

THE ALUMINUM KLEIN: IT WILL CHANGE YOUR PRIORITIES.

FROM MIT. WITH LOVE.

Gary Klein began building aluminum frames while conducting a bicycle frame analysis as an undergraduate at MIT. However, his interest in bicycles was much more than academic. Klein was a registered amateur racer—and his objective was to win more races.

Using sophisticated construction techniques adapted from the aerospace industry, Klein began probing the potentials of both materials and design. And as months turned into years, his love for racing yielded to a passion for quality and innovation.

Today the Aluminum Klein stands, unchallenged, at the cutting edge. The large-diameter, aluminum tube frame delivers a stiffness to weight ratio previously thought impossible. And the ride and handling characteristics are redefining the outer limits of cycling performance and pleasure.

Bicycling Magazine: "How did Klein succeed where other users of aluminum and titanium failed? His engineering analysis was more thorough. And he experimented for years... Gary Klein builds a better bike. That's all there is to it. You get on it and it goes faster."



Photo: Michael Goryl

ride isn't what we expect from a super stiff frame. It's light and bouncy, almost springy. Jump on the pedals and Mountain Klein takes off like a road bike.

BUILT TO LAST A LIFETIME. LITERALLY.

An early Klein frame was subjected to endurance tests equivalent to 200,000 miles of high speed sprinting. Frame stiffness, both lateral and torsional, was identical before and after the test. In other words, it was as ready to race after the grueling test as it was on day one.

Those unprecedented durability standards are now reflected in every Klein made. And that promise is backed by a warranty that quite literally lasts your lifetime.

How is that possible? Because the remarkable Klein frame is one solid piece of high-strength, heat treated aluminum. And since it has no weak points

and no braze material or adhesives to fatigue, the Klein frame will never creep or come loose at the joints.

QUALITY YOU'LL ENJOY THE FIRST DAY AND EVERY DAY.

To be sure, all the advantages of a lightweight, rigid aluminum frame are of little consequence if the various members of the frame are not in proper alignment. For example, if the head tube is not aligned with the rest of the frame—an occurrence that's all too frequent with other aluminum or carbon fiber frames—the bicycle will not ride properly.

That's why Klein is not only engineered to last a million miles—it's engineered to make every mile a special pleasure. And you'll find that commitment to performance and meticulous craftsmanship reflected in every Klein ever made—from the most affordable to the incredible Merrick Klein™ museum bike.

Bicycling Magazine: "As it is, a strong rider can thrust the pedals, strap big gears up steep hills, and try like hell to make the bottom bracket flex. It won't... I could (at 150 pounds) stand on the dropouts without bending them... Klein. The ultimate status symbol, and not incidentally the world's best-engineered bike for the past eight years."

Mountain Bike Magazine: "Gary Klein's aluminum road bikes are justifiably famous and those qualities that made them so have been passed on to the Mountain Klein."

ENGINEERED LIKE NO OTHER FRAME IN THE WORLD.

Obviously, all bicycle frames look fundamentally the same. But what you can't see is the level of rider efficiency they deliver. To illustrate, imagine riding a bike with a frame made from stiff rubber. When you stand on the pedals to sprint, most of your energy will be lost in the multi-directional bending and twisting. Unfortunately, even though it's not as readily apparent, similar deflection occurs in traditional steel frames.

The Klein, on the other hand, virtually eliminates deflection. As a result, it transfers rider energy to forward motion more efficiently than any other bicycle made. And the resistance to deflection is combined with light weight and strength to create unsurpassed handling and performance.

Bicycling Magazine: "This bike is much stiffer than anything else I've ridden and this includes some heavy track bikes... the Klein is in its own class... very little energy is lost from pedal to wheel as the Team Super responded to even the slightest additional effort."

KLEIN TAKES ALUMINUM TO THE LIMIT.

Building frames from aluminum isn't difficult. Building them right is. The alignment of some roasted frames leaves a lot to be desired. But every Klein frame is dead true. And the result is an almost uncanny ability to hold a line and maintain traction—even in the most difficult situations. In short, the Klein goes through corners with the precision of a diamond cutter. And the Klein rider is properly balanced between the wheels, positioned for optimum performance.

