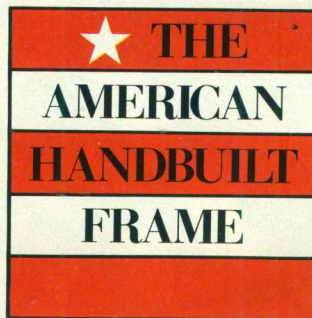


PHOTOGRAPHY BY ED KASHI

**As a framebuilder, Tom Ritchey is without peer, and his colleagues readily acknowledge that fact. No one does as much work as quickly and efficiently as he.**





**TOM RITCHEY**

# AN AMERICAN CINELLI

America's most prolific builder has decided that 1000 frames per year is enough. By limiting production and increasing quality, Tom Ritchey hopes to create even greater demand for his frames.

*By John Schubert*



**W**hen Tom Ritchey turned 30 earlier this year, he felt better about that milestone than most of us did. He's done what he wanted to in those 30 years.

As a bike racer, Ritchey made the U.S. national team as a junior, earning the nickname "Senior Slayer" for beating older and more experienced riders, and he represented the U.S. in the 1974 Junior Worlds team time trial and road race in Warsaw, Poland. (The team was fifth in the time trial; in the road race, a finish-line crash cost him about 15 places, and he finished about 40th out of 200 starters.)

As a framebuilder, he is simply without peer, and his colleagues all readily acknowledge that fact. Some others do work as good; some do work more ornate; a few may match him for inventiveness and creative design. But no one does as much work as quickly and efficiently. No one.

And, at an age when most people are struggling to upgrade from the bungalow or condo, he has completed building—

himself—a beautiful house for his wife and three children overlooking Palo Alto on the San Francisco Peninsula's Skyline Drive.

As the first framebuilder to produce mountain bikes in significant quantity, he's a respected leader in that field. He also builds about 100 tandems per year, making him the second-largest tandem manufacturer in the country after Santana, and the occasional road frame for an old friend like Eric Heiden ("I take orders and make road frames once a year").

His workplace is a shop adjacent to his house, where he builds frames at a rate no other builder even tries to match. With surprisingly little help from subordinates (it gets to be less and less each year), he builds 1000 frames per year. During his free time, he designs off-road equipment. His Force tire is the acknowledged favorite among mountain bike racers—the top four riders use it unsolicited—and his new tubeset will sport "a unique concept that has never been applied to the way a tube is butted." (Details will have to wait for the tubeset's release.)

What sounds like a workaholic's

schedule isn't really that bad: "I work about 50 hours a week, but I start at six and finish at four, so I can spend the rest of the day with my family," he said. "I'm off work when other people are in traffic. I've organized my time that way; I've clung to the cottage industry lifestyle." His employees at his Redwood City distribution center handle all the mail and telephone calls, and they see him about once every two weeks.

But before you throw away the tools of your current profession to go be the next Tom Ritchey, read on and see if it's in the cards for you to be that successful.

You know the kid who had the biggest erector set in town in his garage, and always built neat models of bridges and robots? Ritchey bypassed the model stage; during his elementary school years he learned to use real tools and materials to design and build real machines ("Our garage looked like Frankenstein's lab," he recalls). At 12, he built a multiple-passenger electric car and got his picture in the local newspaper. The skill with tools and fixtures had started to take hold.

At 15, Ritchey found his dad urging



him to come along on Saturday training rides. In the space of two months, he improved from not being able to keep up with his father to being a good competitive cyclist. And he wanted to build a frame.

"I asked my dad if he'd help me do it," Ritchey said. "It was hard enough to get the raw materials. We called Hugh Enochs [a parts distributor and frame-builder] and he had some Falk tubing and real dog lugs.

"I didn't see the light of day until the project was done. I was anxious as could be to put paint on it and ride it."

**"I want to be like Cino Cinelli," says Tom Ritchey. "Because he limited the production of his bicycles, other bicycle companies didn't view him as a competitor, but as an ally."**



Torchwork and leg power went hand in hand to advance Ritchey's career; he had started training with Jonathan Boyer and he won several races on that first bike against some notable competitors.

"That got people interested in, 'Well, what is *he* riding?' I had a business overnight," Ritchey said. "It was a thrill that people thought something I did was that good, particularly at my young age. Of course, if I'd just been an average rider, nobody would want to have a frame I'd made."

But the success of his racing career continued to inspire demand for his frames. At 17, when he won the National Prestige trophy for juniors, he had already built about 200 frames. At 18, at his parents' insistence, he tried engineering school. But that didn't last. Ritchey's framebuilding was earning him between 30 and 40 thousand dollars, more than his engineer father made, and "I learned that [schools] don't like to let you learn until you put in your dues for two years. I had a hard time concentrating on my studies because I was always designing jigs and fixtures in my head.

"After about a half-year, I decided it



**When two helpers left the company earlier this year, Ritchey found he could absorb the work they had been doing with surprisingly little stress.**

was useless, that I was an incurable framebuilder."

