IDEAS NEVER SLEEP
At Ritchey, ideas never sleep. And the proof is in the products. For 1997 we are introducing the largest collection of new innovations in our history. At the same time, we have streamlined our offerings to make selecting the ideal component even easier.

Why not push to design stronger, lighter and simpler components and accessories? A case in point is the Off Center Rim (aka OCR) design, the foundation of an entirely new approach to the rear wheel. In combination with our new WCS hubs Tom has re-engineered the wheel so that dish is significantly reduced without sacrificing gear range or wheel strength. In fact our new wheels weigh less and take more abuse than ever before. Combine that with his 2 X 9 Drive, a revolutionary gear system which makes chain suck and gear jamming a thing of the past, and you can see that Ritchey is taking care of the details so you get maximum enjoyment and performance on- or off-road.

To really understand the spirit behind Ritchey Components, it's best to start with our CEO, Tom Ritchey. On any given day, it's hard to say where you might find him. Riding five and a half hours of cyclocross with Thomas Frischknecht on dirt roads outside of Half Moon Bay, California, quality controlling the latest shipment of rims at company headquarters, or up late at night in his home workshop redesigning a tire tread or drive train or making a CPR tool even more versatile. This kind of in-the-saddle and behind-the-workbench CEO is an anomaly in the bike industry. But it's precisely the character that gives Ritchey its competitive edge, and relentless quest for innovation.

By industry standards, we're a small firm. A clan of hard core riders and enthusiasts. Team Ritchey riders interact with Tom on a regular basis. They test his latest product developments, and deliver essential feedback so that he can carry through with the dozens of ideas he brings back from every ride. These direct relationships work on all levels of the company. It means product development is a top priority and the latest tire designs, components and accessories are constantly ride- and race-proven. In turn, the manufacturing team is continually pushed to ensure quality and consistency.

Most people who have the opportunity to work with Tom immediately feel the intensity he has brought to the sport of cycling: as a member of the United States Jr. National Team, and as a young frame builder who played a pivotal role in developing the first mountain bike. Ritchey's founder and one-man product development department has been at the leading edge of bicycle design for more than 20 years. In other words, if you work with Tom or ride with his components and accessories you can't get any closer to The Source – of inspiration or authenticity.
Team Ritchey

You may not have any interest in diving headfirst into the psychotic world of competitive mountain bike racing. Even on the local amateur level it will put your body through more pain and suffering than you thought humanly possible; it will also beat your bike to a pulp. Parts that came highly regarded for their "durability" and "performance" will suffer, and those that were "designed" more for their marketability than function will be crushed.

Team Ritchey rider Thomas Frischknecht has been developing and testing bikes and products in conjunction with Tom Ritchey for seven years. A Silver Medal in the 1996 Olympic Games in Atlanta, Three World Cup Championship Titles and more victories than one can count, speak volumes about Thomas' hard work and indomitable spirit.

Thomas isn't the only Team Ritchey rider who's put it all on the line in pursuit of victory. Legends born at Ritchey include World Champions Ruthie Matthes, Henrik Djour and Don Myrah. Emerging stars like Andrés Brenes, already a hero in his native Costa Rica, Caroline Alexander and ultra distance madman John Stamstead stand ready to carry on the winning tradition of Team Ritchey. Racing is their passion and performance their obsession.

While we are incredibly proud of Thomas' and the rest of Team Ritchey's efforts, we're also more than a little proud of the fact that not only have our products brought them all great success-they've survived in the world's most torturous test track. Imagine how well they'll perform in your own backyard.
2x9 DRIVE

A chain that doesn’t catch or mis-shift in the heat of competition can mean the difference between winning and losing. The Ritchey 2X9 Drive System is our simple yet effective method to ensure our riders go straight from the saddle to the podium. Once again, Tom Ritchey has demonstrated his unconventional design wizardry. He’s replaced the standard 3 chain-ring system with a smaller, compact-drive, 2 chain-ring crank set. Then he added a specially-engineered 33-T cog ninth sprocket for the rear. The resulting system is lighter, and delivers smoother, more reliable 18-gear shifting that makes chain suck and gear jamming a hassle of the past. In tandem with our OCR rear wheelsets, you’ve got the ultimate upgrade. Patents Pending. After all, an idea that has already won the Bicycling Editors Choice Award needs to be protected. PATENTS PENDING.

DRIVETRAIN OPTIONS

WCS
Titanium Rear Cog 33T
Steel Front Inner Chainring 29, or 30T
7075 Alloy Front Outer Chainring 42 or 44T

PRO
Steel Rear Cog 33T
Steel Front Inner Chainring 29, or 30T
6061 Alloy Front Outer Chainring 42 or 44T

NOTE: To insure safety and optimum performance, the 2X9 Drive Kit requires the use of an OCR rear rim

ADDITIONAL SUGGESTED UPGRADES INCLUDE:
Ritchey Logic Hubs for additional dish reduction see page 19
Ritchey Compact Cranks for cold-forged performance see page 29
K9

Ve

*specially engineered 53-T ninth cog customizes Shimano®'s cassette FH sprockets.
Off Center Rim

Shaving almost 2 mm off the dish so that a wheel becomes exponentially stronger is the kind of challenge that keeps Tom Ritchey up at night. With the development of the OCR (Off Center Rim), Tom solved what many builders had been hoping to overcome for decades. A sturdier rear wheel based upon less dish. In fact, it is the off center alignment that allows for a more symmetrical and powerful rear wheel structure, reducing spoke tension differential by 40% - 50%. Combined with our Logic Pro or WCS Hubs, you’ll be eliminating dish completely. This means less energy spent truing your wheels and more time dishing out the competition. Welcome to the wheels of the future.

