

ALESIA ANN DUFFY

INSTANT *feedback*

When Tom Ritchey designs bikes and components, the decisions he makes are based on his own racing and riding experiences.

by Rich Carlson

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The old black-and-white photographs from the 1970s tell it all: Lanky, young Tom Ritchey, racing his way toward being one of the top riders in the country, on an unmarked bike he'd made himself. "When I first started racing it used to surprise a lot of people that a young rider like me could be racing at that level on a bike I'd built myself," Ritchey recalls. "There were plenty of old-timers who were just waiting for it to break." But Ritchey's home-made specials didn't break. In fact, they held up and rode so well that other racers began asking him to build bikes for them.

"I didn't anticipate going into business when I first started building frames," he points out. "But I began to get some orders, and as my racing improved so did my

framebuilding. I started to get a reputation — I became known as the framebuilder racer."

By 1975 Ritchey was building over 200 frames a year and discovering that trying to be a framebuilder and a top-level racer at the same time was very difficult. At that point he made the decision to concentrate on building bikes and has been doing so ever since. In the late 1970s he was one of the early pioneers of mountain biking — in 1991 team rider Ruthie Matthes won the world championship cross-country race on a Ritchey bike.

Years of experience

Winning talked to the energetic Ritchey about his 20 years of racing, riding and framebuilding experience.

Winning *How long have you been involved in racing?*

Ritchey I rode my first race at the end of 1971. I was living in the Palo Alto area, which in those days was sort of the “Boulder” of cycling. My first full season was 1972. I was a junior racing against Jock Boyer and some other pretty fast guys. We were known as the “Northern California Terrors” back then.

Winning *Do you still race?*

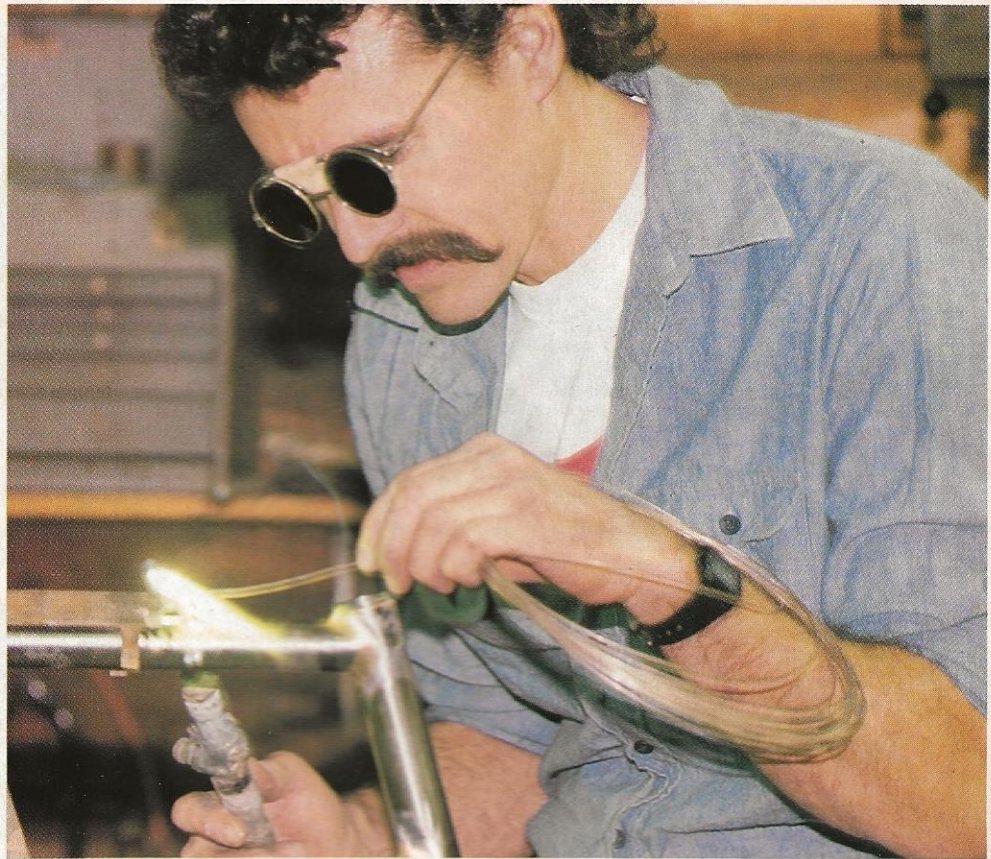
Ritchey Last year I did the NORBA Mammoth Classic, and I’d like to do some NORBA races this year. My lifestyle keeps me in pretty good shape, but for me the racing now is for fun — I don’t see myself becoming a full-blown vet racer traveling all over the place. I race to keep in touch with the sport. You find out what people want. When you’re out there riding at the limit, it helps you better appreciate the feedback you get from people about your product.

