

IBIS TITANIUM HARDTAIL

Its ifs & ands are in the butts

■ All good computer hackers will attest that it's no mean feat to break into the classified military NORAD (North American Air Defense) computers (they even make movies about it). In fact, there are a couple of ex-aerospace engineers making models of black-budget, undetectable stealth jets for sale in hobby shops before the president even knows he OK'd the aerospace project. For a relatively small fee, information detectives will scan your electronic purchases and credit background, then deliver a blow-by-blow report of your personality and private life. Any kid with a personal computer can rob the files, cavedrop on E-mail or find a bride via CompuServe.

Keeping a secret in this day and age is all but impossible—except up in the vaults at Ibis! The folks at Ibis should be commended for sealing their secret titanium tube biting process from the cycling public. Busted titanium tubes and the process used to make them are more carefully protected than the secret to cold-fusion. Busted Ti is mystical, magical, hypothetical and a misnomer. Titanium tubes aren't really busted (at least they



Right down to the spokes: Ibis believes in titanium! It welds, butts, smooths, speaks and rides the stuff constantly. Our test bike even had rainbow-anodized Ti spokes. And* butted main tubes give the chassis a lively feel.

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aren't supposed to be). Somehow Ibis did it (we cut a tube in half to be sure). Don't confuse squishing, ovalizing or swaging (tapering) with Ibis' butting process. We are talking about beautiful tubes with thick ends, tapering to paper-thin mid-sections. The next time someone says that butted titanium tubes are an impossibility, tell them that Ibis has 'em.

How they have them is the big secret. Ramor has it that Arcosteel, the company that manufactures the sacred stuff, has a dungeon of tongue-amputated titanium butting slaves, sworn to die before revealing the process. Secret stuff is the life blood of bicycling and we have heard it all before: Jamesbondium, the strongest composite in the world. Megasteel, the millionth-of-an-inch-thick tube rivaling titanium. Portofolium, the ultra-light organic matrix material formed from Bic pens and yellow legal pads.

We know about butted tubing. It comes on steel-framed bikes in the \$300 range. We also know that squeezing high-strength titanium into even a simple tube is a chore and a half. Butting one must take an act of Congress! Okay, it's a secret. Titanium tubes can be butted, but for all practical purposes it's like plucking feathers from a duck—it doesn't mean doodly if you are not eating the duck. The real question is, does butted titanium tubing perform significantly better? El hombre, like, plain and simple.

THE BIKE THAT IBIS BUILT

Scott Nicol is definitely not a shack-'n-jive dude. He thinks things through and tells it like it is. He was convinced that titanium was the future of high-performance bicycles and, unlike other small builders, made the hefty investment to shift most of his production to the gray metal. His quiet, conservative design approach to building frames led his company down the high road. When he got excited about the possibility of a taper-butted Ti frame, we knew IBSA had to have one.

Our test Ibis arrived as promised (these guys are one of the few on-time frame builders). The sloping top tube habitant was fashioned in the standard NCRBA mold. The whole bicycle was a gray-and-black masterpiece. Most of its accessories were made of titanium: frame, stem, handlebar, bottom bracket, quick releases and seat rails. The Ibis would have been monochromatic except the wheels were spoked with rainbow-anodized Ti spokes (swoosh trick!).

—Roger Rabbit: The Ibis was tailor-made for starting through undergrowth. It was so light it could be hopped, skipped and jumped through rocks and berranites. Weight was well-centered over the bike, making for instant directional changes.



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Oddly, the efforts that Anotecch and Ibis put into butting the main tubes and tapering the rear stays made the beautifully crafted frame appear less exciting to the eye (we must be getting used to the utilitarian look of straight-tube Ti frame construction). In Ibis' tradition, both head and seat tubes were oversized. Up front, the frame sported a threadless 1.125-inch headset (Chris King). Its 1.25-inch seat tube clamped a 28.4mm Synchros alloy seatpost. Both top and down tubes were a moderately oversized 1.375 inches in diameter. Top and down tubes were butted the same: .040" x .022" x .090" thick and the seat tube was straight-gauge, .035" titanium. The rear stays were slightly tapered and terminated into "Joe Breeze"-type recessed dropouts. Chainstays were 1.0" x .625" and seat stays were .725" x .625" diameters. Put the whole beautifully TIG-welded frame together and its projected ride should produce a good combination of climbing stiffness at the bottom bracket and straight-line resilience in the rough. MBA's top testers were very familiar with this frame configuration; the bike's butted tubestay was the only variable in the Ibis equation.



Check it out: For the price of this seamless-looking stem, you could buy your sister a bicycle. Ibis buffs and finishes its welds to a high-gloss sheen. Why? We don't know, but for riders on a budget (a titanium budget) an unfinished version is available.

