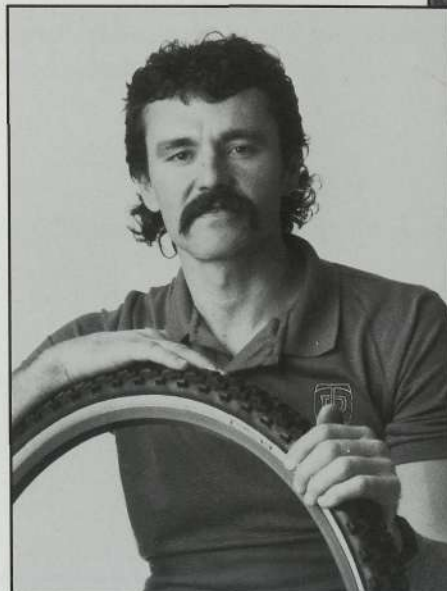


RITCHEY

For the past 20 years, I've built, ridden, and raced bicycles. Cycling has enhanced the quality of my life with a never-ending influx of fun, thrills, and fitness. That's probably why I enjoy designing and creating new and better performing components for bicycles. I hope that my exciting new line of components can make your bicycling experience a better one.

— TOM RITCHEY



TEAM RITCHEY
— 1991 —

LOOK TO THESE LEADING BIKE COMPANIES WHERE RITCHEY COMPONENTS ARE USED FOR PERFORMANCE AND VALUE

ELITE BUILDERS							
Alpinestars	Fila	KHS	Novara	Scott	Basso	Manderic	Rossin
Authier	Fiori	Kuwahara	Offroad	Shasta	Boulder Cycles	Manitou	Salsa
BCA	Fuji	Litespeed	Panasonic	Starway	Brave	Marone	Scapin
Bianchi	GT	Look	Paramount	Sunn	Breezer	Merlin	Serotta
Bike Tech	Haro	Mammoth	Pegasus	Supergo	Brodie	Masi	Silin
Bridgestone	Heavy Tool	Marin	Peugeot	Univega	Bruce Gordon	Moots	Gardi
Cannondale	Iron Horse	Miyata	Quantum	Urkauf	Cilo	Mtn. Goat	Tesch
Cinelli	Jamis	Mondia	Raleigh	Veleclair	Colnago	Mt. Evans	Wojcik
Concorde	K2	Muddy Fox	Rocky Mountain		De Rosa	Olmo	Zinn
Emery	Kastle	Nishiki	Ross		Ibis	Otis Guy	
Extreme	Kestrel	Norco	Schwinn		Klein	Potts	

HOW TO GET QUALITY RITCHEY COMPONENTS

RETAIL CONSUMERS

Quality Ritchey Components can be found as upgrade and replacement parts in performance oriented bicycle shops worldwide.

BRIDGESTONE
WEST COAST (800) 328-2453
FAX: (510) 895-5766

EAST COAST
(800) 638-2453
FAX: (201) 482-6174

RITCHEY
COMPONENTS

BICYCLE DEALERS

If you would like to place an order for Quality Ritchey Components, contact your usual bicycle parts distributors. If you are unable to locate a Ritchey Distributor, contact a regional Ritchey office.

WORLD HEADQUARTERS
RITCHEY DESIGN
1326 Hancock Street
Redwood City, CA 95061
Tel: (415) 368-4018
Fax: (415) 368-0840

RITCHEY JAPAN
4-9-17 Minami Tamondai
Tarumi-ku, KOBE
JAPAN
Fax: 078-782-0620



RITCHEY TAIWAN
7F-1, No. 52
Kung Yih Road
Taichung, Taiwan R.O.C.
Tel: 886-4-327-4665
Fax: 886-4-327-8801

RITCHEY EUROPE
Via Spluga 76
Nuova Olonio
23020 Dubino, SO ITALY
Tel: 39-342-68-7391
Fax: 39-342-68-7460

RITCHEY COMPONENT CATALOG



1991-92

QUALITY COMPONENTRY



MOUNTAIN TIRES

No one designs mountain bike tires like Tom Ritchey. Every Ritchey tire is painstakingly thought out to provide maximum traction with minimum rolling resistance and minimum weight. Before a final design is reached, many field tests are made by Tom and his team riders to ensure performance they will want to ride on. Every tire is also manufactured with the highest quality and standards in the industry. This year brings two exciting additions to the mountain bike tire line. First, we're pleased to announce the introduction of the new MegaBite Z-Max. The Z-Max combines all of the latest refinements of Ritchey's Vector Force Analysis (VFA) with three full years of race-winning MegaBite experience. Once again, Ritchey sets a new standard in tread design technology with the super traction MegaBite Z-Max in both the 2.1" and 2.35" widths. The second addition to the line is our **new special limited edition "WCS" (World Champion Series)** low density rubber line of superlight tires. This series is available in each tire design in either standard black or special red, a softer, more puncture resistant compound. Ritchey tires have always been the lightest full-width tires, and with the new "WCS" series, the lightest just got lighter!



MEGABITE Z-MAX

The Z-Max is the newest in the evolution of MegaBite tires. Perfecting Vector Force Analysis, it takes off-road traction to the max!