Off Center Rim Series

Mountain

OCR WCS
- Machined Walls, Blue Anodized Center Reinforcing Eyelets, Deep Sidewalls

OCR Pro
- Sanded Walls, Reinforcing Eyelets

OCR Comp
- Affordable OCR Design, Reinforced Center for Durability

700c OCR Cross/Touring

OCR Pro 700
- Sanded Walls, Reinforcing Eyelets

OCR Comp 700
- Affordable OCR Design, Reinforced Center for Durability (Europe Only)

Road

OCR Road WCS
- Machined Walls, Blue Anodized Center Reinforcing Eyelets, Deep Sidewalls

OCR Road Pro
- Sanded Walls, Reinforcing Eyelets

OCR Road Comp
- Affordable OCR Design, Reinforced Center for Durability
Rock & Road Rims

Ritchey's Rock series continues to form the backbone of our line and we've simplified it as part of our 1997 streamlining effort. The Rocks feature our bomb-proof triple-box cross section construction, which adds lateral strength and durability. Beyond this larger framework, there are a lot of cool new details at work. This year we've raised the standards on our top of the line WCS models significantly, including deeper sidewalls for better braking. Many of these design innovations have influenced our Pro and Comp models as well. Generous section depth makes changing tires a breeze. Machined sidewalls create a superior brake/rim interface, meaning you have a more accurate, consistent braking surface, in all weather conditions. WCS rims have a great looking blue anodized surface, while the Comp and Pro models feature the metallic finish of their top quality alloys. Stainless steel eyelets and reinforced spoke holes prevent nagging pull-throughs. Whether you're slugging it out off-road or pounding the asphalt, Ritchey WCS, Pro, Comp and Road rims will keep your ride rock steady.

Rock Series

Mountain

**ROCK WCS** Machined Walls, Blue Anodized Center, Reinforcing Eyelets, Deep Sidewalls

**ROCK PRO** Sanded Walls, Reinforcing Eyelets

**ROCK Comp** Reinforced Center for Durability, Affordable Rock Design

700c Rock Cross/Touring

**ROCK PRO 700** Sanded Walls, Reinforcing Eyelets

**ROCK Comp 700** Affordable Rock Design Reinforced Center for Durability (Europe Only)

Road Series

Road

**AERO Road WCS** Machined Walls, Blue Anodized, Reinforcing Eyelets, Deep Sidewalls

**AERO Road Pro** Narrow Aerodynamic cross-section, Generous braking surface
THE ULTIMATE UPGRADE

Wheel Sets
If you want a quick way to radically upgrade the feel of your ride, a new set of Ritchey wheels is the way to go. Most importantly, you get the combined synergy of Ritchey components working in unison. For 1997, we now offer 3 wheelsets – the WCS, Pro and Pro Road – made from “all Ritchey” components. All MTB wheelsets feature Ritchey’s revolutionary Off Center Rims in the rear and the Rock series up front. The new Ritchey road wheelset features new OCR rear rims and a wind cheating Aero front rim. Designed to be as light and strong as possible while still providing a supple and dynamic ride, there’s a wheelset here to meet all your riding needs.

WCS Wheelset
HUBS  Front: Ritchey Logic WCS w/Alloy Axle / Rear: Ritchey Logic w/Ti Axle
RIMS  Front: Ritchey Rock WCS / Rear: Ritchey OCR WCS
SPOKES Ritchey Double Butted 1.8/1.5 w/Alloy Nipples

Pro Wheelset
HUBS  Front: Logic w/steel axle / Rear: Logic w/steel axle
RIMS  Front: Ritchey Rock Pro / Rear: Ritchey OCR Pro
SPOKES Ritchey Double Butted 2.0/1.7 w/Brass Nipples

Aero Road Wheelset
HUBS  Front: Ritchey Road Logic / Rear: Ritchey Road Logic
RIMS  Front: Ritchey Aero Road / Rear: Ritchey OCR Road
SPOKES Ritchey Double Butted 2.0/1.7 w/Alloy Nipples

Finish off your All Ritchey Wheelset
Ritchey Tires (see page 9-12)
Ritchey Rim Tape, Tubes (see page 8)
WCS Tubes
Special lightweight blue compound specifically designed to reduce the rotating weight of your wheels. The double reinforced compound makes these tubes stronger and more resilient than pure latex. Starting at 90g

SuperLight Butyl Tubes
When you want superlight performance at a great price, choose the SuperLight Butyl Tubes. They're durable against flats and feature the value-added Schrader valve adapter (on all Presta tubes) that could get you out of a bind. 50+ grams weight savings over regular tubes

Lightweight Butyl Tubes
These compete head on with most non-branded tubes on the market but come with Ritchey design standards that put them up an extra notch in terms of lightness and performance. 20-25% lighter than standard tubes

Rim Tape
Rim tape’s a practical necessity that’s easy to install and simultaneously minimizes blow-outs while making it simpler to change tires when you have to. A specially formulated adhesive bonds the tape to rims so it won’t move or interfere with the rim/tire bead interface. We've also pulled out all the stops to optimize thinness and durability. That means you won’t be stopping because your tube's been punctured on your rim's spoke hole.

WCS Double Butted Spokes
Put your wheels on a weight reduction program while increasing their overall strength and durability. These double butted spokes shave 70 grams off a mountain wheel and 100 grams from road wheels.

Logic Straight Gauge Spokes
The Logic Series embodies the same great features of cold forging, design mechanics and quality nipples. It goes without saying that a wheel constructed of Ritchey spokes, rims, hubs, tires and tubes is going to be stronger, lighter and faster and all around more fun to ride.

WCS Gold Alloy Nipples
We cold forge these nipples to get the most out of our materials. They're then annodized for surface hardness and extended life. Machined faces improve wrench fit, making them your best choice for truing, improving speed and precision. Silver alloy or brass nipples also available.