MAJOR PERFORMANCE INFLUENCES

A great frame is only the first step towards a top-performing pro bike. Our Ibis had some proven race hardware hanging on its bones. Up top, an Ibis 135mm aero-rise Ti stem and Ti handlebar supported GripShifters and Ritchey Logic brake le-

vers. Down in front was a Manitou 3 fork. The drivetrain was a mix: Shimano NTR details and rear cogs (12-32 eight-speed) were driven by a TIG-welded chromoly Synchros crankset. Stoppers were Curve magnesium carts with Ritchey logic pads. Wheels were 32-spoke Mavic 230 rims, laced to Hugi hubs (re-



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member those 14-gauge Ti spokes?!. Treads were Ritchey Z-Max units, 1.9-inch rear and 2.1-inch front. For some reason, the Ibis was devoid of bar ends.

Like astrology charts, a bike's geometry is a hint of how the bicycle will perform. Ibis didn't stray from proven guidelines. Seat and head angles were time-honored 73 and 70.5 degrees, respectively. Our 17-inch frame had an appropriate 22-inch top tube, 16.875-inch chainstays and a 12-inch-high bottom bracket. The bike's wheelbase worked out to a shortish 41 inches. The bike's overall layout would be perfect for riders around 5'3" to 5'7" tall. Sizes are also available in 12, 15.5, 17, 18.5 and 20 inches (center to center). As tested, the little Ti bike

— **Touch of classic:** Ibis' trademark head badge is a sign of good taste in a world of kitsch and Care Bear coloring. It's nice to have a bike that looks as honest as it rides. Thumbs up on the Chris King headset.

Hand brake: The hand-shaped rear brake cable stop is a reminder not to take yourself or the bike too seriously and enjoy life. The Curve brakes stop well enough to make riding fun at the edge of your speed envelope. —



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Keeping it simple: Inspired by the legendary Joe Breeze, the Ibis' rear dropout is a lesson in simplicity and function. Don't bother using twist-o-matic types of quick-releases, though. The recessed dropouts make twist QRs more difficult to use.

weighed 22 pounds. The frame alone weighed 2.9 pounds. Ibis offers the frame for about \$2600 or a complete bicycle from \$4000 to \$5000. Call (707) 829-5615 for your nearest Ibis dealer.

HOW DID THE IBIS RIDE?

This was a singletracking fool's best friend. It turned and hopped without a hint of effort, making low-to-moderate speed

trailing a blast. Some of this was due to the bike's short wheelbase and featherly weight. On the opposite side of the speedometer, the Ibis' slightly relaxed head angle kept the bike straight as an arrow at speed in the rough stuff. Although most of the MRA staff is spoiled by full suspension, we could sense the titanium frame softening a small portion of the ride

in conjunction with the Manitou 3 up front. The bumper fork was a pretty good match for the Ibis.

All was not roses in the curves, however. The Ibis' measly 1.9-inch Z-Max rear tire wasn't grippy enough to hold traction under hard braking or cornering. Pushing the scooter to its limit often resulted in a slide that was an 11 on the MRA "Whoa Nellie" scale. Steering, apart from the sneakers, was precise and on the quick side of stable. Leaning the bike into the turns at the hips was a successful single-track tip which worked well in tight dirt road sweeper also.

Climbing was a breeze, in or out of the saddle. We wouldn't advise running a super-light bike uphill without a set of bar ends. With the addition of handlebar aids, we could ascend a gear higher everywhere (well, almost). Once again, that skinnny rear tread worked against the Ibis' climbing prowess, losing traction up steep or loose sections. To the bike's credit, its rear end stuck to the earth far better than its lengthy chainstays had foretold.

Slowing the Ibis was a pleasant experience, too. The big magnesium Carve cantilevers were a good match for their Ritchey pads and levers. The system had a

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softer feel at the lever, which turned a couple of testers off. After time, we all liked the powerful braking and found the Curve units easy to modulate throughout the speed range. We traced the trace of sponginess at the lever to a combination of brake pad material and the extra leverage the longer caliper arms afforded.

COULD WE FEEL

THOSE BUTTED TUBES?

Every test rider said they could, but in describing the sensation, each told an entirely different story. All agreed that the Ibis was very light and a tiny bit more lively-feeling than we have come to expect from any Ti bike. Some of the riders attributed the springy feel to the bike's rainbow-colored titanium spokes (a theory which some wheel builders backed). Get a fatter rear tire, add some bar ends and this bike is ready for anything. The bottom line can be summed up by the fact that throughout the duration of the test, there were few moments when the Ibis titanium bike was left in the shop unattended. Yes, we liked it. Yes, we rode the heck out of it. No, we don't want to give it back! Yes, we are going to try to break into Ibis' computer and transfer their test bike into our names. □