◆ 26x2.1	660 grams	66 tpi	
◆ 26x2.35	700 grams	66 tpi	
◆ "WCS" 26x2.1 Kevlar	560 grams	127 tpi	Red compound avail.
◆ "WCS" 26x2.35 Kevlar	600 grams	127 tpi	Red compound avail.
◆ 24x2.0	600 grams	60 tpi	
◆ 20x2.0 (BMX)	400 grams	60 tpi	
◆ 20x1.75 (BMX)	460 grams	60 tpi	



MEGABITE HARDDRIVE

The HardDrive uses a Vector Force Analysis tread with a more open knob pattern and a wider width. It's perfect for soft, loose, and rugged terrain. This is the tire that won the 1989 NORBA Worlds.

◆ 26x2.1	630 grams	60 tpi	
◆ 26x2.1 Kevlar	575 grams	60 tpi	
◆ "WCS" 26x2.1 Kevlar	530 grams	127 tpi	Red compound avail.
◆ 700x38c	470 grams	60 tpi	



MEGABITE OVERDRIVE

This is the first tire to ever use Vector Force Analysis in its tread design. The OverDrive is an excellent high-speed, low rolling resistance tire that offers great traction for fireroads and hard-packed surfaces.

◆ 26x2.0	650 grams	66 tpi	
◆ 26x2.0 Kevlar	600 grams	66 tpi	
◆ "WCS" 26x2.0 Kevlar	530 grams	127 tpi	Red compound avail.
◆ 700x38c	450 grams	66 tpi	
◆ "WCS" 700x38c Kevlar	380 grams	127 tpi	Red compound avail.



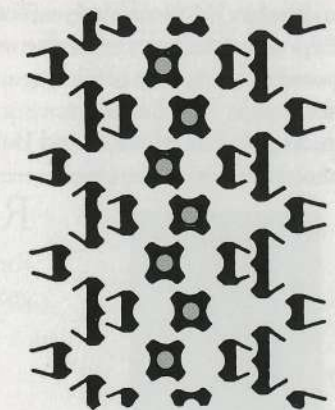
MOUNTAIN TIRES

FORCE RACING K

This two-time NORBA National Championship winning tread is still the leader in light weight, full-width, off-road tires. The Racing K is now available in the exclusive "WCS" series design, making the lightest mountain bike tire ever.

◆ 26x1.9 Kevlar	535 grams	66 tpi	
◆ "WCS" 26x1.9 Kevlar	465 grams	127 tpi	Red compound avail.

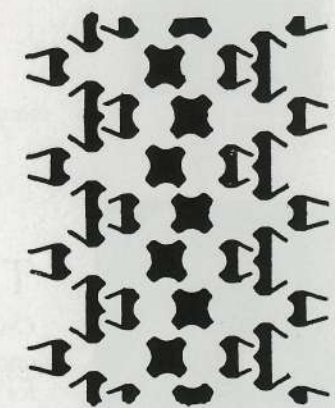
World's lightest MTB tire!



FORCE DURO

The Force Duro has been a longtime favorite of mountain bikers. The Duro provides the same performance of the Racing K with taller knobs to make a longer-wearing tire.

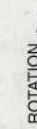
◆ 26x2.0	640 grams	66 tpi	
◆ 26x2.0 Kevlar	575 grams	66 tpi	
◆ "WCS" 26x2.0 Kevlar	510 grams	127 tpi	Red compound avail.



MOD QUAD

The Mod Quad uses Vector Force Analysis to combine the lower rolling resistance of the original Quad with the off-road performance of the MegaBites to make it the ultimate in multi-terrain tires.

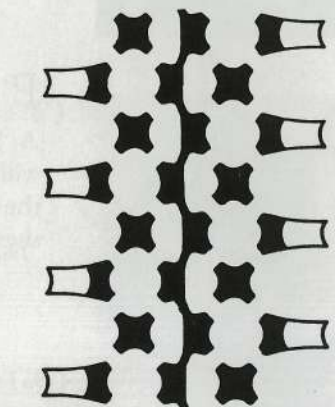
◆ 26x2.0	650 grams	60 tpi	
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QUAD

The Quad is the most often copied multi-terrain tire on the market. This ever popular design sets the standard for *all-terrain* tire performance.

◆ 26x1.6	550 grams	60 tpi	
◆ 26x1.9	640 grams	66 tpi	
◆ "WCS" 26x1.9 Kevlar	560 grams	127 tpi	Red compound avail.



PROELITE WHEELS & PROCONTROL



RITCHIEY PROELITE WHEELS

A race proven, limited edition "pro-quality" set of team wheels!

Second only to the frame, wheels are known for their importance to the performance of bicycles. Their weight and strength are critical factors which directly influence the way a bike will ride and feel. A wheel is essentially a dynamic structure that is asked to take the first onslaught of punishing abuse. Well designed, shock absorbing wheels are mandatory for mountain bike riders. Taking weight off the wheel, in however small increments, is a challenge of the highest order. The risks are self-evident, but the liveliness of a strong, light, agile, trail gripping pair of wheels are unparalleled to any other bicycle component.

That's the trick to the Ritchey ProElite Wheels. Only a very limited number are made annually, due to the labor intensive effort put into each and every set. ProElite Wheels are meticulously hand laced, trued, tensioned, and individually serial numbered by WheelSmith.

ProElite Wheels start off with Ritchey's new ultra-light 395 gram **Vantage Pro Rims**. Then Ritchey makes use of the weight-saving **Shimano Ultegra** front hub and the **Deore XT** 7-speed rear hub. These are laced by **WheelSmith** technicians using their finest quality butted 15/17 (front) and 14/16 (rear) spokes. Finally, **ProElite** wheels receive

Ritchey's new ultra-light **MegaBite Series "WCS" Kevlar** beaded tires and **Pro "WCS" Latex tubes**. And if that's not enough, WheelSmith even guarantees the wheels against spoke breakage and for trueness.