Spoke Speak
• choice of double-buttled and straight gauge

• WCS alloy or brass nipples • manufactured by DT-Swiss

• cold-forged from the highest quality Swedish 18.8 steel

• design dynamics to increase shock dissipation and reduce breakage.
TIRES

For years Tom Ritchey’s tire designs have set the standards that all road and mountain treads have to measure up to. World Cup, World Championship and Olympic standards to be exact. At the core of the tire program is a concept called Vector Force Analysis. It’s a complex subject that Tom has made a life-long focus, both on the drawing board and on the trail. (He also has world class athletes like Thomas Frischknecht to bounce off ideas and test prototypes regularly). Vector Force Analysis dictates that curved, angled knobs (like those featured on Ritchey tires) interact most effectively with the vector forces of your tires. Vectors such as directional forces, gravity and friction. While this drives the design decisions defining particular tires, the same Ritchey manufacturing standards are found in a variety of top quality material compounds, producing a wide selection of tools for most riding needs, tastes and budgets. Have fun choosing your tools and may the Vector Forces be with you.

CASINGS

World Championship Series (WCS)

- Lightweight for the serious racer
- Low density rubber for lighter weight and sticky grip
- Supple casing for higher pressures and speed
- Kevlar bead

HardDrive Kevlar (HDK)

- High density rubber for maximum durability
- Stiffer casing for better cornering
- Kevlar bead

HardDrive Wire (W)

- Same high performance tread design at value pricing
- Strong tire/rim interface for downhill performance
**SPEEDMAX**

Inspired by 1996 Silver medalist Thomas Frischknecht, the Speed Max uses the same positive gripping side knobs of the Z-Max, but the center features an aggressive file tread interspersed with half-moon directional grippers. The perfect tool for dry, hard packed courses.

26 x 2.0, 700 x 30
[WCS], [HDK], [W]

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**SPEEDMAX Cross**

The legend continues. Lightweight and supple with low rolling resistance. Great braking and cornering. Best overall tire for front and rear use.

Sizes: 26 x 1.7, 26 x 1.9, 26 x 2.1, 26 x 2.35, 24 x 2.0, 20 x 1.75, 20 x 2.0 [WCS], [HDK], [W]

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**ZMAX**

A more squared off design with stiff side knobs enhance cornering and braking. All conditions. Especially effective as a front tire with an OmegaBite rear. Sizes: 26 x 1.9, 26 x 2.1 [WCS], [HDK], [W]

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**ALFABITE SC**

A climbing tool, this rear specific tire will keep you connected to the trail. The semisquared profile, with widely spaced lugs, sheds mud in the most severe conditions.

Sizes: 26 x 1.9, 26 x 2.1 [WCS], [HDK], [W]

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**OMEGABITE**

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**WCS Blue Wall**

Our WCS has always meant top of the line, lightweight performance. This year, we've raised the bar again. The Kevlar, carbon-fiber reinforced casing adds stiffness to the sidewall to prevent pinch flattening without adding any weight. So you can have your durable casing and eat it too.
ZMAX

Best performance in extremely loose, sandy, or muddy conditions. Front and rear use for cross-country and downhill.
Sizes: 26 x 1.9, 26 x 2.1 [WCS],[HDK]

MUDMAX

It's about mud. The trim 1.9 size tire is designed for critical frame/fork clearance, and facilitates carving through bogs. A self clearing center profile sheds away the mud, with Z-Max side knobs beefing up the traction.
26 x 1.9 [WCS],[HDK],[W]

ALFABITE MONDO

The same debris and crud squirting, tread pattern as the AlfaBite SC, but in an enormous size for maximum impact protection. Great for front when matched with OmegaBite DH rear. Size: 26 x 2.35 [HDK],[W]

OMEGABITE DH

Optimized for braking, the OmegaBite DH's reversed traction bar becomes a downhill's "braking bar." Downhill competition use, directional.
Size: 26 x 2.1 [W]
Bite the trail or the asphalt. The Cross Bite's inverted jaws are set inside a smooth profile to give you traction on the dirt and road. Sizes: 26 x 1.1, 26 x 1.4, 26 x 1.9, 700c x 38c [HDK],[W]

Our favorite cyclocross tire for loose conditions. A fast tire with low rolling resistance for mixed terrain. Center knobs keep the energy in your legs, which is nice if you've got to clear that next log. Sizes: 700c x 35c, 700c x 40c [W]

Originally designed for riding Moab's Slickrock Trail in Utah, the Moby-Bite became a hit on rough city streets. Also considered the ultimate cruiser tire. Size: 26 x 2.1 [W]

Fast rolling slick. Parabolic traction sipes shed water and keep you in control. Long wearing rubber compound mated to a light and supple casing. Sizes: 26 x 1.0, 26 x 1.4 700 x 20c, 700 x 24c, 700 x 28c, 700c x 38c, [WCS] 700c only, [HDK],[W]

Logic Valve Adapter [Superlight Only]
There's nothing like being up Shraeder Creek with a Presta valve. Our new, virtually weightless Ritchey Logic Valve adapter, however, puts an end to that nightmare. These lightweight adapters are now standard with our SuperLight Presta valve tubes, making them compatible with any Schraeder valve pump. Even the hose at your local gas station. Ride on.
A Conversation with Team Ritchey rider and Atlanta Silver Medalist Thomas Frischknecht

Q: You won the Silver medal in the '96 Olympics in Atlanta. How did it make you feel?

TF: Even though it wasn’t the gold it was the biggest race and biggest success of my career. The whole world was watching and the pressure was on. And because I was one of the favorites going into the race and I had been working really hard for that day for a long time. Then to come through and get where I wanted to be—the podium—it was a great satisfaction.

Q: Was it emotional up there on the podium?

TF: On the podium I definitely felt bigger emotions than my other races. But the whole experience of being at the Olympics was one of the greatest adventures of my cycling career and the ceremony was a nice finish to it.

Q: Your relationship with Tom Ritchey, as one of the key people who tests out his products. Do you ever feel like a guinea pig?

TF: It’s a great relationship. Things might not work exactly as planned but they never break. We’re not crash test dummies, but people who test his products. He really appreciates our feedback, listens to us, and improves things when necessary. It’s a relationship that is very unique in the industry.

