

FAT CHANCE'S TITANIUM EXPERIMENT

Externally butted tubes are just part of the picture

Who in the world needs an even lighter and more exotic titanium frame? Isn't simply owning a piece of the gray metal enough anymore? Isn't the concept of shaving titanium by the thousandth of an inch from already-too-light Ti tubing like plucking feathers off an ostrich to save weight? *MBA* has heard all the rumors: titanium frames that weigh less than a saddle; super-secret titanium butting methods; chemically treated raw titanium from the Urals; men who risked their lives stealing NASA Ti information

and sold it to an undisclosed bicycle manufacturer in Asia; "new," "improved," "better," "lighter," "stronger" and "whiter whites." All the fuss about titanium is bunk.

Titanium is what titanium does. Hype loses all its bluster the moment your knobby tires reach the dirt. A titanium frame with bad geometry is a waste of metal.

So when Fat Chance's Chris Chance unveiled his latest, newest, trickiest, lightest and strongest titanium frame, Chris

had the smarts to add one more word to the litany of titanium hyperbole. "Relax," said Chris.

We took Chris' advice, pigeonholed all the techno mumbo-jumbo for later and just went for a ride.

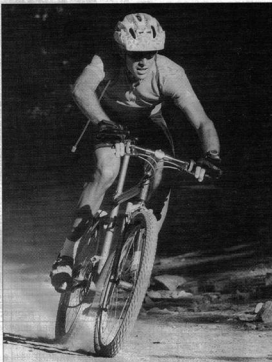
MEET THE TITANIUM FAT CHANCE

It is as easy to become enamored with technological innovations as it is to fawn over ethereal nuances in the name of bicycle performance. *MBA* had been testing a host of full-suspension super frames when Chris Chance offered to ship us his latest prize: a rigid titanium mountain bike. No suspension, no frills, just a nice, light bike. Hey, why not?

Of course, the Fat Chance titanium steed was a bit more than a nice bike. The titanium Chance utilized the company's externally butted, oversized 3/2.5 titanium alloy tubes. There were a lot of style and value-added details in the frame, a reflection of Chris' high level of commitment to the gray material. Take the rear dropouts, for example. These CNC-machined beauties are thin and elegant. Their flowing lines will go largely unnoticed by most customers; so will the rounded plugs on the ends of the untapered seat and chainstays. A few customers might notice the TIG-welded seat tube cap (which reinforces the top of the seat tube and reduces its diameter to allow for a smaller, lightweight [but still oversized] 29.4mm seatpost). Besides, how long would it take a rider used to run-of-the-mill bikes to discover the anti-chainsuck mechanism under the chainstay?

One thing that every rider will spot right off the bat, however, is the Fat Chance "Big J" rigid forks. That's right—rigid! It is one of the nicest-looking rigid forks ever made. It's a shame that it comes during the era of suspension legs. One-inch, untapered, chromoly blades terminate into an angular, TIG-welded, tubular crown. Small triangular braze-on gussets reinforce the crown/blade junctions on the rear of the

Smooth sailing: Given a long stretch of smooth dirt, the Fat Chance flies. Unless the going was extremely steep, Fat Chance Titanium riders rarely noticed the change in effort. For anyone who has ever asked the question, "Can a bicycle be too light?", the answer is, "No."



Everywhere equally present: The Fat Chance Titanium proudly flew the titanium flag wherever possible; right down to its Action Tec front chainrings, Onza pedals and bolts on the water bosses. When will the world run out of this stuff? ►

fork. The Big 1 fork may be the reason that Fat Chance still believes in a rigid ride. The company has manufactured the five-tube beauty since its inception in the early '80s, and the fork has become a trademark of sorts.

... & THAT EXTERNAL BUTTING?

Titanium doesn't readily lend itself to standard metal-forming techniques like drawing, swaging or even bending. The gray metal cannot be easily stretched or compressed, which are the bread-and-butter of the tube-butting process. What do you do when what you want to do can't be done the way it has always been done? Improvise! Fat Chance buys thick-walled titanium tubing and uses a special machining process to remove material from the lightly loaded center section of the tube. In short, it spins it and lathe it down. The ends are left almost full-thickness to reinforce the frame junctions.

