

Kestrel Model 4000.

The 4000's unique appearance is more than just styling cosmetics. Airfoil tubing sections and wish-bone stays substantially improve airflow while the signature scalloped seat tube retains close-coupled frame geometry and allows room for the massive bottom bracket section. True one-piece construction, hybrid composite materials, and functional aerodynamics make the Model 4000 the world's most efficient frameset for triathlon, road racing, time trials, and long-distance events.

UNIFRAME™ CONSTRUCTION.

The *only* true one-piece bicycle frame. Fiber continuity is maintained through all frame junctions; no "glued-on" frame sections.

GRAPHITE/SPECTRA® HYBRID

For the Model 4000, Kestrel has hybridized two advanced composite fibers: graphite, and a new ultrahigh strength ballistic fiber, Spectra, to create a unique proprietary laminate.

STRONGER

Over twice as strong as premium chromolly in front-end loading tests. Up to four times the fatigue life of either steel or aluminum, and substantially less potential for catastrophic failure.

STIFFER

In lateral deflection tests, Kestrel measures 20% stiffer than premium steel frames at the bottom bracket; 18% stiffer at the head tube.

SUSPENSION ENGINEERED

Spectra has the highest vibration damping coefficient of any composite fiber. And significantly greater damping than either aluminum or titanium—which are actually inferior to steel in this respect. Kestrel's rear triangle is designed as an integral suspension unit, incorporating Spectra material molded over foam-core stays.

"They've found just the right combination of stiffness and comfort. It's like a finely tuned sports car—you can feel the road, but the ride is never harsh. It tracks like an arrow on descents. I've never ridden a bike that was this light and stable at the same time. It's by far the best bike on the market, by any standard of comparison."

Mike Secrest/ Kestrel 4000, Race Across America Winners

TRUE AIRFOIL CONSTRUCTION

Wind tunnel prototyped. Kestrel airfoils have substantially reduced thickness ratios (41% and 53% as projected into the airstream for down tube and seat tube respectively), yielding the lowest coefficient of drag of any production frame.

BIOMECHANICS

Biomechanical efficiency in the Model 4000 is determined by dynamic weight distribution analysis. This computerized program models the effects of frame design on rider location to ensure proper positioning for seated riding, out-of-saddle climbing, and sprints.

SPECIFICATIONS

MATERIALS AND CONSTRUCTION

Proprietary advanced composite Carbon/Spectra hybrid in a continuous fiber, One-piece Uniframe format.

SIZES

52, 54, 56, 58 & 60 cm

COLORS

Kestrel White or Custom Finish

GEOMETRIES

SIZE*	52	54	56	58	60
Top Tube	52.45	54.61	55.88	56.52	57.15
Head Angle	73.0	73.5	74.0	74.0	74.0
Seat Angle	74.5	74.0	74.0	73.5	73.0
Chainstay	41	41	41	41	41
Rake	5.0	4.4	4.4	4.4	4.4
Drop	6.7	6.7	6.7	6.7	6.7
Trail	4.83	4.95	4.95	4.95	4.95

The Kestrel 4000 is available as a frameset, or as a complete bicycle with Campagnolo Croce D'Aune or Shimano Dura-Ace components.

*Note: Although Kestrel frames are sized from center of bottom bracket to top of top tube, our seat tube extension makes Kestrel frames equivalent to center-to-center steel frames of the same size.

A LEGAL ADVANTAGE

The Model 4000 has been approved for use in local, national, and international competition by USCF, US PRO, UCI, and by Tri-Fed.

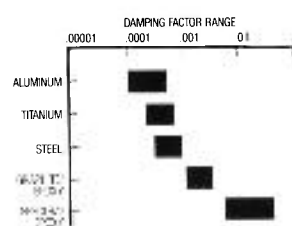
"This bike will never be mistaken for anything but one of the most innovative, most startling, and most daring bicycles of our time."

—Bicycle Guide

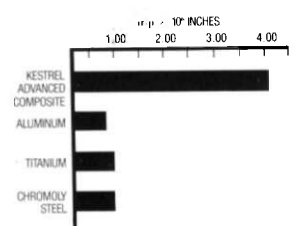
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Watsonville, CA 95076

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Kestrel and Uniframe are trademarks of
Cycle Composites, Inc.

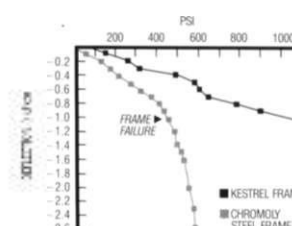
▼ Damping characteristics of materials (Data provided by Allied-Signal Inc.)



