

## 2012 Citico

- · Handmade in the U.S.A. using T1 technology
- The Citico features the MTB-industry's first frame fabricated with the lightweight and durable 6AL-4V titanium
- Geometry optimized for 80 to 100mm fork travel delivers ideal suspension
- · Available as a frame only

# Litespeed Tech Feed: 2012 Citico

First and foremost, if you're going titanium, you need to go Litespeed for the simple fact that Litespeed's skilled metalworkers are the best in the industry. Secondly, if you want a meticulously designed and fabricated, top-of-the-line, performance-based hardtail, choose the Litespeed Citico.

Lightweight and strong, 6AL-4V is the ultimate workhorse of the titanium industry. While 3AL-2.5V is 60 ksi (tensile strength), 6AL-4V is 130 ksi. That's why Litespeed uses it where it matters most on the Citico, on the top tube. The Citico's six-sided top tube creates a stiffer front-end design where it meets the head tube, providing never-before-experienced steering feedback, accuracy, power transfer and incredible handling.

Most other brands don't use 6AL-4V titanium tubing because the material is difficult to manipulate and it's expensive. If they do incorporate the robust alloy into their bike designs, they don't vary tube shape like Litespeed does. Litespeed's skilled craftsmen were the first to build a frame with 6AL-4V titanium. They have years of experience manipulating this alloy and know how to take advantage of the material to enhance performance.

The Citico is a Litespeed T1 frame. T1 frames are butted and shaped, undergoing a radical degree of manipulation to emphasize stiffness, compliance, handling and strength. T1 frames are the most technically advanced titanium frames available in the world. By applying knowledge acquired through partnerships with NASA and other external research associations, our designers and fabricators have created tube specifications and characteristics unique to Litespeed.



### Outta-This-World Titanium Fabricaton

Known for revolutionary and meticulous titanium bicycle designs—like the 2012 Citico—as well as for overall expert metalwork, NASA has sought the help of USA-based Litespeed for numerous projects, most recently the landing gear of Curiosity, the Mars Rover, launched on December 3, 2011.

"Litespeed normally focuses on perfecting its own product line. The Citico, for example, sets a benchmark for the competition," said Peter Hurley, the CEO of American Bicycle Group," but we love putting our heads and hands together to solve problems for NASA. They call upon us, because like (CONT •

LITESPEED. 2012 Citico



#### Top of the Line for Ultimate Terrain

Inspired by Tennessee's Citico Creek Wilderness, in which elevations can reach 4,600 feet, and only a few of the rugged upper terrain's slopes incline less than 30 degrees, you can bet the titanium Citico hardtail is a featherweight climber.

Whether the competition is the trail itself or a pack of buddies still negotiating the singletrack below, the Citico rider is sure to be the victor. The hexagonal-shaped top tube and massive down tube combine for seriously efficient power transfer on steep-graded ridges. It also offers precise steering control and tracking on wicked and twisted switchbacks or wild descents. In addition, titanium makes for a softer ride on the rear end, no matter the punishing terrain.

# Outta-This-World Titanium Fabricaton

 our customers, they need and expect absolute quality."

Unlike its predecessors named Spirit and Opportunity, the current Mars Rover will use its wheels as landing gear rather than airbags when a rocket-powered descent lowers it directly onto the Martian surface via a tether in August of 2012. The new precision landing allows NASA to practically pinpoint a site compared to previous explorations. Curiosity has a titanium rocker-bogie suspension system, which prevents it from tipping while navigating the rocky terrain. Independent six-wheel drive and cleats provide traction. Opportunity can also swerve and turn in place 360 degrees.

"We're honored to work with NASA's Mars Science Laboratory," said Hurley. "The Curiosity Mars landing in late summer is something we're definitely looking forward to. Our only regret: we couldn't send along a mountain bike for testing on Mars."

#### Dirty Talk

#### Litespeed answers trail lovers' questions about the Citico

Rider Q: Why such a unique top tube and down tube? How do they affect ride and handling?

LS: The top tube begins as a flat sheet of 6AL-4V titanium. Engineers incorporate the proprietary technology of radial brake forming to maximize the weld surface area and increase stiffness where it meets the head tube. The cold formed down tube morphs in shape and size from the head tube to the bottom bracket shell. The result is increased stiffness for exceptional power transfer.

Q: Why not make the entire Citico frame out of 6AL-4V titanium?

LS: We use 6AL-4V on the Citico's top tube, where morphing it will be most effective in enhancing handling and performance. While we are very adept at manipulating 6AL-4V titanium, we find that the lightweight 3AL-2.5V alloy is ideal for fabricating the Citico's intricate chain stays and seat stays and morphing the all-important down tube. Plus, the top tube is more expensive to create than the entire rest of the frame. Using the combination of alloys in the frame helps keep costs down for those who lust after the Citico.

Q: What advantages do the Citico's chain stays and seat stays provide?

LS: Asymmetrical chain stays provide drivetrain stiffness, and the seat stays provide the vertical compliance needed on a hardtail.





