tusa X-Pert Zoom FF-9	2.2	Atomic Aquatics Full-Foot SplitFin**
2.5	Tilos Feather	1.8	Tilos Feather		Tilos Feather

* These are interest items only and were not factored into the scoring. For more results of fin performance using alternate kicks, see the ergo performance chart.

THE SLALOM COURSE

Six test divers, using a flutter kick, swam an obstacle course in approximately 10 feet of water. While on the course, divers' hands clutched either weight belts or BC straps to ensure all maneuvering power was generated by the fins. Divers swam two circuits per fin, timing their runs with digital stopwatches. The fastest time for each fin was taken from each diver, then averaged, to come up with the following course times.

TIME (in seconds)	
	OPEN-HEELS
30	Apollo Bio-Fin Pro XT/C-Series
31	Apollo Bio-Fin Pro Yellow
32	Atomic Aquatics Reef Red
33	Aeris Velocity Duo
34	Mares Volo Power
	Tusa Imprex Tri-Ex
35	Genesis Scuba Response
	Tilos Magnifica
36	Sherwood Scuba Impact
37	H2Odyssey F-14 Thruster
	Scubapro Razor
38	H2Odyssey/Tilos Mach II Turbo
	FULL-FOOTS
33	Atomic Aquatics Full-Foot SplitFin**
	Tusa X-Pert Zoom FF-9
36	Tilos Feather

THE EFFICIENCY COURSE

Six test divers, using a flutter kick in approximately 10 feet of water, swam a straight-line course 65 feet long, including a 15-foot "runway" to allow them to achieve their most efficient kicking rhythm before starting their digital stopwatches. Divers completed two runs for each fin. The best runs for each diver for each fin were then averaged.

Note: This test is new to our fin protocols, but the data is remarkably consistent with our established tests for speed and maneuverability. As with our other tests, we don't recommend using this data alone to make your fin choice. It should be used only in conjunction with speed, slalom

COURSE TIME (in seconds)	
	OPEN-HEELS
20	Apollo Bio-Fin Pro Yellow
21	Apollo Bio-Fin Pro XT/C-Series
	Atomic Aquatics Reef Red
22	Tusa Imprex Tri-Ex
23	Aeris Velocity Duo
	Genesis Scuba Response
	Mares Volo Power
26	Scubapro Razor
	Sherwood Scuba Impact
	Tilos Magnifica
27	H2Odyssey F-14 Thruster
	H2Odyssey/Tilos Mach II Turbo
	FULL-FOOTS
22	Atomic Aquatics Full-Foot SplitFin**
23	Tusa X-Pert Zoom FF-9
24	Tilos Feather

** Please see editor's note, page 79.