Custom Bike Buyer's Guide

Crisp Titanium

Clockwise from left: Breezer-style dropouts help create stiffness; S-bend stays offer compliance; Crisp etches custom graphics and creates functional elegance.

I HAVE ALWAYS WANTED A TITANIUM BIKE. THE BEST ONES COMBINE the top attributes from other materials: They feel lively like steel, but more connected and reactive like aluminum, and, when made right, are just as quick with power transfer as carbon. And yet ti, like steel, can also be comfortable all day. Best of all, titanium bikes are durable as hell. They'll ride the same way on Day 1 as they will on Day 5,000, and if you get one that isn't painted, it can even be repolished after a decade of scratches. Dents? You're not going to chip a ti frame unless you crash very badly, and even then your manufacturer can almost always repair it.

Which was what led me to Darren Crisp. The custom builder touts an intriguing pedigree: He trained as an architect but chucked that life path to live and build bikes in Tuscany, and he had a business in Italy repairing other makers' frames before he ever built one under his own name. He also studied under Dario Pegoretti, a maestro of custom, with whom he shares a guiding philosophy: that a properly made custom bike can last a lifetime (hence Crisp's lifetime guarantee). Clinching the deal was Crisp's aesthetic; many ti-bike makers go for wispy spareness—or brute bulkiness. Crisp skates down the middle, hewing toward classic triangles, but with oversize tubes and dropouts for strength, and he uses softening visual features like gently bent seatstays. He's also a good listener: When I explained the qualities I was after, he was open to my concerns and needs. I completed several forms that included notes about my desires, and sent back various measurements: my dimensions standing, seated, on the bike, range of motion, and so on. When I had questions, Crisp patiently explained both his philosophy and my options—as well as the inevitable trade-offs.

For example: Crisp said he couldn't build me the lightest ti frame out there. Lighter ti tends to feel whippy; fortunately, the heavier materials he uses would produce the stiff, fast bike I wanted. Crisp builds with oversized, 3Al/2.5V titanium tubes (34.9mm straight-gauge tubing everywhere but on the down tube, which is even larger, at 40mm, and triple-butted), with milled and machined parts (dropouts, bottom bracket) in stiffer 6Al/4V. Speaking of which, Crisp went with Paragon Machine Works Breezer-style dropouts on this frame because the 50mm of welding surface

KENT PELL (X5)

enables a stiffer drivetrain. He explained: "Trimming off material, especially with ti, you begin to lose those mystic ti qualities. That's kind of a contradiction." He also said that round tubes offer better resistance to torsional loads than shaped tubes.

Some frame specifics: I have a slowly degenerative upper spine, which makes my neck somewhat inflexible. To counter this, Crisp made a tall, 15.5cm head tube. To keep the bike from feeling sluggish in turns as a result, he kept the head angle fairly standard (72.5 degrees) rather than slackening it, and because my lower back is fine, kept the top-tube length sufficient to both avoid that slacker head angle and consequent too-long trail, which would also make steering feel sleepy. The rear triangle is made to feel both compliant, with S-bend seatstays, and reactive, with short, 41mm ovalized chainstays.

DARREN CRISP HEWS TOWARD CLASSIC TRIANGLES WITH OVERSIZE TUBES AND DROPOUTS FOR STRENGTH.

For the Crisp's maiden voyage, I rode the toughest A shop ride in the area: Flats drilled at 25 to 32 mph, two steep climbs good for 2,000 feet of elevation gain, and a grand total of 35 miles raced all-out. It was perhaps not the most advisable get-to-know-you session. But through my gasps the Crisp quickly became a trusted extension of my legs, butt and hands. It rocketed ahead under sudden surges in speed, descended tight bends instinctively and steered perfectly. Most of all I didn't have to think about the bike at all, or where I was on the road. And with each subsequent ride the bond has grown, almost eerily so. I'm not sure what more I could want, which probably means this bike is nearly perfect for me.—*Michael Frank*

€2,900*

WEIGHT	16.04 lb. (as tested; 1,720g frame and fork, claimed)
SIZES	Custom
FRAME	Titanium
FORK	Edge Composites American Builders Edition carbon fork and steerer
COMPONENT HIGHLIGHTS	(as tested) Campagnolo Athena 11-speed drivetrain, compact crankset (50/36), cassette (12-25); Campagnolo Eurus 2-Way wheels; Hutchinson Fusion 2 tires; Easton EC90 SLX3 road bar, EA90 stem, EC90 seatpost
INFO	crisptitanium.com

*Frame only; €3,285, frame and fork

7 STEPS TO GETTING YOUR BIKE

HERE'S WHAT TO EXPECT—AND WHAT TO DO—DURING EACH STEP OF YOUR BIKE'S MANUFACTURE.

1. Contact the builder. Whether you have a concrete idea of what you want or a general description, be prepared to discuss options. This is a time to think about possibilities for your bike, not close them off. Set up a fit consultation either directly or electronically, or through a trained dealer. Make sure you understand the details of delivery and payment—including how firm the estimated completion date is. (Delays are the most common source of friction between custom frame builders and buyers.)

2. Make a deposit. This is often as much as half the total price of the frame. Find out if there are interim payments and when the final one will be due (upon completion or delivery), and again go over the contingencies for delays.

3. Get fitted. You'll need: a personal fit based on the builder's preferences, which range from detailed dynamic fitting sessions like Serotta's Size Cycle to simple three-measurement fits you can do at home. Also be prepared to supply your current bike's complete dimensions—make sure to measure accurately, or pay a local bike shop to do this for you—as well as those of any bikes in the past you've particularly liked. Compile a list of likes and dislikes about how your current bike rides.

4. Discuss the build. Review with the builder what you like and dislike about your current bike and what you want in your custom. Ponder the options: Do you want fender eyelets? Lots of tire clearance? What about paint? Be prepared to e-mail the builder examples or inspirations for graphics. Are you buying a complete bike or just a frameset? Either way, consider what parts you'll use. You'll generally be asked to sign off on a final statement that sets out the geometry and other specifications for your bike. This is your last chance to make changes without incurring an additional cost.

5. Wait. In most cases, you should be able to occasionally ask the builder for details of the construction. Some post updates or pictures on their websites. Prepare anything you need on your end (parts, etc.) for completing the bike, or arrange to have a trusted shop complete construction. Be patient.

6. Pay promptly. These people are not getting rich—or, in most cases, even middle-class—on what they make from building bikes, so ease their cash flow.

7. Follow up. After the bike comes, give the builder a call or send an e-mail that expresses your appreciation and, ideally, admiration.