Q: It must be pretty great to have Tom Ritchey as your mechanic.

TF: Yes. His company is small and he’s the man in charge of all product development and because I have such a close relationship with him I’m at the source of every new product coming out.

I can call him up and talk to him about a tire design for the Olympics six months before the race and he’ll have the prototype 4 months later. He’s very flexible in doing certain things and experimenting. On a typical team you get a bike to ride and that’s it. Their product development is way slower compared with Team Ritchey’s. Because Tom really has a connection with his riders and since he’s riding his bike a lot too he totally understands what we’re talking about. Also because it’s just one person in charge of product development, he’s very fast about coming out with new ideas and flexible about changing things. And he’ll always try his best to give us the right tools and go out and be one step ahead of everyone else.

Q: Tires. Do you design tires a lot with Tom?

TF: Not a lot but sometimes. The SpeedMax was one of these ideas to go with the semi-slick tire. It turned out well.

Q: 2 X 9. What are your thoughts?

TF: I definitely like the system having two chain rings in the front combined with a micro drive system. Since June and through the Olympics I’ve been riding with two chain rings in the front and it just makes shifting easier. Instead of trying to make everything better all the time sometimes people make things more complicated. They solve one problem but create three new ones. I think Tom looks at the bike as something that should be kept as simple as possible and the 2 X 9 system is a step in that direction, making it less complicated while offering more usable gears. You sacrifice nothing at all. It works as good and is a lot simpler. (continued page 23)
Logic Pedals
Of the dozen good reasons to choose Ritchey Mountain and Road pedals, most important is that you become part of our tireless commitment to bettering an already outstanding design. While 1997's Logic series embodies a whole new wave of improvements, our self-service upgrade kits offer present owners a quick and easy way to benefit from Tom's latest developments as well.

Mountain Logic Comp
If you're interested in putting the pedal to the medal (gold and silver that is), the Ritchey Logic Series is for you. Even after it was race-proven, Tom Ritchey's championship design has been continually improved upon. A wider toe hook and dual spring release make the cleat to pedal connection smoother and faster. Double seals on the spindle and bushings add durability and reduce maintenance. You'll be in and out of these pedals so gracefully, you might think they can read your mind. 360g/pair

Mountain Logic WCS
Same great features as the Mountain Logic with an ultra-light super strong Titanium axle. 320g/pair

Mountain Logic Pro
Once Again, Tom is one step ahead of the competition. The Logic Pro introduces a new lightweight "butterfly" body which supports our classic dual-spring release hardware while reducing weight to a mere 165g per pedal with sturdy CrMo axles. The large inboard cartridge bearing and axle system increases durability and reduces friction. Ideas never sleep. Does Tom? 330g/pair

Road Logic
While Tom may be known as one of mountain biking's pioneers, his roots also lie deep in road riding. So it was only logical that he design a Road Pedal that features the same dynamics as the Mountain Pedal, but scaled down for the road. And while the Road Logic is a world class pedal, it keeps a super low profile. The lowest cornering profile of any pedal on the market. CrMo spindles add strength and a dual spring mechanism works so well, you might think you have eyes on the soles of your shoes. 238g/pair
You probably know the feeling. You’re miles from home and something needs fixing or adjusting but you don’t have the right tool. It’s improvise or start walking time. Luckily, nothing pisses Tom off more than not having a simple tool when he or one of his riders needs it. So he’s designed a series of Compact Rescue Tools (CPR) that are so light and versatile you can handle most any emergency without filling half a seat bag. Beginners to pros swear by them. Mountain Bike Action Magazine has declared them a “must carry” item. These are a life saver in more ways than one.

CPR 14+
With no less than 15 tools, the CPR 14+ is the ultimate wheel world survival kit in a 78 gram CrMo single cast package. Made from quality construction materials so it won’t weigh you down or let you down, it features all the necessities: 8, 9, and 10 mm box wrenches; 14 and 15 gauge spoke wrenches; 3, 4, 5, 6 and 8 mm allen wrenches; flat head screw driver, a Phillips screwdriver, a 14 mm crankbolt socket; narrow type chain tool and the essential bottle opener.

CPR 9
This 9 function tool covers the basics. Weighing in at 46 grams, this is extruded 7075 T-6 alloy and should cover most on-trail emergencies. It’s hard to beat this quality and functionality at such a great price.
CPR 5
For those on a serious budget you can still cover your butt if you carry this in combination with our C.P.R. 4 tool. Again, it’s extruded 7075 T-6 alloy so it won’t break after a couple of emergencies or adjustments. Add a 4mm allen and you also have a perfect chain tool.

CPR 4
Leave it to Tom to stretch the limits of tire levers. He’s added on 8, 9 and 10 mm box wrenches, 5 and 6 mm allen keys and a screwdriver to boot. Made from carbon reinforced nylon with hardened steel inserts this is a great tool and companion to its other C.P.R. brethren.

Clothing and Accessories
Whether you are eating mud or sipping your Latté, you’ll look as pro as Team Ritchey in these high quality garments from jerseys, riding shorts, hats to even duffle bags.

Boom Box
We get a certain satisfaction in making a patch kit and tire levers lighter and more compact than you ever thought possible. That’s why our Boom Box is made of two plastic tire levers, which snap together to form an empty cargo space, just big enough to carry a patch kit. The levers make freeing the tire from the rim a snap and hold all you need to take care of blow outs. Don’t be surprised if one day we figure out how to put the pump in there too.
We don't design the most durable brake pads on the planet so that you can use them more than necessary. They're made to last and perform so you spend a lot less time hassling with your brakes. While the brake pad is a seemingly small component, accuracy and efficiency are key targets of the design, and Tom has spent countless hours mastering that crucial dynamic of where the pad interacts with the rim surface. The Logic Brake Pads, arguably our most popular replacement part, are constructed from a special compound, tailored for all conditions (black) and severe conditions (red). And new for 1997 we’ve introduced a new generation of SuperLogic Brake Pads. These ultra low-profile pads benefit from all the advantages of their Logic brethren, but have been specifically built to accommodate low profile systems. Once again, if you're looking to upgrade, don't forget the details and always look to Ritchey.