Mountain Bike Magazine: "Throughout the race I had to laugh because I'll be flying along, scaring the heck out of myself, then I'll realize the bike was capable of going much faster than I was. I wasn't even close to pushing the bikes performance limit."

Bicycling Magazine: "I could sprint as hard as I could out of the saddle, and this frame would 'track' straight down the road... The Team Super sticks to its line on bumpy and torn-up roads."

THE RIDE COMFORT IS EXCEPTIONAL.

Klein clearly destroys the bicycle folklore about stiff frames riding poorly. Instead, Klein's light weight, coupled with the shock dampening benefits of aluminum and boron construction, allow the bicycle to follow the road surface easily—without pounding the rider. The reduced shock level also means less energy is wasted (bump energy comes out of forward momentum).

Bicycling Magazine: "Rigidity and ride comfort were fantastic, which is to be expected."

Mountain Bike Magazine: "Of the aluminum bikes I've ridden, the Klein is the smoothest. The oversized tubing provides plenty of stiffness required for efficient energy transfer, but the

have two choices. Either incur a substantial weight penalty—or the tube walls would be so thin that they would easily dent, fold and collapse. With large diameter aluminum, you can maintain a safe wall thickness and still have a frame at least a pound lighter than if it were lightweight steel. (For a technical report of aluminum design criteria, see your Klein dealer or write Klein Bicycle Corporation.)

Klein road bikes weigh in from less than 16 lbs. for the custom light—to 22 lbs. for the Performance™ Tour. The Mountain Klein™ ranges from less than 22½ lbs. for the Mountain Race—to 25½ lbs. for the Trail. Whatever the model, Kleins are typically lighter—up to several pounds lighter—than other comparably priced bikes. But again, while the lighter weight does make it easier to follow the terrain and maintain traction, the big payoff comes from the larger tubes.

A Klein, for example, has at least a 20% longer fatigue life than S1 heavy gauge Columbus. It's approximately twice as stiff. And it's 50% stronger. Add the superior corrosion resistance and shock damping ability of aluminum—and it's clearly the material of choice.

The advantages of Klein's lightweight frames for racing have long been heralded. But these same advantages pay big dividends when applied to other uses such as touring and off-road.

Mountain Bike Magazine: "Invariably, the first thing everyone did was pick up the bike, then, almost as a double take, pick it up again. The bike is light! Ours came out of the box weighing 25.5 pounds, including water bottle cages and bottles... Klein was the first (mountain) bike we've weighed that broke the 27 pound barrier."

Cyclist Magazine: "Klein has a penchant for lightweight equipment and bikes. Yet, unlike some builders, Klein carries this off without the usual loss in strength or rigidity. Kudos to Klein."

THE NEW CYCLE AESTHETICS.

The technical advantages of a Klein are astounding, but the aesthetics of this new age bicycle are just as

precision jigs. And remember, if you buy an aluminum frame that is out of alignment it can't be straightened by traditional methods like steel frames. The frame may be weakened, or even fat, if re-alignment is forced.

In short, an exotic frame simply must be built right to begin with. And while some frames may approach Klein in one characteristic, or another, when you consider the total spectrum of efficiency, handling, ride, weight, durability, alignment, quality and aesthetics—nothing else even comes close.



The Klein Limited Lifetime Warranty: Klein Bicycle Corporation will replace or repair at its option, any frame or frame, fork or other component made by Klein Bicycle Corporation that is defective in material or workmanship. Klein Bicycle Corporation is not responsible for consequential damage. This warranty is extended to the original customer only for his or her lifetime, or one million miles, whichever comes first. Warranty services are fast, friendly.

THE MODELS OF KLEIN.

In the road framesets there are three distinct price levels. However, in terms of quality, precision alignment and other structural features, they all represent unsurpassed Klein standards of excellence. The additional cost

Bottom Bracket deflections. Increased efficiency is apparent under all riding conditions, but it is most evident under conditions of high stress such as a steep hill climb or a hard sprint.