ProElite Wheels are as fast as wheels get. By shedding over one full pound off the wheels of your bike, you can actually feel the difference. Previously these race wheels were only available for the Ritchey P-22 Team race bikes and other professional race teams, so now is your chance to get a set of these limited edition wheels.

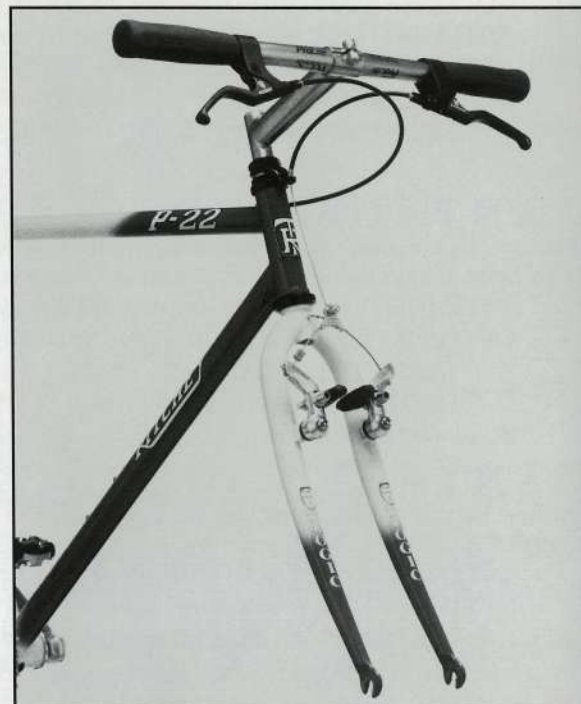
RITCHIEY PROCONTROL *An advanced system of control components for race-winning performance!*

ProControl is Ritchey's high performance front end control system for mountain bikes. ProControl features eight different race proven components, as used by the Ritchey Race Team and many other pro riders.

Ritchey's ProControl succeeds as never before in making a super light and highly agile control system. The ProControl system includes the very latest in component design and technology, including the **Logic triple butted fork** with the Force Directional Steerer (700 grams), the **Logic Comp Headset** (110 grams), the **Cliff Hanger** drop-cable hanger (17 grams), the **Force Comp Stem** (290 grams), the butted **ProLite "WCS" bars** (120 grams), **True Grips** (100 grams), **Logic Brake Levers** (95 grams/pair), and **Logic Cantilever Brakes** (145 grams).

The ProControl system continues Ritchey's tradition of designing the most responsibly engineered lightweight products on the market. In addition to reducing needless weight, strength is actually increased through the use of such trademark Ritchey specialties as Force Directional (FD) technology, proprietary butting and heat treatments, and the use of only the highest quality "spare no expense" materials. ProControl strikes a balance between reduced weight and improved strength, the result of which can greatly improve the performance of a mountain bike. Steering is more accurate and shock absorbing is enhanced.

Ritchey's ProControl will fit any standard-size or 1-1/8" oversize mountain bike, which makes improved performance available to thousands of riders without the high end cost of purchasing a new bike. And when you figure ProControl's cost versus its weight benefits and improved front-end agility, the new ProControl system from Ritchey is winning... by design.



CLOTHING & ACCESSORIES

RITCHIEY GIVES YOU SOMETHING EXTRA...STYLE

We feel Ritchey components offer cyclists something extra. That's why we wanted to offer a little something extra to our friends and customers. We now carry a wide variety of clothing and accessories, including official Ritchey racewear, casual clothing, shop aprons, caps, sweat bands, helmet covers, gloves, decals, and water bottles.

Now you can wear what the Ritchey Race Team wears! Our official short sleeve team jerseys, long sleeve team jerseys, full zip team wind breakers, and matching shorts are available on high quality cycling apparel from Aussie. Show them you use Ritchey components with these beautifully bold red-white-and-blue designs.

We also have a selection of after-ride clothing. Choose from short sleeve t-shirts, long sleeve t-shirts, workshop aprons, and sweatshirts, featuring the popular Ritchey logos "Ritchey," "TR," "Handmade by Tom Ritchey," and the famous puff-ink MegaBite track design riding from front to back. With sizes from small to extra large, and colors from navy blue to red, we're sure you'll find something to fit your style!

We also carry Ritchey water bottles. They come in a variety of colors and styles and are available in two sizes, regular (20 oz.) and large (28 oz.). Riding gloves are made in small, medium, large, and extra large sizes, all in bright red-white-and-blue. Whether it's a component or an accessory, the quality of Ritchey designs always give you something extra.



HANDLEBARS & GRIPS

Establishing standards for handlebars has been one of Tom Ritchey's endeavors ever since he introduced the original one-piece "Bullmoose" design in 1981. A handlebar is more than a piece of bent aluminum tubing. Ritchey's designs of previous years have soon become his competitors' goals. At the same time, Tom is busy in the shop and on the trail designing an even better product. To understand this you need only look at Ritchey's LATEST bar—the remarkable ProLite "WCS," a 120 gram special development effort between Tom Ritchey and Easton Aluminum in the U.S.

PROLITE "WCS"

The ProLite "WCS" sets a new standard in shock absorbing, light weight handlebars strong enough for competition.