Soon, Ritchey's frames were sold through Palo Alto Bike Shop and its national catalog, lending Ritchey additional visibility. But already, Ritchey was discovering a problem: He had trouble building custom labor-of-love frames one minute and price-point okay-quality frames the next.

"I was always struggling with making my 'B' bikes into my 'A' bikes," Ritchey said. "People couldn't tell the difference. It wasn't a good deal for me, and so I

phased out the B bikes."

Ritchey built about 20 frames per month in 1976 and 1977. In 1978, he saw the first mountain bikes, built by Marin County's Joe Breeze. That year, about half of Ritchey's production became mountain bikes, which were marketed and sold by Gary Fisher. Soon, Ritchey devoted his business to mountain bike production, and his early bikes served as prototypes for many an off-shore imitator to follow.

During these years, Ritchey first emerged as the "fastest good frame-



builder” anywhere. His flawless brass fillets—initially necessary because there were no lugs available for oversize mountain bike tubing—became his trademark, and the speed with which he produced them became his legend. Huge batches of frames came away from his shop each week, every frame sporting beautiful fillets, every fillet devoid of the smallest pinhole or other imperfection. Other builders could spend hours filing to get fillets that pretty; Ritchey did them with a few strokes of a file.

But beware of complimenting Ritchey on his legendary speed; sometimes he finds that such compliments are backhanded insults.

“I feel disserved when people associate the success of my company to the volume of the product, thinking there’s a tradeoff in what the customer’s been getting.”

Indeed, there is no tradeoff. That’s the mystery of Ritchey, that he keeps up his speed without compromising the product.

In the early 1980s, Ritchey and Fisher parted company after years of mounting friction. Each still winces at memories of the unhappy partnership, but both have thrived in the years since, running their own businesses.

Since then, Ritchey has widened the gap between his output and that of others. When two helpers left earlier this year, he found that he had improved



### Ritchey farms out less critical tasks to assistants but keeps important brazing work and final checks for himself.

enough that he could absorb the work they had been doing with surprisingly little stress.

But you won’t find Ritchey talking about increasing his output. He wants to keep it where it is. This year he stopped importing inexpensive mountain bike frames from Japan to sell under the Ritchey name because he found the quality control, while good, wasn’t up to what he would have done himself.

“I want to be like Cino Cinelli. Because he limited production of his bicycles, other bicycle companies didn’t view him as a

competitor, but rather as an ally. Guerciotti and Bianchi use his handlebars, stems, and saddles; I want Schwinn to use my tires. And the only reason they would do so is acceptance at the highest level.” The prestige of the relatively scarce Cinelli frames has rubbed off on many a handlebar stem; so it is with Ritchey’s limited production frames and his tires.

An American Cinelli? He’s earned the designation. When you’re stuck in traffic at 5 or 6 some evening, think of the American Cinelli. He’ll be bouncing his son on his knee that very minute. □

## IN THE DIRT: RITCHEY ASCENT

**T**om Ritchey makes more expensive bikes. He makes bikes with more doo-dads and braze-ons; bikes with fancier detailing and more of his famous brass fillets. But he’s exceptionally proud of the \$995 Ascent, a bike he views as giving the most reliability, design excellence, and value of any racing-oriented off-road bike.

The Ascent is a no-nonsense design, ready to race right out of the box. And, to a very limited extent, it’s built to a price. The frame and fork are TIG-welded before Ritchey lays hands on them. He fillet brazes the seat cluster, a

joint which has sort of become his trademark, does cleanup, alignment, and quality control, and ships it off to the painter. Because the other joints don’t get the Ritchey fillet treatment, the bike costs hundreds less than his top models.

But function doesn’t suffer. Frame geometry is sheer racing, the butted tubeset is made by Tange to Ritchey’s design, and components are mostly Shimano Deore and Deore XT, with a few items from Specialized and Sun-Tour.

And, important to the builder whose name is on the down tube, the quality control is in his hands alone: “I inspect it, I align it. When it goes to the painter, it has gone through the same sequence of checks my most expensive bike goes through.”

Not only that,

the Ascent has frame geometry that reflects the latest feedback from racers and trail riders. Chainstays have shortened to 17¼ inches from the 18-inchers which adorned early Ritcheys; the ¾-inch difference makes the modern bikes more agile in tight trails and easier to pedal up steep terrain where front/rear weight distribution is critical.

The head tube angle has advanced one notch, from 68 to 69 degrees; this change gives better slow-speed handling, but at speed over the bumps, the Ritchey is still reassuring. The seat angle has become 73 degrees, giving optimal rider position over the pedals.

The bottom bracket has dropped ½ inch, to 11½ inches. Some riders will object to this lessening of ground clearance, and when I ride the tight, curving hillside trails of old, gnarly East Coast woods, I sometimes side with them. But on most mountain bike terrain, including the extremely rough Jeep trail that became our Ascent’s favorite test pike, there’s no problem. Rocks and ruts danced in and out of my path, but I never hit the pedals on any of them.