Every centimeter of your Klein is honed to translate your body's power into speed. The light chainstays, good bottom bracket clearance and exceptional high speed handling geometry. The excellent rider positioning over the cranks. The tight brake clearance for maximum braking efficiency. The wheel clearance designed for 700c or tubular wheels. And the light weight, shock absorption and high power efficiency of Klein Power Tubing. It all combines to create a sprint, hill climber, and all around racing and training bike to which nothing else compares. It's the ultimate frameset for those who want to go fast.

THE QUANTUM.
Quantum represents an incredible value in its category. Only a few years ago you would have paid four times the price to get Quantum's performance. From precise alignment to powertrain efficiency, to superb ride and handling, it incorporates all the characteristics that have made Klein famous.

However, while its performance has been compared to a Ferrari, its priced like a Volkswagen. The finished frames are stocked in the standard color in a wide variety of sizes for immediate delivery. Some options are available to provide a degree of tailoring to the

owner's needs and desires.

THE CRITERION.
Gary Klein personally supervises the custom-fitting and choice of components for every Criterion build. And, after a meticulous final inspection, his written approval accompanies each completed frame. Body measurements and riding style are analyzed and the Criterion is specially sized and fitted to the individual. The wide range of options can best be described as "What would you like to have?" Criterion is available in a very wide range of sizes, from 31 to 68cm, to fit



Fork tip preparation.

Head tube fitting.

Final finish of joint.

Maximized chainstay spacing.

Even Klein hardware is built here.

Multiple coats of ClearFrame™ enamel.

Quality work standard to the last detail.

The small, expensive Klein performance wheels and disc brake.

Part of the Klein clan.

worthy of praise. Everywhere, form follows function. For example, Klein's shaft and braze cables run inside the frame's down tube. That means they're less prone to accidental damage—and the bold, clean lines of the bike remain uncluttered.

The large diameter Power Tubing™ not only creates a stronger, more rigid frame, it cuts a dramatic visual silhouette. Guaranteed, it's a bit radical for the traditionally rounded—but those chained to the conventions of the past are also sentenced to their limitations.

Finally, every Klein is meticulously finished. Welds disappear into the bike's frame and the final finish is always deep and lustrous.

Bicycling Magazine: "After a few days around a Klein, steel frames look fragile and wimpy by comparison."
Bicycle Guide: "It not only performed well, it also looked as if a lifetime of effort went into the bike's construction and aesthetics."

A FEW WORDS ABOUT OUR COMPETITION: THERE IS NONE.

The advantages of a Klein over traditional Chromo Molybdenum steel frames are obvious by now. Several manufacturers have jumped into the production of aluminum or carbon fiber frames. However, to compare a Klein to any of them is truly to compare apples and oranges.

After extensive testing for stiffness and alignment (copies of the results are available through your dealer or by writing Klein Bicycle Corporation) none came close to Klein. In fact, test results showed Klein frames to be 20 to 80 times more accurate than other exotic frames—even those supposedly made in elaborate

of more expensive framesets simply reflects the time it takes for the custom built and fitted features, the extra detailing and the added Boron reinforcements that are available to those who demand the very ultimate.

FOR THOSE WHO WANT TO GO FAST: THE RACING FRAMESETS.

There is little that is more exciting than riding a quick, responsive, high-spirited bike. The Klein begs you to jump—or to bust a hill. In a tight racing park it feels secure and sure-footed. You know you're not working as hard as your competitors—and you can easily outmaneuver them. The bike is distinctly nimble, but not so light that road adhesion and high speed stability are reduced. It gives that "I'm faster than anything else on the road" feel. And although you might think that this level of machine should be reserved for those special races, the unmatched level of durability makes it a bike to use for everyday training—in all seasons.

The overall frame is at least 70% more rigid than the best steel frames, and far less energy is wasted in

virtually anyone. Custom designs are available for the few who may need it.

THE TEAM SUPER:

The Team Super represents the highest quality, custom-fitted frame Klein can produce. Any flaw in the finish is cause for rejection. Nothing is spared in the design and construction of this frame. The addition of Boron fiber composite improves its shock absorbing characteristics and power train rigidity. Used primarily in advanced aerospace applications, Boron fiber, per weight, is the strongest, stiffest structural material in the world. Since Boron composites absorb high frequency shock many times better than conventional materials, the Team Super has an exceptionally smooth ride.

