

1995 Catalog



World Leader in Cycling Technology



Litespeed Quality.

At Litespeed, we have never been satisfied with accepting current technology as being the best one can do. Every day we stay focused on applying our 40 years of metal fabricating experience to advancing the "state-of-the-art" in cycling technology. Our cold-worked 3AL-2.5V and exclusive 6AL-4V titanium tubesets are proof positive that when it comes to standard titanium tubing, just being titanium isn't good enough anymore.

Cold-working is by definition, "the plastic deformation of metals under the action of applied forces at temperatures below the recrystallization temperature." This translates to the reforming of a metal at room temperature. The results of this process are an increase in hardness, yield point, and strength of the metal. There is also a decrease in density and conductivity. Litespeed's unique manipulation of this technology allows for the creation of a tubeset that is stronger, lighter, and dampens vibration better than standard 3AL-2.5V that other frame builders use.

6AL-4V is an alloy of titanium that possesses a strength to weight ratio that is approximately 30% greater than 3AL-2.5V. So, in theory, you should be able to have a tubeset that is 30% lighter than a 3/2.5, and yet just as strong. The difficulty in breathing life into this theory is that in the past, 6/4 was only available in bar and plate form. Litespeed's unique capabilities have produced the world's first production 6AL-4V tubeset.

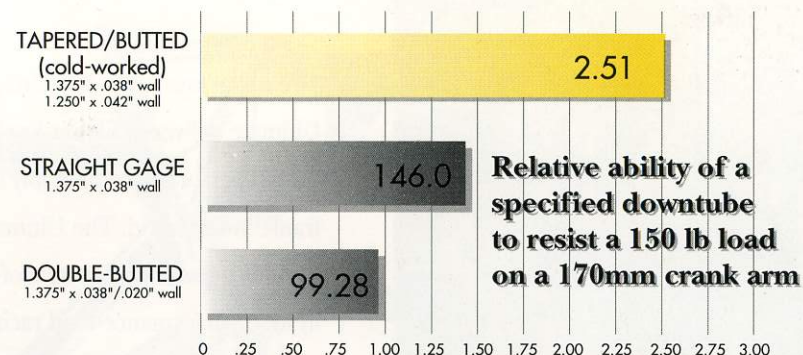
There are no corporate executives in three-piece suits here, no overseas labor or materials. Litespeed quality is built into each bicycle by a select group of craftsmen, using cutting edge technology and painstaking attention to detail. With a truly state-of-the-art line designed and built for increasingly individualized needs, Litespeed is the recognized leader in titanium frames. Whatever your needs—road, off-road, triathlon, time-trialist, even custom engineered designs, Litespeed has an answer. It's what sets us apart: Quality.

Litespeed quality. _____

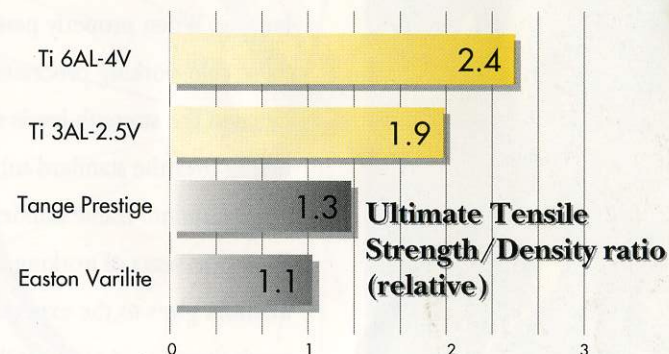
Just
being
titanium
isn't
good enough
anymore.