- INTENDED USE ♦ pro racing, project bicycles
 MATERIAL ♦ butted Easton EA70 super alloy
 WIDTH ♦ 540mm WEIGHT ♦ 120 grams
 BENDS ♦ 4°, 6° FINISH ♦ super hard coat platinum

PROLITE

The ProLite has become the choice of top mountain bike racers. Its light weight, shock absorption, and durable construction have proven a winning combination!

- INTENDED USE ♦ pro racing, project bicycles
 MATERIAL ♦ butted Easton EA70 super alloy
 WIDTH ♦ 540mm WEIGHT ♦ 140 grams
 BENDS ♦ 4°, 6°, 9° FINISH ♦ black, red, silver, blue

FORCELITE

The ForceLite competition bar is a new feature and value-packed bar design from Ritchey. Using a premium grade 2014-T6 alloy that is nearly 50% stronger than 6061-T6 alloy, this 180 gram lightweight has the appearance, in its brushed satin or black finish, of the popular ProLite at nearly half the cost.

- INTENDED USE ♦ high performance
 MATERIAL ♦ 2014-T6 heat treated aluminum
 WIDTH ♦ 560mm WEIGHT ♦ 180 grams
 BENDS ♦ 6°, 9° FINISHES ♦ black, silver

ORIGINAL FORCE FD

The original Ritchey alloy bulge bar, still popular for good looks and affordability.

- INTENDED USE ♦ sport performance
 MATERIAL ♦ 6061-T6 heat treated aluminum
 WIDTH ♦ 560mm WEIGHT ♦ 230 grams
 BENDS ♦ 6°, 9° FINISHES ♦ black, silver

TRUE GRIPS

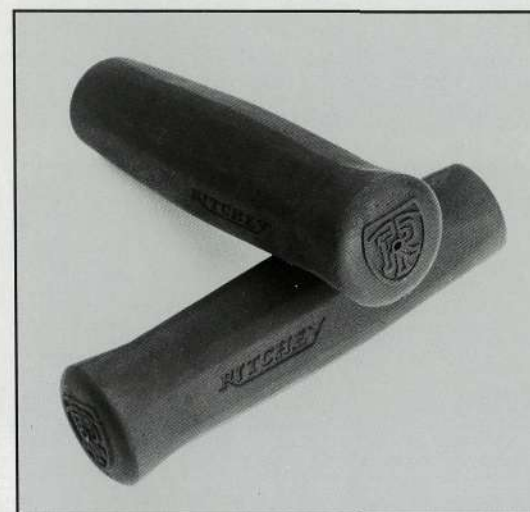
Ritchey's True Grips have fast proven themselves to be the racer's choice. Specially formulated compound which helps your hands stick to the grips without any gummy residue. Unlike many of the "trendy" grips out today, True Grips actually help to improve your performance.

- COLORS ♦ black, grey, red, white, blue
 WEIGHT ♦ 100 grams

TRUE GRIPS II

Ritchey's new True Grips II offer a superior hand-palm-finger conforming shape ideal for the high performance user. Made in right and left hand contours, the True Grip II uses the same great compound of the original True Grip, to offer the best in controlled performance. (Not pictured).

- COLORS ♦ black
 WEIGHT ♦ 100 grams



FORCE COMP STEMS

The numerous medals won at the 1990 and 1991 World Championships are just the latest proof that the Force Comp Stem is the strongest, lightest stem available. The Force Comp features unique, butted "supertubing," made with a proprietary second heat treatment process to allow the use of thinner gauge chromoly. An unbeatable and unmistakable combination is made with trademarked ovalized extension tubing and unparalleled quality construction. Fatigue testing showed the Force Comp to exceed JIS standards by 300%, outperforming all previously tested stems. At just 290 grams (150mm), the trustworthy Force Comp leads in light weight and durability. The butted Force Comp is now also available for high performance road riders. Currently the Shaklee and Subaru road racing teams along with the National Cycling Team claim this stem is the strongest and lightest they've ever used!

FORCE COMP (MOUNTAIN)

Considered simply the world's best, this stem won the 1989 NORBA World Championships in addition to a Silver and two Bronze pro/elite medals at the 1990 Worlds. The Force Comp continues to prove itself as the strongest lightweight stem available at any price.

- INTENDED USE ♦ competition and project bikes
 EXTENSION/RISE ♦ 120mm, 130mm, 140mm, 150mm, 160mm, (all 10° rise), 130mm (20° rise)
 STEM DIAMETER ♦ 22.2mm (standard), 25.4mm (OS)
 FINISH ♦ satin chrome
 WEIGHT ♦ 290 grams (150mm)

FORCE DIRECTIONAL (MOUNTAIN)

The original FD stem has been improved for '92. Its full chromoly construction has more quality features than any other stem at its price.