It's butted, but not in the traditional sense. Butted bicycle tubing is manipulated to be thicker on each end; however, the transitions are hidden in the LD of the tube. Fat Chance's externally machined butting process makes for a lighter, more durable frame than an equivalent-weight straight-gauge Ti frame, and as an added plus a customer gets to see what he isn't getting. Fat Chance's process removes about 0.020" from the tube wall. Exactly how much weight the machining saves won't tip a gram scale into upheaval, but Chris claims the shaved Ti tubes noticeably enhance the riding quality of the bike. We shall see.

THE SUM OF ITS PARTS

In keeping with Fat Chance's functional fashion statement, Chris assembled our test frame with a killer component selection: high-back, high-performance and highly reliable stuff (mostly from American cottage-industry suppliers). Key drivetrain elements were Shimano XTR derailleurs, Grafton cranks and titanium bottom bracket and Action Tec titanium chainrings (46/36/26), eight-speed titanium cogs (11-32) and a special upper pulley replacement which significantly improves the titanium-injected shifting in the rear. GripShift, Grafton levers, Onza bar-ends and Answer Hyperlite bars made an impressive dashboard. A ten-degree, 135mm Ringle stem connected it to the bike via a Chris King threadless headset. Brakes were black, magnesium Grafton cants with Dia-Compe pads. The Fat Chance's wheels were built up with impressive Bontrager BC1 rims, 15/17-gauge spokes (32) and Ringle Bubba hubs with matching blue "Twister" quick



releases. Tires were the latest bi-axial rubber compound, Panaracer "Magic" 1.9s with blonde Smoke/Dart treads. Accommodations were handled by a Flite titanium-railed saddle on a Ringle Moby seatpost. All the Ringle stuff was anodized blue to match the fork and decal highlights (a refreshing break from purple).

KNOWLEDGEABLE NUMBERS

True off-road handling emanates from a subtle mixture of theory and seat-of-the-pants understanding of dirt riding. Chris Chance has both wired. The titanium Fat Chance has its own unique geometry: a blend of razor-quick East Coast steering, mixed with a dash of Western stability. Our 18-inch Fat Chance had a quick, 71.5-degree head angle mixed with a laid-back, 72-degree seat angle. The bottom bracket was a West Coast-standard 11.75 inches high while the top tube was a spot-on 23 inches. Chainstays were on the long side at 16.875 inches.

The frame has a little height designed into the head tube to compensate for the addition of a suspension fork (just in case you get soft on the concept of rigid rid-

ing). In fact, the bike is available with a Rock Shox Mag-21 or a Manitou 3 for a little extra cash (oops, we promised Chris we wouldn't mention that tidbit). The titanium Fat Chance comes in 10-, 14.5-, 15.5-, 17-, 18- and 19-inch sizes. Its price tag of \$2425 includes either a "Big 1" or a "Yo Eddie" rigid fork (ours had the Big 1 unit). Frame-only is \$2195 and with a (gasp) suspension fork, the tag increases to \$2580. Colors? Dark silver, gray or titanium finish. Our bike came in under 20 pounds on the MBA scale and Chris Chance claims the 18-inch frame weighs a conservative 3.6 pounds. That's a light bicycle! For more info call Fat City Cycles at (617) 625-4922.

MBA GETS GRAY & FAT

Riding the Titanium Fat Chance required no coaxing. The entire MBA test crew wanted to experience exactly how a sub-20-pound, rigid bicycle felt on a long, hard, fire road climb. The only test rider who didn't get a chance to ride the Chance was a Felix Unger wanna-be. He had spent all year whining about "heavy, sluggish, stupid suspension bikes," so nobody bothered to tell him about the light,

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down cactus-infested, rock-strewn chutes, it could still be ridden down the chutes at moderate speed without exposing its rider to mortal danger. The titanium Fat Chance was light enough to be lofted over fairly large obstacles and, once the death-defying stuff was behind you, it was a super-handling trail bike. The Grafton stoppers were precise and powerful and Panaracer's flesh-colored tires backed them up with bomb-proof traction. Good brakes combined with a feather-light bike made tight, fast singletrack into a game of hard braking and short, quick sprints to the next corner. The suspension bikes might have absorbed the trail, but the rigid bike virtually attacked it.