Litespeed
TITANIUM

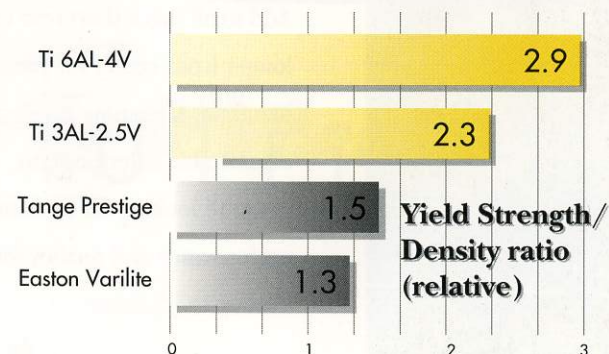
Stress Chart of Standard vs. Cold-Worked Tubesets
3AL-2.5V Titanium

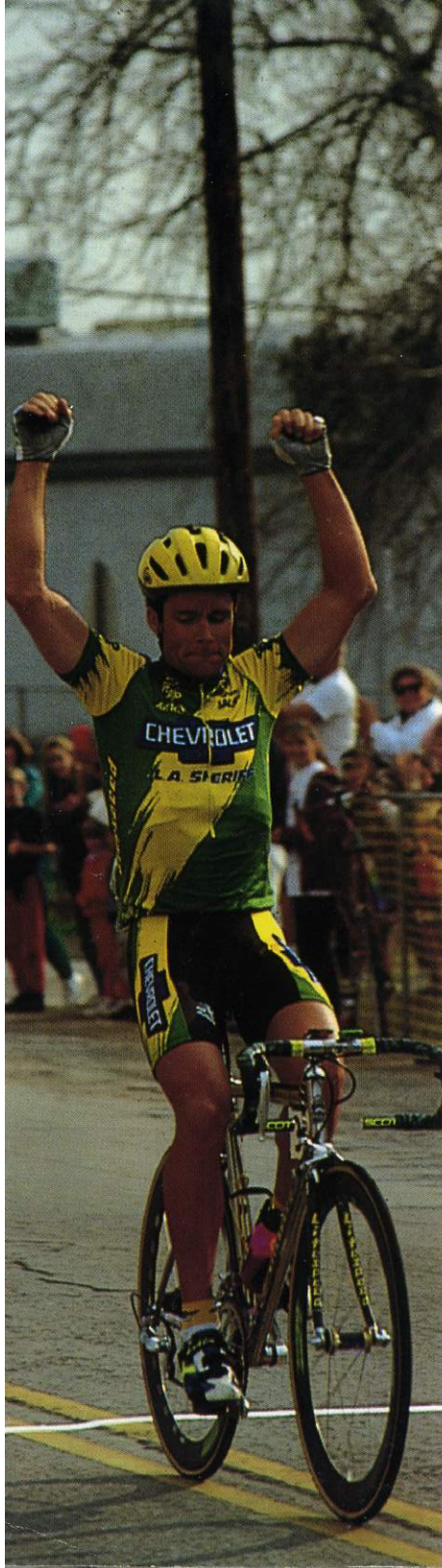


Ultimate Tensile Strength/Weight
Comparison of Cycling Tubing Materials



Yield Strength/Weight
Comparison of Cycling Tubing Materials





Ultimate

The name says it all—the Litespeed Ultimate delivers a higher level of overall performance than any other frame in the world. The Ultimate is without question, THE state-of-the-art in high performance road racing frames. We take U.S. made, 3AL-2.5V titanium tubing, and specially cold-work it in our shop by swaging, tapering, bending, and internally butting. When properly performed, these cold-working processes actually increase the strength levels of the tubing over the standard tube used by other titanium frame builders.

Forty plus years of working with titanium gives us the experience to reach these levels of strength and yet maintain the unmatched resilient ride that makes titanium famous.

Add to all this a short rear center and longer front center for precise handling, screaming acceleration, and comfortable rider position.

If you're looking for no-compromise performance and quality, this frame lives up to it's name,

...the Ultimate.