- INTENDED USE ♦ high performance and general use riding
 EXTENSION/RISE ♦ 120mm, 130mm, 140mm, 150mm (all 10° rise), 130mm (20° rise)
 STEM DIAMETER ♦ 22.2mm (standard), 25.4mm (OS)
 FINISH ♦ black chrome
 WEIGHT ♦ 340 grams (140mm)

FORCE COMP (ROAD)

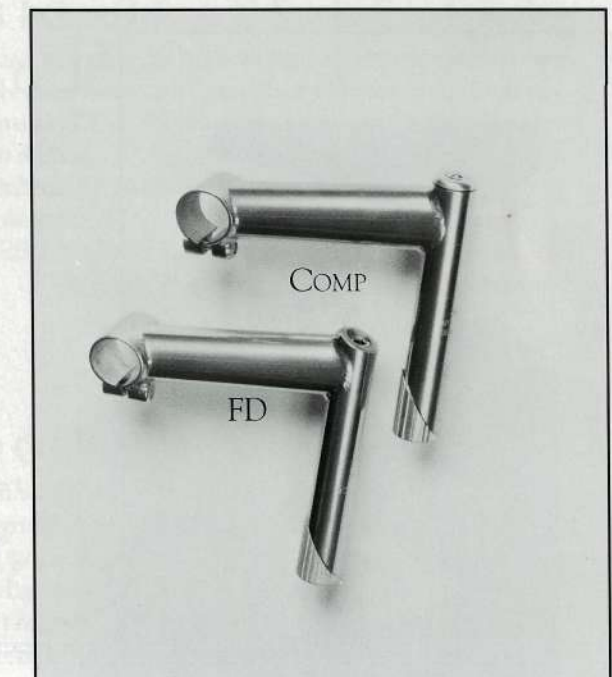
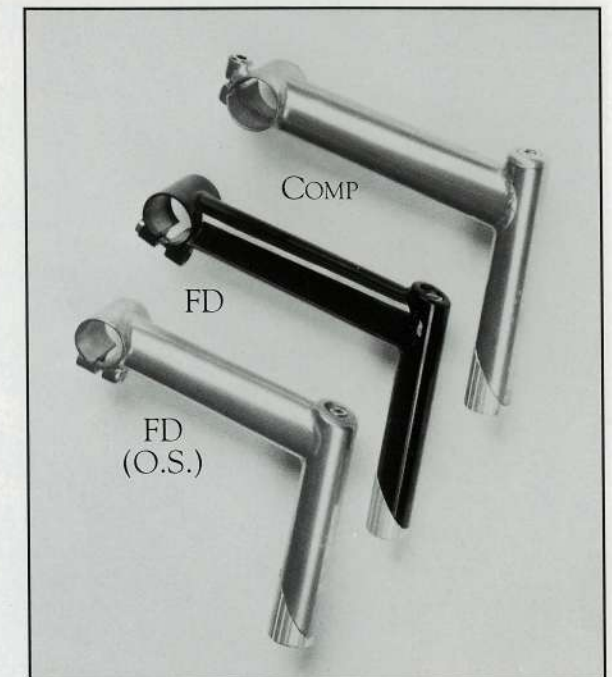
This is the new stem used by 1990 World's Silver Medalist Ruthie Matthes, World's team rider Bobby Julich, and 1991 World Cyclocross Champion Thomas Frischknecht. Using the same proprietary butted construction as the classic Force Comp mountain bike stem, it's quickly becoming the choice of top road racers world wide. This stem is 30% lighter than alloy stems!

- INTENDED USE ♦ road racing, criteriums, triathlons, and high performance road riding
 EXTENSION/RISE ♦ 90mm, 100mm, 110mm, 120mm, 130mm, 140mm, 80° (-10° rise), 90° (0° rise)
 STEM DIAMETER ♦ 26.0mm
 FINISH ♦ satin chrome
 WEIGHT ♦ 240 grams (110mm)

FORCE DIRECTIONAL (ROAD)

The FD stem offers all of the super strength characteristics of the trademark Ritchey chromoly construction at a more affordable price!

- INTENDED USE ♦ high performance road riding, general use
 EXTENSION/RISE ♦ 90mm, 100mm, 110mm, 120mm, 130mm, 140mm, 80° (-10° rise), 90° (0° rise)
 STEM DIAMETER ♦ 26.0mm
 FINISHES ♦ satin chrome
 WEIGHT ♦ 270 grams (110mm)



SEATPOSTS & SADDLES

Have you ever seen a seatpost bent sideways? They don't because all the forces are imposed on the fore and aft directions. So Tom Ritchey designed the world's first and only force directionally butted seatpost. It uses superior strength 2014 series aluminum in the post, but that's only the beginning. Instead of a bulky cast clamp, the FD post is joined to a super-tough forged, single bolt clamp. Then a special welding process is used to create not only the toughest seatpost available, it's also the lightest. The 300mm FD seatpost weighs over 15% less than the leading competition. The FD is now available in both mountain bike and road bike sizes, and all are built with the craftsmanship and aesthetics that make Ritchey components the number one choice for serious riders!



FORCE DIRECTIONAL SEATPOST (MOUNTAIN)

It's tough, butted, light, and has the looks that belong in a showcase. The FD Seatpost is the ultimate in racing posts, and it's now available in road and off-road lengths as well as in standard and oversize diameters

- INTENDED USE ♦ competition and lightweight "project bikes"
 POST MATERIAL ♦ butted 2014 series (standard), 6061 T-6 (OS) alloys
 CLAMP ♦ forged alloy, single bolt
 DIAMETERS ♦ (standard) 26.2mm, 26.4mm, 26.6mm, 26.8mm, 27.0mm, 27.2mm, (OS) 28.6mm, 28.8mm, 29.0mm, 29.2mm, 29.4mm, 29.6mm, 29.8mm, 30.0mm
 LENGTHS ♦ 300mm, 330mm (OS in 330mm only)
 WEIGHT ♦ 250 grams (standard 26.8x300mm) 300 grams (OS 29.4x330mm)

FORCE DIRECTIONAL SEATPOST (ROAD)

The world's first butted seatpost is now available in a road length, letting road racers benefit from a stronger, lighter seatpost!