SuperLogic Brake Pads
With Shimano bringing V-brakes down into lower level component groups, there is more demand than ever to upgrade to a higher performance brake pad. The SuperLogic series was conceived with this in mind. Benefiting from years of race-tested designs on our Logic series, the SuperLogic pads clearly fill the niche of evolving brake technology, as well as Shimano's pad holders. Directional grooves allow debris to channel away from brake mechanisms, while a graduated edge prevents sidewall cuts. Ritchey's low profile cold-forged SuperLogic pad holders increase braking efficiency and power. Once again a simple design makes for easy replacement, while the pad compounds are formulated in two heavy duty categories: black (all conditions) and red (severe conditions). *Available as pads or as pads with holders. Watch for cantilever and road models coming soon.

Logic Brake Pads
Some time ago the Logic Brake pad set the enviable standard against which most other pads are judged. 45 degree grooves on the top of the pad channel away debris, while a wide braking surface increases power and reduces squealing. Logic pads are easy to install and feature a wear-indicator that signals their replacement time has arrived. Choose from black (all conditions) and red (severe conditions). Standard or threaded post types are available.

Threaded Logic Brake Pads
Cantilevers Brakes

Brakes are something you don’t want to overuse, but you can’t exactly live without. (A few un-named Team Ritchey riders excepted.) The Logic Cantilever brake system continues to drive the Ritchey brake line, delivering all the control and stopping power you need. Relying on cold-forged steel parts and an efficient design that reduces the distance from brake to rim, Logic Cantilever Brakes are responsive, smooth and quiet. Easily adjustable, these are great for cyclocross as well as mountain biking. Combine these with our three finger levers and Logic brake pads, you’ve got your hands on the winningest brake system on the global racing circuit.

Logic Levers

Yet another high value cold-forged Ritchey component at an excellent price, this lightweight champion was ridden to World Championship victories in 1992, 1993 and 1994. The three-finger grip provides maximum leverage and comfort, providing the control you need on those killer workouts.

Logic Cantilevers

Logic Cantilevers are cold-forged to maximize rigidity without adding weight. In other words, you get lightweight performance and prolonged-life. A medium profile was spec’d to provide for the optimum 90 degree cable angle, ensuring maximum power. Close positioning keeps brakes tight to the rim, eliminating chatter and flex.

Logic 27 Levers

These are about the most comfortable levers you can find, with a three-finger grip design that improves ergonomics and increases control. The integrated shape accommodates twist shifters, which makes it the perfect lever for our 2 X 9 Drive kits. A cam receiver allows for easy adjustment of brake cable stroke for fine tuning the feel.
Skewers
Our Lightning Rod wheel quick release and Logic Seat Q/Rs are light, easy to operate with a friendly feel that inspires confidence and security. We started with a 7075 alloy, then added an elongated lever that provides a clear mechanical advantage (translation: killer clamp down and quick release). A low-friction Delrin® cradle creates smooth action, without compression, for easier more secure closure. This design allows just 25kg of closing force to crank 300kg of tension on the dropout – something worth knowing when you’re chattering over the rocks.

Lightning Rod
We’ve chosen titanium for the WCS skewers, Both ultra light and ultra strong. The Logic is tried and true stainless steel edition with designed-in quality and economy.
Hubs
Only a rare designer can juggle the barrage of technological improvements to the bike without sacrificing performance on some level. With the advent of the 8-speed drive train, mountain bike wheels have absorbed the lion's share of the burden. They're built with more and more “dish” to make room for the larger spacing requirements. And increasing dish comes at the expense of strength.

But because Tom Ritchey sees singular components as part of an ever-evolving system, he's managed to minimize dish on the hubs by balancing the hub flanges. The result is an increase in strength without an added weight penalty.

Logic WCS Mountain Hub
In particular, the rear of the Logic WCS Mountain Hubset was developed with the new Off Center Rim and 2 X 9 drive system in mind. Mountain Hubset flanges are angled 7075 aluminum which are soft on spoke deformation but strong for life. They feature oversized alloy (USA) and titanium (Europe) axles for lightweight strength and performance, and perfect head cradles in the flange for reduced stress at the critical spoke head. The rear hub is equipped with an eight speed Shimano freehub cassette body for standard gear clusters and adaptability. Front Alloy 94g/Ti 100g, Rear 260g

Logic Pro Mountain Hub
Same great features as the WCS Mountain Hubs with CrMo steel axles. Front 115g, Rear 306g

Logic WCS Road Hub
Reduce the dish in your hubs and you stand a better chance of dishing out the hurt on your competition. But our Logic Road Hubs weren't designed in isolation. They compliment Ritchey's new for 1997 Off Center Rim (OCR) technology that is upgrading the way our bikes already perform. By producing a hub even stronger than traditional spoked wheels, the Logic Road Hub will take all the potholes, train tracks, curbs, cattle guards and other pounding the road has to offer. Front 90g, Rear 275g

Logic Pro Road Hub
Same great features as the WCS Mountain Hub with CrMo steel axles. Front 115g, Rear 300g
Stems
In addition to the appropriate angle, the right finish and a cool Ritchey logo, our stems for 1997 have a lot of not-so-obvious details at work. Fundamental quality materials are featured here, such as heat treated CrMo tubing or new cold-forged alloy for our Complite Mountain stems. But there are a slew of other behind the scenes forces at work, like a knee-friendly bolt design that won't gouge you on out of the seat climbs and the two-bolt handlebar clamp that makes removal hassle-free.

WCS Road and Mountain
The WCS stems' butted quill and extension tubes reduce weight yet retain strength. A secondary heat treatment after TIG welding allows use of lightweight CrMo tubing. Choose from a variety of sizes and angles.