Winning *So you still manage to get in a lot of riding, even with your business?*

Ritchey Riding is an important part of my business. I ride about 8,000 miles a year, about 40 miles every other day. I have a course in the Santa Cruz mountains that combines six or seven miles of dirt with some gnarly stretches of pavement. Riding allows me to test my own products; it gives me a lot of information. Having ridden for so many years and built so many bikes, I feel that I’m my own best source of testing information. This shortens development time a lot. I can make and test a prototype frame or part within a couple hours. Maybe the best part of working this way is that I stay really excited about what I’m doing. It gets the creative juices flowing — I’m selfishly motivated to work on something and then go out and ride it.

Winning *When did you first start building frames?*

Ritchey Back in 1972, when I was 15. My first racing bike was a Cinelli. My second was my own.



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Starting young

Winning *Fifteen is a tender age to start building frames. What motivated you?*

Ritchey I’d always liked making my own stuff — I was never intimidated by the process of building something. I’d made go-karts and sailboats previously, so building a bike seemed pretty straightforward. My father helped me with my first frame, but after that I did all the work myself.

Winning *Were those early frames unique or different in comparison to European or other U.S. frames of the period?*

Ritchey Lightness was very in back then — everyone was into drilling out everything. I tried to build bikes that were light without all the drilling. I used oversized diameter tubing and ovalized tubing to achieve this, and in 1974 I also learned to fillet braze. These things became my trademark. By 1979 if you saw a fillet-brazed bike with an oversized top tube and

Ritchey hasn’t strayed from the actual work of building frames.

ovalized seat tube, it was a Ritchey. Jobst Brandt, whom I consider to be the most brilliant engineering mind I’ve met, taught me a lot during this period. He had an answer for every question I had. He always challenged me to design sensibly and responsibly.

Winning *When did you start building mountain bikes?*

Ritchey In 1977 Joe Breeze came to me for a custom tandem and

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FRED KORNAHRENS

brought one of his “ballooner” bikes with him. It was overbuilt — must have weighed 40 pounds. I was working on a bike similar to a hybrid at the time and was trying to get the weight way down. I learned about what Joe was doing and then used my own ideas and techniques to build a couple of bikes that were strong but much lighter. That more or less was the

Racing at Pacific Grove, Calif., in the 1970s — “I began building frames almost as soon as I started racing.”

‘I’m always conscious of weight, because that’s important when climbing; and I’m always conscious of stability, because it’s important that a rider feel comfortable during fast descents.’

start of mountain bikes as we know them — there haven’t been too many changes since then.

Lightness and stability

Winning *Do you have different design requirements for road frames and mountain bike frames?*

Ritchey I ride in dynamic situations — I’m either going up hills or down — so any bike I design has two fundamental criteria, lightness and stability. I’m always conscious of weight, because that’s important when climbing; and I’m always conscious of stability, because it’s important that a rider feel comfortable during fast descents.

Winning *Is mountain bike racing more conducive to design innovation than road racing?*

Ritchey To me, innovation is defined as improvement. Road bikes have been around for a long time and have a very solid func-

tional foundation — a lot of experimentation has already taken place, so there’s not going to be too much deviation. The only big improvements recently have been in aerodynamics. Mountain bikes are a relatively new breed whose foundation is not as established, although I think it’s more established than other people might. This may be an unpopular thing to say, but I think right now a lot of innovation in mountain biking is marketing driven — anything that’s new, whether it’s tested or not, is considered an innovation. Sometimes I’m branded as a conservative, but I want a product that’s popular because its functional and reliable. If I’m conservative in that respect it comes from 20 years of experience — I still consider myself to be cutting-edge when it comes to lightweight technology.

Winning *You’ve also designed many components — tubing,*

stems, tires, etc. How did you become involved in those areas?

Ritchey Simply from wanting to make improvements to those products. Take steel tubing, for instance. I'm one of the few remaining advocates of using steel for lightweight performance bikes; most builders have given up using steel in favor of going to exotics. But I felt that steel had never been given the right design improvements. When you build frames for 20 years you learn where a bike's Achilles heels are. My tubesets are designed like a fine-tuned system — through butting I strengthen weld-zone areas subject to high stress, like under the down tube and in the seat tube area, while at the same time removing weight in stress-free areas. And if you're going to build bikes without using lugs, you should design your tubesets accordingly. That's why we call our tubing "Logic" tubing,

because its design makes sense! I used to order materials and components built to my specifications and then get charged for tooling costs and so on. Then I realized that I was just giving away my ideas, so I started having things built to my specifications and then marketing them under my name.

One-man show

Winning *Do you still build many frames yourself?*

Ritchey Definitely. In fact I'm pretty much of a one-man show. Last year I and one part-time employee made 950 bikes.

Winning *Do you foresee any major developments in bike design springing up in the near future?*

Ritchey I think the key word is "major." To me, major these days is STI; 100 years ago it was something like a roller chain. When I first started out I thought I would

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re-invent the bicycle, and I suppose the dreamers just coming in still feel the same way. But, again, I think that the long history of refinement in bike design has reduced the opportunities to make major developments. □