▼ Specific strength (Material strength for a given weight)



▼ Compressive strength (PSI applied at head tube)



Kestrel

Kestrel Model 200 SC.

The Kestrel 200 SC utilizes technologies pioneered on the revolutionary Model 4000 to offer Kestrel performance for about the same price as premium metal frames. Lighter, stiffer, stronger, more resilient and aerodynamic than conventional designs, the 200 SC redefines the ultimate frameset for criteriums, road racing, and the performance enthusiast.

UNIFRAME™ CONSTRUCTION

The aerospace industry has proven that molded one-piece construction is the only design truly appropriate to the new advanced composites. And Kestrel is the only true one-piece bicycle frame. No prefab tubes. No lugs. No "glued-on" frame sections. And no potential for inadequate glue joints, lug failure, tube separation, or the other problems that plague conventional designs.

STYLING

Freed from the constraints of tube-and-lug design, the Uniframe molding process makes Kestrels the first bicycles in which form really follows function. Finite Element Analysis—computer studies which model the complete spectrum of forces at work on a frame—defines the flowing lines and compound curves of the 200 SC. The sloping, variable-profile top tube changes shape from a horizontal oval, to round, to a vertical ellipse as it approaches the seat tube. The downtube airfoil widens at the bottom bracket for increased rigidity. And seatstays curve at the wishbone to

meet the seat tube, which itself is an airfoil design scalloped for wheel clearance. One look tells the whole story: Kestrel has defined a completely new aesthetic for the racing bicycle.

CARBON/SPECTRA® HYBRID

All Kestrel frames combine carbon fiber with Spectra, an ultrahigh-strength ballistic material, to form a unique proprietary laminate. The Model 200 SC's carbon/Spectra hybrid offers specific strength, modulus, and shock absorbent properties far superior to steel, aluminum, titanium, or even carbon or carbon/Kevlar composites.

STRONGER/LIGHTER/AERODYNAMICALLY FASTER

It's easy to build a frame that's strong. Or light. Or shaped like an airfoil. But only the potential of advanced composites in a one-piece format allows a frame to possess all these properties simultaneously. The Kestrel 200 SC is over twice as strong as premium chromolly frames in actual front-end loading tests, with fatigue resistance more than four times that of metal frames. It's up to thirty percent lighter than top-of-the-line steel frames. And the 200 SC's airfoil cross sections are developed from wind-tunnel test models for true aerodynamic advantage.

SUSPENSION ENGINEERED

Spectra has the highest vibration-damping coefficient of any frame-building material. And Kestrel's Uniframe molding process allows the 200 SC to take maximum

SPECIFICATIONS

MATERIALS AND CONSTRUCTION

Proprietary advanced composite Carbon/Spectra hybrid in a continuous fiber, One-piece Uniframe format.

SIZES

51, 54, 56, 58 & 61 cm

COLORS

Gunmetal or Custom Finish

GEOMETRIES

SIZE*	51	54	56	58	61
Top Tube	51.9	54.6	55.9	56.5	58.2
Head Angle	73.0	73.5	74.0	74.0	74.0
Seat Angle	74.5	74.0	74.0	73.5	73.0
Chainstay	41	41	41	41	41
Rake	4.6	4.4	4.4	4.4	4.1
Drop	6.7	6.7	6.7	6.7	6.7
Trail	4.8	5.0	5.0	5.0	5.0

The Kestrel 200 SC is available as a frameset, or as a complete bicycle with Shimano Dura-Ace or Ultegra components.

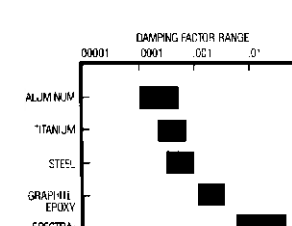
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advantage of a property of composites called *anisotropy*—the paradoxical ability to be both stiffer in one plane and more forgiving in another. It is this unique combination of lateral stiffness with vertical shock damping that gives the Model 200 SC its outstanding road feel, smooth ride, and responsive handling.

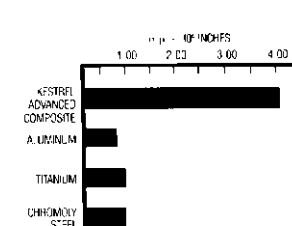
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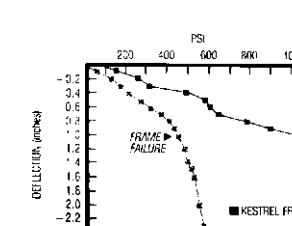
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