- INTENDED USE ♦ road racing, criteriums, triathlons
 POST MATERIAL ♦ butted 2014 series aluminum
 CLAMP ♦ forged alloy, single bolt
 DIAMETERS ♦ 26.2mm, 26.4mm, 26.6mm, 26.8mm, 27.0mm, 27.2mm
 LENGTHS ♦ 240mm
 WEIGHT ♦ 210 grams



LOGIC SADDLE

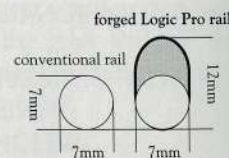
This isn't just a name stamped on some nice leather! Tom Ritchey has designed the saddle to reduce weight and maintain comfort. A new base shell holds shortened rails, therefore reducing weight. Tom took extra care to design a contour for optimum comfort and therefore maximum rider performance.

- DESIGN FEATURES ♦ new racing profile, top quality sheepskin leather, medium density padding
 RAILS ♦ shortened length spring steel
 COLORS ♦ black, white
 WEIGHT ♦ 315 grams

LOGIC PRO SADDLE

While most alloy rail saddles are breaking, the new Logic Pro takes a *different* approach to increasing strength and saving weight using aluminum. We took the same great Logic Racing saddle rails and forged them with the best 7075-T6 aluminum and in the strength sensitive areas increased the vertical area by 180% to resist the impacts of rugged ridding (see figure). At 250 grams, the Logic Pro saddle is light years ahead!

- DESIGN FEATURES ♦ new racing profile, top quality sheepskin leather, medium density padding
 RAILS ♦ ovalized, forged 7075-T6 alloy
 COLORS ♦ black, pearl
 WEIGHT ♦ 250 grams



LOGIC BRAKES & CABLE HANGERS

Tom Ritchey has designed a lightweight brakeset that actually helps you go faster. The new Logic Brakeset is a high performance braking system with features top racers demand. Tom starts off with a powerful new medium profile cantilever design, then constructs brakes using the best quality cold-forged alloy available for the design. In addition to using a minimalistic two-position spring design, Logic cantilevers reduce the distance to the fork to eliminate performance-robbing chatter. A specially designed brake pad adjustment hole increases vertical adjustability, offering the best rim/tire versatility. To get maximum performance from Logic Brakes, Tom designed the new Logic Brake Levers. The ergonomically correct three-finger lever features a wedge profile to reduce fatigue, and a special index finger "harbor" to add comfort. Cold-forged for strength, Logic Brake Levers are just the thing to finish off this truly high performance brakeset.



LOGIC CANTILEVERS

Logic cantilevers not only provide you with the ultimate in stopping power, they're ultra-light to help you go faster.

- DESIGN ♦ maximum force "medium" profile
 CONSTRUCTION ♦ cold forged 6061 T-6 alloy, brass bushing pivot bearing, two position spring adjustment
 PAD ADJUSTMENT ♦ increased vertical adjustment hole
 CABLE END ♦ special "tuck" to hide cable ends
 COLORS ♦ black, silver
 WEIGHT ♦ 145 grams/set

LOGIC BRAKE LEVERS

Now you can get a handle on braking performance with strong, light weight, and full reach Logic Brake Levers from Ritchey.

- DESIGN ♦ three-finger profile with anatomically contoured blade
 LEVER MATERIALS ♦ cold forged 6061 T-6 alloy
 CABLES/HOUSING ♦ BRS low friction, high strength
 COLORS ♦ black, silver
 WEIGHT ♦ 95 grams/set (without cables and housing)

CLIFF HANGER CABLE HANGER

Now you can take braking to the edge with the new Cliff Hanger Cable Hanger from Ritchey!

- DESIGN ♦ special high strength, low profile for full stem adjustment (optional cable adjuster)
 MATERIALS ♦ 6061 T-6 forged alloy
 THICKNESS ♦ 4.5mm
 CABLE DROP ♦ deep 16mm drop for smoother cable routing
 SIZING ♦ 1", 1-1/8" (OS)
 COLORS ♦ black, silver
 WEIGHT ♦ 17 grams



LOGIC CRANKSETS

At last a Logical cure for the common cold-forged crank! Tom Ritchey created this crankset with the serious rider in mind. The Logic Crankset is cold-forged for superior strength, and features an ultra-clean "hidden pin" design for less weight and increased stiffness. The Logic Crankset has a very low "Q-factor," a feature that makes for efficient and ergonomic pedaling. The left crank arm also receives a unique reinforcement at the axle area to increase strength. Finally, the super duraluminum material is hand polished to a high quality satin finish that's only found on the highest quality cranks.