Complite Mountain Alloy
New for 1997, the Complite Mountain Alloy is light and stiff enough to handle the most demanding conditions and has a unique flip-flop design that allows you to shift between two different positioning options. The bolts are rounded and inset on the stem, meaning you won't chafe your legs on frantic out of the saddle bursts.

Complite Road and Mountain
Here we offer a great value stem with Ritchey's signature design build-ins. A butted and heat treated CrMo extension tube combined with a welded steel quill reinforcement insert allows for a shorter bolt and lighter weight.
Headsets
Like your bottom bracket, the headset is a critical part that takes a lot of thrashing and earns little respect. But Ritchey headsets are specially designed to grin and bear even the ugliest terrain and the most insensitive riders. The key dynamic in all of Ritchey threaded and threadless headsets is the use of beefier high-load bearings in the lower cup (where most impact occurs) and smaller diameter bearings for the upper piece. At the same time an inverted top cone deflects stress down to the headtube’s stronger mid-section. These undeniably logical design decisions direct impact stress away from weaker stem areas and toward the reinforced steering column. Once again it’s an optimal solution which results in a weight reduction but increases strength and the life of the product.

SplitHanger
The Split Hanger is to be used for a threadless headset system. It provides superior cable routing, and the allen bolt will tighten to maintain headset adjustment.

CliffHanger
This cable hanger is cold forged from aluminum and has a deep drop for smoother cable routing. This model is designed for use with a threaded headset system.

WCS
The WCS features high quality needle bearing retainers on both the top and bottom resulting in smooth operation even under the most stressful conditions. Anodized and CNC machined duralumin alloy cups provide maximum strength and minimal stack height, making the WCS an excellent choice in either a threaded or threadless model. 82g 1" 92g 1 1/8"

Fuzzy Logic
A threadless headset with the same impact absorbing and stress deflecting design features as the WCS with high-load needle lower bearings and trimmed down 1/8” ball bearings above. A notched compression ring assures a tight seal against a threadless fork stem.

Comp
A solid performer used in victories in the 1990, 1992 and 1993 World Championships, the Comp is a threaded or threadless headset with 3/16” lower bearings and 1/8” bearings above. For serious riders on a budget, it’s hard to argue with the Comp’s value.

Logic
An all around choice for performance and value, the Logic provides Ritchey’s unique oversized lower and small upper bearings at a competitive price. Comes in threaded and threadless models.

All threadless produced under Subiccone U.S. Pat No. 5,095,770 and related patents
THOMAS FRISCHKNECHT

Q: How old are you?
TF: 26.

Q: How many years have you been racing for Ritchey?
TF: 7 years.

Q: How has racing affected your life?
TF: It is my life. It's a 365-day per year job and 24 hours a day. You don't just go home and do whatever you want at the end of the day. You live your job.

Q: And does it sometimes feel like a job or are you doing something you really love? Or both?
TF: It is certainly a combination. This job offers great opportunities and a lot of great things. Travel. Contacts. The sport itself. Training is a lot of fun when you get to know good places and the weather is good. But it also turns into a job that you have to do whether you're up for it or not. Training in the rain. I can't say that I enjoy every training ride I'm doing. A lot of times you have to work really hard to do the job. But the positive aspects definitely outweigh the negative.

Q: What about the new front suspension and full suspension bikes?
TF: That was just the evolution of the whole sport. The courses got more radical. Everyone went faster down the hill. You just had to move on.
**NO NOISE IS GOOD NOISE**

**SuperLogic Bottom Brackets**
The 1996 introduction of our SuperLogic bottom bracket series is living proof that limits are made to be broken. A combination bearing/cupset design modification quickly made this a favorite among riders and mechanics alike. The 68 mm BB shell delivers a lower Q-factor for natural, more efficient pedaling. Bearings are sealed for smooth performance, low maintenance and longer life. Meaning you won't hear a creak or squeal out of this bottom bracket and as the saying goes, no noise is good news. Race-proven by Team Ritchey and raved about in cycling magazines, there's a lot about SuperLogic bottom brackets to stand up and shout about.

**WCS**
This is the dream bottom bracket, guaranteed to last and perform without a gram of excess weight. 7075 alloy lockrings combine with a hollow 6-4 Titanium spindle for ultralight materials. The spindle itself features a bulged center design for increased torsional rigidity and strength.

**Comp**
While the chromoly spindle is not quite as strong as the Pro, it is still an outstanding upgrade and value. It also benefits from the low maintenance cartridge bearings, which are easily replaced if they ever wear out.

**Pro**
This lightweight, durable design centers around a hollow nickel chromium spindle, with the same outstanding features that has put SuperLogic bottom brackets at the top of the charts.
VECTOR Saddles
When it comes to saddles, we do our best to keep them as trim and utilitarian as possible. How you maintain your end of the bargain is up to you. Seriously, our Vector Series saddles are optimized for comfort, adjustability, balance and that all important factor, shock absorption. A special thermoplastic shell provides flex and memory that eliminates that painful break-in period and minimizes bulk. The "Plus Rail" design feature makes the saddle adjustable with an additional 10mm of fore/aft positioning.

ClingOn Pocket Protector
A saddle cover with an integrated zippered pouch made with non-slip USA patented Dartexx® material weighing half of separate saddle bags. The pouch has enough room for your CPR tool, a spare tube and a couple bucks for the road. USA only

New Vector Wing
The Mercedes" of saddles. In other words, comfort with performance. What's the rub? The rails connect to a Vector Wing Kevlar® cross-brace rather than the seat itself. And Tom developed a new criss-cross pattern for the midsection of the shell, which allows maximum flex and shock absorption. To ride it is to love it.
Seat Posts
You don't want to know the number of pounds per square inch that your tush impacts a seatpost. Suffice it to say that our seatposts are designed to handle as much pressure as possible through rigidity, while remaining as light as possible. We accomplish this by relying on Ritchey's own Logic design and Force Directional butting technology, which channels stress to those areas which can absorb it the most. Our seatposts for 1997 are better than ever.