- 1993 Tour DuPont first place team
- 1993 British Pro Champion
- Yellow Jersey, stages 2, 3, and 4, in 1994 Tour DuPont
- 1994 US Pro Champion

Custom Tapered,
Ovalized/Butted
Front Triangle

Sculpted seattube sized
for 27.2mm Seat Post

Litespeed custom
double taper seatstays

External Cable Routing

Dual Water Bottle Bosses
with Titanium Fasteners

Braze-On
Front Derailleur Mount

Beautifully sculpted
vertical dropouts/
130mm Rear Spacing

Litespeed custom tapered
ovalized/butted chainstays

6AL-4V 68 mm English-Threaded
Bottom Bracket Shell with Vent

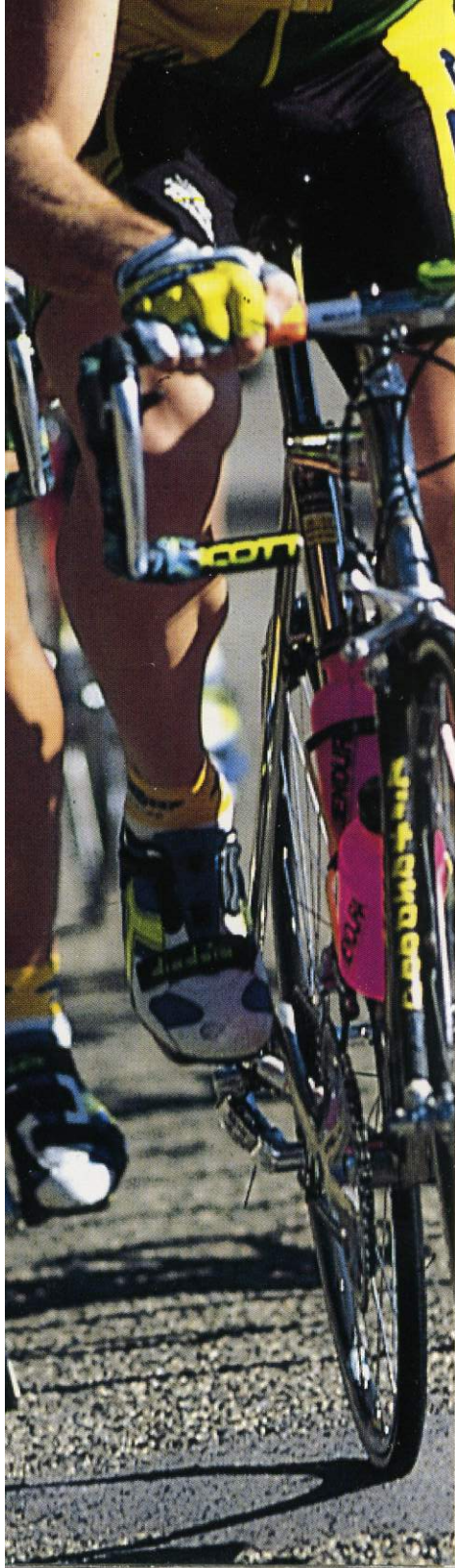
SIZE CENTER TO TOP	TOP TUBE LENGTH	HEAD TUBE ANGLE	SEAT TUBE ANGLE	CHAIN STAY LENGTH	WHEEL BASE	FORK RAKE	STAND OVER HEIGHT	BOTTOM BRACKET HEIGHT	FRONT CENTER LENGTH	HEAD TUBE LENGTH	WEIGHT
48cm	50.00cm	72°	74°	39.3cm	93.6cm	4.5cm	74.1cm	26.9cm	55.2cm	10.0cm	3.12 lbs
50cm	52.00cm	72.5°	73.5°	39.3cm	95.2cm	4.5cm	75.5cm	26.9cm	57.0cm	10.3cm	3.14 lbs
52cm	53.00cm	73°	73°	39.3cm	94.3cm	4.5cm	76.9cm	26.9cm	56.1cm	10.2cm	3.17 lbs
53cm	53.75cm	73°	73°	39.3cm	95.6cm	4.5cm	77.7cm	26.9cm	57.2cm	10.8cm	3.21 lbs
54cm	54.50cm	73°	73°	39.3cm	96.3cm	4.0cm	78.6cm	26.9cm	57.9cm	11.7cm	3.25 lbs
55cm	55.25cm	73°	73°	39.3cm	96.7cm	4.0cm	79.6cm	26.9cm	58.5cm	12.5cm	3.28 lbs
56cm	56.00cm	73°	73°	39.3cm	97.4cm	4.0cm	80.6cm	26.9cm	59.0cm	13.6cm	3.31 lbs
57cm	56.50cm	73°	73°	39.3cm	98.0cm	4.0cm	81.6cm	26.9cm	59.6cm	14.6cm	3.34 lbs
58cm	57.00cm	73°	73°	39.3cm	98.6cm	4.0cm	82.6cm	26.9cm	60.2cm	15.6cm	3.37 lbs
59cm	57.50cm	73°	73°	39.3cm	99.1cm	4.0cm	83.4cm	26.9cm	60.7cm	16.8cm	3.42 lbs
60cm	58.00cm	73°	73°	39.3cm	99.6cm	4.0cm	84.5cm	26.9cm	61.7cm	17.8cm	3.46 lbs
62cm	58.50cm	73°	73°	39.3cm	100.1cm	4.0cm	86.4cm	26.9cm	61.6cm	19.9cm	3.55 lbs