PHOTOGRAPHY BY TONY SCARPETTA

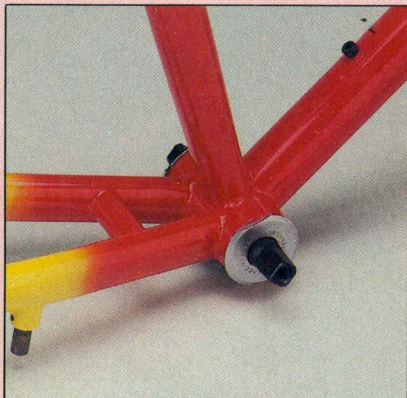


And for competition, the slightly lower bottom bracket is universally preferred. It gives a lower center of gravity and better all-around handling, in exchange for ground clearance that most riders never need.

Not only the bottom bracket height felt right on that Jeep trail. The bike was also exceptionally easy to control, whether we pounded it at reckless speed or slowed down to a crawl in its 23-inch low gear. On rough terrain, the Ascent's front wheel never took instruction from the rocks below; it only



Reinforced seat collar with fillet-brazed seat-stay cluster is a Tom Ritchey trademark, and one of the frame joints he brazes.



Ovalized seat tube is said to add rigidity to the bottom bracket area.

listened to the bars above. It has proven frame geometry, and it works quite well. Ritchey's Force tires were secure on dry rock, wet mud, loose shale, and the usual variety of other surfaces.

Then there were the little pluses. As you would expect from Shimano's indexed Deore XT derailleurs, it's impossible to blow a shift. And both brakes worked flawlessly. SunTour's XC-II bear trap pedals were a delightful classic. Ritchey's own design Force Directional handlebars have a sensible bend in them, and the superb construction of the stem is a delight to the eyes.

Another plus is knowing that Rit-



Fork blades are drawn to Ritchey's specifications and TIG welded in a unicrown design. (Headset was installed for photo only; production models have a Tange Levin sealed unit.)



they never makes a radical change in pursuit of a one-dimensional advantage. When he shortens his chainstays, he makes sure you can still fit big tires and fenders and the crankset of your choice. No chainwheel you can imagine will scrape the chainstay. He's thought a lot more about how you might fool around with the bike than you are likely to, and he's designed it to anticipate your future whims. (If you yearn for the geometry and riding qualities of the Ascent, but want some brazed-on bosses for the luxuries of life, Ritchey has a similar model for you. The Timberwolf has Ascent geometry, all the favorite braze-ons, and a price tag \$100 lower, thanks to some more economical components.)

Another factor in the Ascent's favor is durability. A competition rider will have to be a real oaf to cause any problems with this bike. Design of the mountain bike has evolved, broken bike by broken bike, but guess which builder has spent the most years looking for and correcting weaknesses? You can spend less and get similar dimensions and components, but you don't get the subtle design triumphs that have kept Ritchey a leader in mountain bikes these many years.

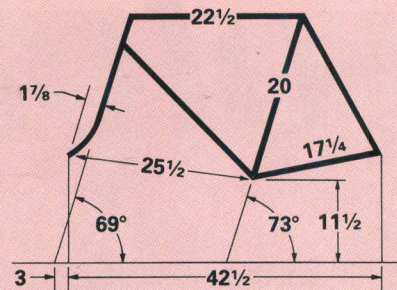
—John Schubert

## RITCHEY ASCENT

**\$995** (price may vary)

**Sizes available:** 16, 17, 18½, 20, 21½ inches

**Size tested:** 20 inches



**Wheelbase** 42½

**Frame weight without fork:** 5 lbs, 3 oz

**Fork weight only:** 1 lb, 14 oz

**Frame:** Tange double-butted oversized chrome-moly steel tubing made to Ritchey's specifications; brazed-on bosses for two water bottles, brake and derailleur cables, front and rear dropout eyelets. Tange Levin CD sealed cone-and-cup headset.

**Rims:** Araya RM-20, 26 x 1.50, 485 grams

**Spokes:** 36, 14 gauge, laced cross-three

**Hubs:** Shimano FH-M730-QR low flange; front and rear quick release; sealed cup and cone with open/close lube port; rear Freehub

**Tires:** Ritchey Force, 45-80 psi, 26 x 1.9

**Crank:** Specialized ST-1 mountain triple, 175 mm arms

**Derailleurs:** Shimano Deore FD-MT60 front and Deore XT RD-M730 rear with Deore XT SL-M730 index/friction shift levers

**Freewheel:** Shimano FH-M730-QR Freehub

**Chain:** Shimano Uniglide

**GEARING** in inches:

**	26	36	46
13	52	72	92
14	48	67	85
17	40	55	70
20	34	47	60
25	27	37	48
30	23	31	40

**Saddle:** Specialized Lambda; nylon base with leather cover and foam padding

**Seatpost:** Strong aluminum with one-bolt clamp; 260 mm long, 26.8 mm diameter; Specialized seatpost quick release

**Brakes:** Shimano Deore XT BR-M730 cantilever front and BR-M731 U-Brake rear with Magura brake levers

**Pedals:** SunTour XC-II beartrap with sealed bearings

**Handlebars:** Ritchey design Force Directional, 23¼ inches wide, with Force Directional stem

**Built by:** Ritchey USA, 1326 Hancock Ave., Redwood City, CA 94061