WCS
These seatposts have been ridden to victory in the 1994 World Championships and the 1995 World Cup Championships. The WCS is a hard core component, featuring a hard anodized finish which resists scratching and a titanium fixing bolt to shed the merest gram of excess weight. 225g MTN 195g Road

LightningRod™ Seatpost QR
It's your seat's equivalent of a belt. The combination of 7075 lever and stainless skewer means once it's there you won't be replacing it any time soon.

Expert
Our unique Force Directional Butting alone makes this a top performer at an exceptional value. Wide clamping cradle diffuses stress on saddle rails, unlike more fashionable posts on the market.
Ritchey True Grips have crossed more finish lines in mountain competition over the last six years than we care to list here, proving there's a lot more to a great grip than four inches of spongy rubber. We put as much effort into designing a grip as we do a tire tread. A great grip will wick away rain and sweat, weather the blistering sun, and won't fatigue your hands over the longest rides. The True Grip Series is designed to accommodate a variety of bikes and purposes, including comfort, performance, weather and overall durability.

True Grip Original
Our best value grip, this features Tom's original ergonomic hexagonal design, which means the grips will be cushioning rocks and potholes, not your hands.

True Grip GS
Specifically designed for use with the latest generation of GripShift™ and twist shifters, the GS is made from a soft lightweight compound with a shark tooth grip pattern that reduces slip regardless of torque, mud or rain.

True Grip Lite
A horizontal fin pattern, cut into a special Klaton™ rubber material, not only wicks away heat and moisture, but sheds critical ounces without sacrificing durability. Race proven in the 1994 World Championships.

True Grip WCS
This long-lasting neoprene foam won't harden or blacken your palms. Like all Ritchey grips we put shock absorption and comfort at a premium, and the WCS has a hexagonal profile that suits just about everybody's paws.

True Grip II
These grips are ergonomically designed for both right and left hands. The True Grip II uses the same comfortable compound as the original True Grip.
Handlebars
Handlebars are easily taken for granted. But they're a key element well worth a quality investment. Tom focuses on strong lightweight materials that steer you clear of problems. Only the best materials are fashioned into Ritchey bars, with butting and transitions designed in to deliver consistent performance over the long haul.

RESPONSIBLY LIGHTWEIGHT

ProLite WCS
These lightweight bars have an undeniable track record, the choice of Team Ritchey champions for the past five years. The ProLite WCS bar features triple-butted extra thick center for added strength and durability. 123g

ProLite
The ProLite is our extreme bar, triple-butted like the WCS, but built with thicker walls to handle the rigors of cross country and downhill racing and training. For serious riders who want problem-free hammering without thrashing your check book. 140g

CompLite
The silver CompLite is competitive and light, as the name suggests. Tom chose a 2015-T6 alloy for this double butted seamless design, an ideal product for serious enthusiasts on a budget who still demand Ritchey's lightweight performance. 150g

ForceLite
Though it's our lowest price handlebar, the ForceLite still embodies Ritchey's championship design standards. Made from double butted 2014-T6 alloy, these bars deliver responsibly light performance at an undeniably affordable price. 170g
Cold Forging
When it comes to Ritchey parts, Tom believes that how you make them is as important as how they work. Which is why the parts that take the most punishment are manufactured using the most effective process: Cold forging.
It all starts with good design. Years of experience and careful testing go into every component he makes. Then, the best materials; only high-quality alloys from the top suppliers. After that, it's to the presses.
Cold forging requires creating a series of dies, not an inexpensive proposition. The alloy is then put under as much as 800 tons of pressure and stamped into shape. What does that accomplish? Quite a bit. Under all that pressure, the metal is compressed and then it is shaped in a series of steps, making it even stronger than the original material. Unlike CNC machined parts, cold forged components have an internal structure that has not been broken by machining, so they’re also more resistant to fatigue failure. With these factors working together, something else happens that riders love just as much: The stronger cold forged alloys allow us to use less material in the manufacturing process. Less material, lighter parts. The result of all this is that Ritchey parts are incredibly strong, yet amazingly light. Cold forging isn’t the easiest or least expensive way to go, by any means. It requires careful planning, smart design and the conviction that the product is as perfect as possible. But when you take components as seriously as Tom does, it’s the only way to go.

Going with the Grain

Crank Sets
When road testing our cranksets, we crank up the intensity – almost as much as the tons of pressure the metal alloys are subjected to during the cold forging process. They’re raced and thrashed until we’re sure we’ve achieved an optimal level of lightness and strength. And because Ritchey cranks are cold-forged, they can be built with a smaller arm radius, which means a significant reduction in the Q factor – the distance between the outside of the cranks at the pedal hole. This reduced Q factor means a better feel of the ride, improved aerodynamics and biomechanics.
Tomahawk Helmet

When your CEO insists on doubling as the number one crash test dummy, you make a helmet to protect your vital assets. That means good looking, easy to wear and tough as rock. Designed with styling, ventilation and comfort in mind, the Tomahawk is heads and shoulders above most helmets on the market. Worn by Team Ritchey in pursuit of Olympic Silver, 6th, and 15th place finishes.
Bar Ends
Bar ends are an ergonomic add on, providing comfort and extra power for those times when you’re up out of the saddle or powering a long climb. We’ve made it simple to choose our bar ends, by offering only two models and concentrating on the fundamentals of design, quality materials and function. Tom has pulled off an impressive balancing act to reduce the stress on lightweight expensive handlebars, while maximizing the strength of the bar ends and leaving plenty of room for grips. This is an optimizing process at the center of every Ritchey design decision. And it goes without saying that small details like bar ends lend an extra touch of class and performance that riders at every level can appreciate.