Shifter Bosses, Vertical Rear Dropouts, Brake Bridge, Seat Post Binder, 6AL-4V Bottom Bracket Shell, and all Cable Guides are CAD Designed and CNC Machined from Solid Titanium bar and plate.

Finishes: Traditional Brushed, Brilliant Polished

Ultimate
the Ultimate



Vortex

The Litespeed Vortex has redefined the standard of performance for ultra-light frames. Utilizing the Litespeed exclusive 6AL-4V titanium tubeset, we have created a frame that while being inconceivably lightweight, maintains the strength necessary for high performance. Uncharacteristic of most frames in this weight category, the Vortex descends as well as it climbs. Such stability coupled with a well-balanced geometry allows you to carve tighter turns at higher speeds than ever before thought possible. The unmatched strength of 6AL-4V titanium resists flex making acceleration instantaneous yet controllable. On a Vortex, you'll leave the pack in your wake.

photo: Rob Lettieri

Sculpted Seattube For
27.2mm Seat Post

Litespeed Exclusive 6AL-4V
Titanium Custom Tubeset

External Cable Routing

Dual Water Bottle Bosses
with Titanium Fasteners

1.375 in. Clamp-On
Front Derailleur Mount

6AL-4V Titanium,
68mm English Threaded
Bottom Bracket Shell With Vent

Beautifully Sculpted Vertical Rear
Dropouts/130mm Rear Spacing

SIZE CENTER TO TOP	TOP TUBE LENGTH	HEAD TUBE ANGLE	SEAT TUBE ANGLE	CHAIN STAY LENGTH	WHEEL BASE	FORK RAKE	STAND OVER HEIGHT	BOTTOM BRACKET HEIGHT	FRONT CENTER LENGTH	HEAD TUBE LENGTH	WEIGHT
**49cm	51.00cm	72°	74°	40.6cm	95.4cm	4.5cm	74.3cm	26.9cm	55.7cm	8.6cm	2.29 lbs
**51cm	52.50cm	72.5°	74°	40.6cm	96.6cm	4.5cm	75.8cm	26.9cm	56.9cm	8.9cm	2.39 lbs.
53cm	54.00cm	73°	74°	40.6cm	97.9cm	4.5cm	77.8cm	26.6cm	58.1cm	10.7cm	2.50 lbs.
55cm	55.50cm	73°	73°	40.6cm	97.7cm	4.0cm	79.1cm	26.6cm	58.0cm	11.9cm	2.58 lbs
57cm	56.50cm	73°	73°	40.6cm	98.6cm	4.0cm	81.1cm	26.6cm	58.9cm	13.8cm	2.66 lbs
59cm	58.00cm	73°	73°	40.6cm	99.9cm	4.0cm	82.6cm	26.3cm	60.4cm	15.7cm	2.74 lbs
**61cm	58.25cm	73°	72.5°	40.6cm	99.8cm	4.0cm	84.4cm	26.3cm	60.3cm	17.5cm	2.91 lbs