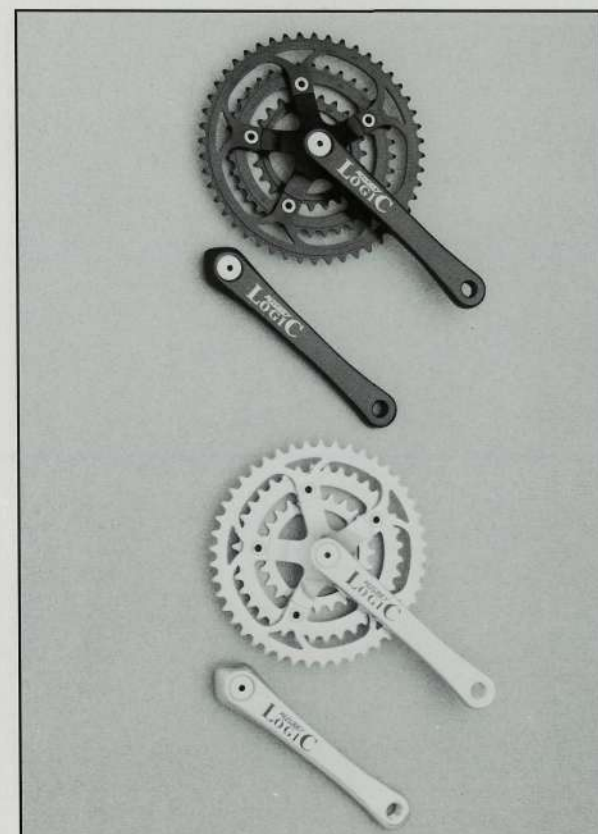
LOGIC CRANKSET

Ritchey brings Logic to one of the most important parts of the bike: the crankset. The Logic Crankset offers light weight, excellent power efficiency, and an ultra-low "Q-factor!"

- MATERIALS ♦ forged duraluminum
- FINISH ♦ hand polished-silver, black anodized
- LENGTHS ♦ 170mm, 172.5mm, 175mm, 177.5mm, 180mm
- Q-FACTOR ♦ 151mm
- INNER RING ♦ 74mm
- OUTER RINGS ♦ 110mm
- CHAINWHEELS ♦ 24/36/46t, 26/36/48t
- WEIGHT ♦ 650 grams

LOGIC TANDEM CRANKSET

- MATERIALS ♦ forged duraluminum
- FINISH ♦ hand polished silver anodized
- LENGTHS ♦ 170mm, 175mm
- Q-FACTOR ♦ 151mm
- INNER RING ♦ 74mm
- OUTER RINGS ♦ 110mm
- CHAINWHEELS ♦ 26/38/54t, 38/38/drive
- WEIGHT ♦ 1390 grams



HEADSETS & BOTTOM BRACKETS

Upper bearings of headsets don't wear out, but lower bearings do. That's because nearly all impact forces work against the lower bearings. The upper bearings work mainly as a keeper. That's why Tom Ritchey designed the Logic Headsets. Oversized 3/16" bearings on the bottom increase the strength by substantially increasing the amount of load bearing surface area. To balance the smaller load requirements on the top, Logic uses 1/8" bearings which also reduce needless weight. The result is a headset that has the strength of an oversize headset while actually reducing the weight of a standard size headset. Another example of Ritchey winning by design.

LOGIC COMP HEADSET

You can't find a stronger, lighter headset! That's why so many top pros choose the Logic Comp headset for top performance on the road and off.

- STACK HEIGHT ♦ 33mm
- CONSTRUCTION ♦ 1/8" top bearings, 3/16" lower bearings, chromoly bearing steel, precision polished races
- LOCKNUT ♦ duraluminum
- SIZING ♦ 1" — 24 tpi, Eng (30.2, 26.4), JIS (30.0, 27.0)
- COLOR ♦ black cp
- WEIGHT ♦ 110 grams



LOGIC HEADSET

The Logic Headset has the same world championship winning design as the Logic Comp at a more affordable price.

- STACK HEIGHT ♦ 33mm
- CONSTRUCTION ♦ 1/8" top bearings, 3/16" lower bearings, high quality bearing steel races
- LOCKNUT ♦ steel
- SIZING ♦ 1", 1-1/8" (OS), 1-1/4" (OS)
- COLOR ♦ satin cp
- WEIGHT ♦ 130 grams (standard 1"), 140 grams (1-1/8" OS), 145 grams (1-1/4")



Current fads to widen bottom brackets aren't necessary with Ritchey's new Logic Bottom Brackets. The Logic BB fits a standard 68mm frame shell, while moving the cup-bearing position out to 78mm. This gives you the axle/bearing strength of a wider or oversize bottom bracket without needless extra weight and availability hassles. Through careful design and the use of the highest quality chromoly and ni-chromium materials, Ritchey has developed the lightest and toughest bottom brackets available!



LOGIC PRO

The Logic Pro is a durable, competition-worthy bottom bracket. It's strong, light, and provides superb pedaling performance!

- CUPS ♦ sealed crmo steel, precision ground bearing surfaces
- SPINDLE ♦ hollow nickel-chromium
- THREAD ♦ English 1.37x24
- SIZE ♦ 68x120mm (centered)
- WEIGHT ♦ 285 grams



LOGIC PRO "WCS"

Same construction as the Logic Pro, but with an alloy lock ring and titanium fixing bolts for an ultimately light 265 grams.

- CUPS ♦ sealed crmo steel, precision ground bearing surfaces
- SPINDLE ♦ hollow nickel-chromium
- THREAD ♦ English 1.37x24
- SIZE ♦ 68x120mm (centered)
- WEIGHT ♦ 265 grams

LOGIC COMP

The same great Logic features with more affordable construction.