Logic Pro WCS
Single-piece, cold-forged construction is the signature of Ritchey design and the Logic Pro WCS bar ends are no exception. While the grain structure and integrity of the 6061 alloy is maximized through cold-forging, the one piece design minimizes the potential for stress or breakable joints. Once again, these are ultra lightweight and durable. The metal medals are made of like three World Cup championships and the silver in Atlanta ’96.

Logic Expert
The clamp on the Logic Expert is “stress diffused,” an awesome built-in design detail to reduce any potential damage to handlebars. Tom has chosen a two-piece bonded 6061 alloy construction, with a tapered 25mm clamp taking up only 15mm of space, so it fits snugly under the grips.
Frame Components

When some of the country's top builders depend on you for frame components, you're doing something right. And Tom Ritchey's signature tubing and frame components can be seen gracing the likes not only of his own line of bikes, but many of the premier rigs across the country. This remarkable reputation and loyalty is a tribute to Tom's tireless pursuit of superior design and manufacturing processes. In this intensely competitive industry, relaxing is not an option. Continual improvement is imperative.

But while other companies have pursued ever more exotic materials, Tom Ritchey has stayed true to steel, refining his designs and accomplishing what few people ever thought possible in terms of strength and weight. New for 1997 is a phenomenal tubing that retains 98% of its tensile strength after brazing and welding, and maintains its original mettle despite the most wicked workouts.

Tubes

The WCS is the lightest of our tubing component line, featuring extremely long transitions which eagerly absorb impacts and diffuse stress throughout the whole tube, rather than concentrating it in specific areas. The WCS, Pro and Comp tubing have all been optimized to provide the best stiffness, resiliency and strength-to-weight ratio for their intended purposes.
Frame Parts
Ritchey also produces a wide range of cold-forged and investment cast dropouts and fork ends, as well as lightweight seat collars and bottom bracket shells that complement the critical joints where tubes meet. The Road Logic investment cast fork crown is an excellent example of Ritchey’s classic design – best described as performance art.

Tom Ritchey could just as easily fit in "the Fathers of Mountain Biking" slot, but Ritchey’s remarkable capacity for invention makes him worthy of his own position. Ritchey still produces legendary bikes, but it is the well-designed, sensibly-priced components that have had the greatest impact. Besides, back in 1990, Ritchey had the foresight to sponsor a young Swiss cyclocrosser named Thomas Frischknecht — now three-time men’s World Cup Champion. Best of all, Ritchey (the company) is still run by Ritchey (the man).

— MOUNTAIN BIKER September 1996
20 Years of Mountain Biking People Who Made a Difference
THOMAS FRISCHKNECHT

Q: The last two years have been big years for European racers. What are the Europeans doing right?

TF: The U.S. riders have lost more contact because there is no development program in the U.S. at all. The hopes of the U.S. are getting older and they’re not bringing up the young guys. After John Tomac, Ned Overend and Tinker Juarez, there is a huge gap where I don’t see anyone following in their footsteps. Where in Europe the competition is so fierce and the younger guys are pushing the older guys and competition is always the key to improvement. That competition hasn’t really existed here in the U.S.

Q: The future of racing. Are you happy with the way courses are evolving?

TF: The variety of the courses is huge. The World Cup race on the U.S. East Coast for example is almost a completely different sport than what we know in Europe. The races in Europe tend to be faster, not as technical, so your physical abilities tend to be more important than technical skills. So this variety is fine for the World Cup I think. There are ten races and at the end the most complete rider will win. For the World Championship I think it’s definitely important that the course offer some climbing and technical descents so that you can also make points with your technical skills. But in general they are trying hard to provide good race but they are very different too.

I don’t always agree with the length of the race. When the race lasts up to 3 hours it gets boring. They’re not fun to watch anymore and they’re not fun to race in. I prefer racing between 2 and 2 1/2 hours, on a more intense course where tactics become more important than a marathon race.

Q: You have a small child.

TF: Yeah, a boy, 2 1/2 years old.

Q: Is Ritchey going to launch a front suspension Baby Freh tricycle?

TF: We’ll see. We’re not that far. He’s just learned to walk. I’m not going to push him to do anything.

Q: But not until you’re finished winning all your medals.

TF: Yeah. The job I’m doing right now is so time consuming and then there’s my family life. My schedule is totally loaded. Traveling, Racing. Doing all the things I have to do.

Q: Surfing…

TF: Yeah I like surfing. The first time I surfed was two years ago in Half Moon Bay. In general I just like to try out different sports. As a cyclist you can get pretty fixed on the bike which I think can be a little dangerous. Whenever I can I go snowboarding, cross country skiing or surfing when I’m in Hawaii. Even though I’m not very good at it. I just try and play around.

Q: Riding in California…

TF: I rode 5 1/2 hours with Tom yesterday. The weather was awesome. The trails are in great condition. I was on my cross bike riding on the trails and dirt roads. It was a totally great experiment, something I don’t do at home. There I either go on my mountain bike or on my road bike on pavement but the combination of offroad riding on a 700c wheel cross bike is not so common in Europe but the trails are so smooth here and there’s a totally different feel than on a mountain bike. You get further with less effort. It’s a really cool combination.

Q: Any intentions to coach or work with younger riders?

TF: Yeah, I definitely wouldn’t mind doing that but I think I’ll have a lot of different options. I’m really committed to racing for another four years because I want to compete in the Olympics in Sydney. It’s my last long-term goal. I’m putting 100% of my efforts into racing now and don’t think too much about what comes after.

Q: Even though the focus of racing might be in Europe right now do you feel like you’re coming to the center of innovation when you come to Northern California?

TF: Definitely. The relationship with Tom is so exciting because he knows all about the history of the mountain bike and was one of the guys who has made all this possible. This is definitely mountain bike heaven, where everything was born.
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Ritchey International
Via Cantonale 2
CH-6916 Grancia-Lugano
Switzerland
tel: +41.91.960.5220
fax: +41.91.960.5221
e-mail: info@ritchev.ch