The suspension guys (and Fat Chance does make a MacPherson Strut full-suspension bike) did win a moral victory as the speeds picked up. The most powerful brakes in the world are useless if the tires won't stay earthbound. Once the rigid Fat Chance was taken past a certain speed over rough terrain, turning and braking suffered. Like all rigid mountain bikes, the Fat Chance would get very sketchy through uneven traction or bumpy curves. If a mountain bike rider needs to be reminded of the benefits of front suspension, riding the titanium Fat Chance at speed will provide you with an object lesson that will indelibly impress the benefits of suspension forks upon you.

Photo by Chris Chance

TI-ING IT ALL TOGETHER
So many questions, so few answers: (1) Were Chris Chance's fancy externally butted titanium tubes of any benefit? (2) Is a rigid bike still valid? (3) Did MBA like the Fat Chance Ti bike?

There are clear answers to these questions—almost. (1) On the subject of the bike's externally butted, oversized, titanium tubing, in addition to reducing weight on the Chance's frame, there was a softer ride to the bike over sharp, medium-sized impacts (like small, embedded rocks). (2) If you are a true pedaling puritan, the rigid version of the Fat Chance Titanium would be hard to pass up—providing one had the money to spend on a frame and fork of this caliber. There is a hidden benefit to riding a rigid mount: if you fall, you will be going slower (the severity of a fall grows exponentially as speed increases). (3) We think the Ti Chance is an excellent ride as a rigid bike, but we would order ours with a suspension fork. As a side note, Action Tec's chainrings and rear cogs worked without a hitch—a Ti landmark for MBA's staff. Until this test, we had yet to experience a good shifting set of Ti cogs. Overall, the Fat Chance Titanium is happiest in the mild but fairly capable of wild. It isn't made for slam-dancing in the pit. If you want to waltz through the backcountry in style, this bike should be your dance partner. □



Alternative nation: Most of the titanium Fat Chance's component pick was "made in the USA." The shopping list included Answer Hyperlite bars, Grafton brake levers and GripShift. The bike is a nationalistic ode.



Straight arrow: Fat Chance has been making this fork for a decade (the Big 1). The Fat Chance's performance over moderate bumps was smoother than anyone had imagined possible, due mostly to its supple 1"-diameter tube front end.



Say, Hallelujah: Fat Chance equipped the Titanium with Action Tec's titanium rear cogset. Every test rider gave it thumbs up. This was the first titanium rear cluster that actually worked. Check out the CNC'd rear dropout. Very nice.

feathery and rigid Fat Chance. Unfortunately, all the nitpicky, retro-grouch guys like Felix can smell the essence of lightness from three blocks away. He was suited up and astride the Fat Chance before any of us knew he was even at the trailhead (we hate that guy).

The little gray Fat Chance was an "E" ticket at the first revolution of the crankset. Chris Chance was correct in assuming that we would like this bike once we rode it. After a couple of years of hammering full-suspension bikes, feeling every nuance of the trail surface is an experience to savor. The titanium Fat Chance offers a fair trade for all the pounding its rigid chassis transmits by climbing like a balloon escaping from a two-year-old.

One of the grinder parts of the most popular MBA trails is a wide, hard-packed access road used by humongous trucks to haul titanium ore from the local mountains. The Fat Chance's ultra-light weight

and rigid bottom bracket were worth two higher rear cogs up the titanium road. It was at once apparent that a rigid bike's forte was long, medium-grade, smooth fire road ascending... especially if the route requires *beaucoup* big-ring, out-of-the-saddle efforts. Of course, a sub-20-pound bike is an obvious candidate for a good climber, eh? What about the other 20% of the dirt experience?

Several of the inveterate full-suspension test riders hoped that putting the rigid Chance to the "gnarly-rocky-single-track" test would even the score (and wipe the smile off Mr. Rigid's face), proving the superiority of suspension once and for all. The Fat Chance embarrassed the suspension proponents. The rigid-forked, titanium-tubed, East Coast-built rigid bike handled the rough, rocky terrain well enough to obscure the difference. While it was true that the Fat Chance couldn't be hammered gleefully