- CUPS ♦ sealed, bearing steel
- SPINDLE ♦ hollow crmo
- THREAD ♦ English 1.37x24
- SIZE ♦ 68x120mm (centered)
- WEIGHT ♦ 290 grams

LOGIC FORKS

Have you ever seen a fork bent sideways? Tom Ritchey hasn't. Seeing another opportunity for design improvement, Tom used his proven philosophy of strategic strength—placing and fat trimming to make the Logic Fork. The Logic Fork uses the world's first Force Directional butted steerer — thicker on the front and back, and thinner on the sides. It's stronger than conventional steerers where it needs to be, but overall it's lighter. Then Tom designed big 27mm triple butted fork blades, which make the Logic Fork Track like no other lightweight fork in the world. In fact, the Logic fork carried a Ritchey rider to victory in the 1989 NORBA World Championships. In 1990, half the pro/elite cross-country medals at the World Championships were won with Ritchey Logic Forks. With Logic you get proven performance and proven durability! New for '92 is the "Prestige" Logic Fork.



- MATERIAL ♦ 4130 chromoly
- STEERER ♦ force directionally butted
- FORK BLADES ♦ Logic designed 27mm round triple butted, large (600 R) radius curve
- OFFSET ♦ 1.8"
- SIZING ♦ 1", 1-1/8" (OS)
- FINISHES ♦ chrome, black chrome, raw
- THREAD ♦ 1"-1x24 tpi, OS 1-1/8x26 tpi
- LENGTH ♦ 40mm thread with 25mm slotting
- WEIGHT ♦ 700 grams (127mm steerer)

STEERER LENGTH	HEAD TUBE LENGTH	APPROX. WEIGHT (1")
127mm	75-90mm	700 grams
140mm	85-100mm	715 grams
165mm	100-130mm	730 grams
190mm	135-155mm	745 grams
215mm	155-180mm	760 grams
240mm	180-205mm	775 grams

Ritchey Team rider Thomas Frischknecht jubilant after his 1990 New England NORBA #4 victory



TUBING & DROPOUTS

Frame tubes rarely fail in the middle. They usually fail at the ends near the welded joints. This was the original motivation behind Tom Ritchey's Logic Frame Tubing. Logic tubing is differentially double and triple butted — it thickens at the ends with a shorter and stronger butting. This design lets the tube withstand the concentrated heat of TIG welding and the rigors of front-end abuse. This construction also allows a much longer "thin" area, reducing weight significantly. These Ritchey designed, Tange manufactured tubes allow the building of the lightest chromoly frames in the world (3.8 lbs., 19" size), frames that are also strong enough to carry pro riders to three of the top six pro/elite medals at the 1990 World Championships. This year Ritchey introduces a full range of new Logic tubing, including mountain, road, and hybrid/cross tube sets.

LOGIC TUBESETS

Tom Ritchey *steels* the world! Ritchey-designed Logic tubing has proven to be the best performing steel tubing in the world, with the results to prove it: 1989 NORBA World Champion (men's pro/elite cross country), 1990 Hillclimb Worlds gold medal (men's pro/elite), 1990 Worlds Cross-Country silver and bronze medals (men's pro/elite), two 1990 Worlds Cross-Country bronze medals (men's and women's pro/elite), and a 1990 Worlds Road silver medal (women's).

MOUNTAIN

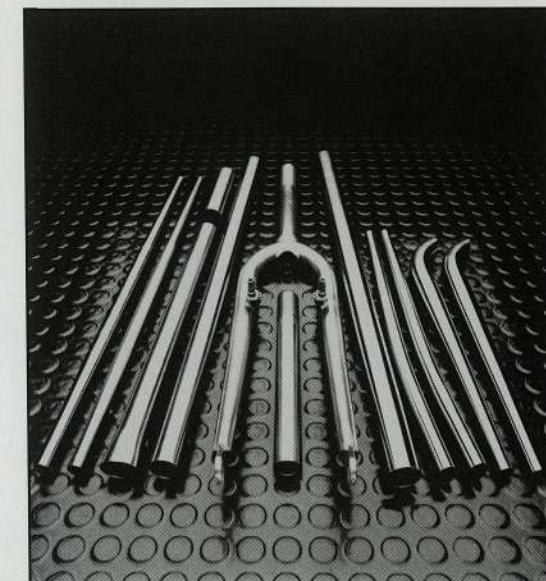
- ♦ LOGIC PRESTIGE PRO "WCS"
(Intended use: pro competition, project bikes)
- ♦ LOGIC PRESTIGE COMP
(Intended use: competition)
- ♦ LOGIC EXPERT — *seamless crmo*
(Intended use: competition, performance riding)
- ♦ LOGIC SPORT — *seamed crmo*
(Intended use: performance, sport riding)

CROSS

- ♦ LOGIC CROSS — *crmo*
(Intended use: hybrid, cross, and fitness bikes)

ROAD

- ♦ LOGIC ROAD PRESTIGE
(Intended use: road racing, time trials, triathlons)



LOGIC DROPOUTS

Logic features finally come to dropouts. To match his tube sets, Tom Ritchey designed a light-weight, high performance set of dropouts with these features:

REAR VERTICAL DROPOUTS

- ♦ cold forged for strength and durability
- ♦ designed *over axle center* derailleur position gives optimal chain wrap
- ♦ half moon CS and SS tange allows for off-center slotting for better chain/cog clearance with additional strength of brazed surface area
- ♦ 2-3mm shorter derailleur hanger, reducing mass and weight not needed on modern mountain and road bikes with slant parallelogram SIS index derailleurs
- ♦ SS/CS angles: 53° and 62° mountain design, 74° road bike design

FRONT DROPOUTS

- ♦ wide width designed for 16-19mm fork blade ends
- ♦ cold forged for strength and durability
- ♦ unique weight saving cut away also allows for improved heat up