** Denotes custom frame size. "Custom" frames will not be a common stocked item.



Shifter Bosses, Vertical Rear Dropouts, Brake Bridge, Seat Post Binder, 6AL-4V Bottom Bracket Shell, and all Cable Guides are CAD Designed and CNC Machined from Solid Titanium plate and bar.

Finish: Traditional Brushed, Polished

Vortex
the V o r t e x



Classic

The Litespeed Classic is a road frame that is as beautiful as it is functional. The Classic combines traditional European geometry with Litespeed's impeccable quality standards. Our craftsmen hand work each tube, braze-on, and dropout to create a masterful blending of style, strength, comfort, and versatility. In short, a classic.

The custom 3Al-2.5V tubeset provides the unique resilient yet solid ride that makes titanium the material of choice for the cyclist. The oversize front triangle maintains the rigidity needed to provide precise handling and control. The tapered/butted rear stays provide both lateral rigidity and vertical compliance for better climbing, acceleration, and comfort...

...that's the Classic.

Litespeed 3Al-2.5V
Custom Tapered/Butted
Titanium Tubeset

Sculpted Seattube Sized
For a 27.2mm Seat Post

External Cable Routing

Braze-On Style
Front Deraileur Mount

Dual Water Bottle Mounts
With Titanium Fasteners

Horizontal Rear Dropouts
with 130mm Spacing

6AL-4V Titanium,
68mm English Threaded
Bottom Bracket Shell With Vent

SIZE CENTER TO TOP	TOP TUBE LENGTH	HEAD TUBE ANGLE	SEAT TUBE ANGLE	CHAIN STAY LENGTH	WHEEL BASE	FORK RAKE	STAND OVER HEIGHT	BOTTOM BRACKET HEIGHT	FRONT CENTER LENGTH	HEAD TUBE LENGTH	WEIGHT
48cm	50.00cm	72°	75°	40.6cm	95.3cm	4.5cm	74.1cm	26.9cm	55.4cm	9.4cm	2.91 lbs
50cm	52.00cm	72.5°	75°	40.6cm	97.1cm	4.5cm	75.6cm	26.9cm	57.3cm	10.2cm	2.99 lbs.
52cm	53.00cm	73°	74.5°	40.6cm	97.2cm	4.5cm	77.1cm	26.9cm	57.4cm	9.8cm	3.13 lbs.
54cm	54.50cm	73°	74.5°	40.6cm	98.8cm	4.0cm	78.6cm	26.6cm	59.0cm	11.4cm	3.27 lbs
56cm	56.00cm	73.5°	74°	40.6cm	99.3cm	4.0cm	80.3cm	26.6cm	59.5cm	13.3cm	3.34 lbs
58cm	57.00cm	73.5°	73.5°	40.6cm	99.5cm	4.0cm	81.8cm	26.6cm	59.7cm	14.9cm	3.41 lbs
60cm	58.00cm	73.5°	73°	40.6cm	100.2cm	4.0cm	83.6cm	26.3cm	60.5cm	16.6cm	3.48 lbs
62cm	58.50cm	73.5°	73°	40.6cm	100.1cm	4.0cm	85.4cm	26.3cm	60.4cm	18.5cm	3.56 lbs.



Shifter Bosses, Horizontal Rear Dropouts with adjustor screws,
Brake Bridge, Seat Post Binder, 6AL-4V Bottom Bracket Shell,
and Cable Guides are CAD Designed and CNC Machined from
Litespeed spec'd solid titanium bar and plate.

Finishes: Traditional Brushed, Brilliant Polished

Classic
the Classic