FOR THOSE WHO WANT TO GO FAR: THE ALL-PURPOSE FRAMESETS.

The Mile-Eaters™ are designed for your consummate comfort and pleasure. They'll get you over a given course in the least possible time—with the minimum amount of effort and fatigue.

Klein's first model of this type was appropriately called the Stage. As the name implies, it was intended for long races over difficult terrain in which steering quickness is less critical than the cumulative effects of rider fatigue. The Stage embodies the efficient cycling positions used in racing, with the rigidity and lightweight construction Klein is famous for.

It performs very well in a criterium, but unlike typical racing frames provides a very high degree of comfort in longer events.

Bicycling Magazine: "The bike pedaled stiffer than still in the climbs and sprints but not at all harsh riding."

Longer chainstays provide more equal weight distribution between wheels than typical racing frames. This, in turn, makes the high

speed handling slightly more balanced. The rear wheel sticks better in high speed cornering than a bike with more weight on the rear wheel. This allows the rider to corner in a two wheel drift—much faster and with better control than if the rear wheel tended to slip first.

Because of the longer wheelbase, the bike has more stability than a normal racing bike. Even on loose dirt and gravel it handles comfortably. And on rough roads, the special geometry keeps the tires in contact with the surface, improving traction and overall efficiency.

Best of all, this geometry is not only superb for long distance racing, it's equally suited for touring. Especially fast touring. The rigidity of the Klein frame allows it to handle loads without the sway and wobble that many touring bikes exhibit. Yet the comfort of the Klein is far superior.

Bicycling Magazine: "Rigidity and ride comfort were fantastic, which is to be expected." "Can one tube be the ultimate, perfect tube for both stage races and loaded touring?" Yes, Gary Klein builds it. "The Stage I ride uses truly great for serious racing and for serious touring."

THE PERFORMANCE.
The Performance delivers Klein's exceptional ride, handling, power train efficiency and frame alignment—at an equally exceptional price. It's an all-purpose bike offering unsurpassed value. Finished frames are stocked in a wide range of sizes in the standard colors for immediate delivery. Some options are available to provide a degree of tailoring to the owner's needs and desires.

THE ADVANTAGE.
Gary Klein personally reviews the fitting and choice of components for the Advantage—and his final inspection approval accompanies each custom-fitted frame. The Advantage is specially sized and fitted to the body measurements and riding style of the individual rider. It's available in a wide variety of sizes, from 46 to 70cm, to fit virtually anyone. Custom designs are available for the few who may need it. Almost any option a cyclist might want is available.

THE STAGE.
The Stage represents the ultimate in comfort and per-

formance. It's the frame for individuals who demand the very best the world has to offer, not only in ride and handling, but in aesthetics as well. Boron fiber reinforcements are used to further enhance the properties of the frame. Boron fiber, per weight, is the strongest, stiffest structural material in the world. Since boron composites absorb high frequency shock many times better than conventional material, the Stage has the smoothest ride obtainable.

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of-the-art road frames and applied it to the needs of the off-road cyclist. The result is an off-road wonder bike, the ultimate all-terrain bicycle.

The geometry of the frame is designed to enhance high speed traction and control. It climbs and descends better than bikes designed specifically for one or the other. A sloping top tube allows plenty of clearance for the rider in interesting situations.

Tight chainstays are achieved with high strength and rigidity by using a beefy square section of tubing. Where other builders use a chainstay bridge, Klein uses a hollow gusset plate that blends into the upper and lower surfaces of the chainstays. It increases strength and provides lower crevices for the collection of dirt.

The Power Cam brake is mounted underneath the gusset. This configuration keeps dirt from the rear wheel off the brake mechanism—and channels the brake forces through the ultra strong chainstays.

For all its off-road splendor, not everyone who buys a mountain bike spends all their time dancing over the continental divide. Klein has taken this into consideration and for those

whose most frequent obstacles will be city curbs and pot holes, the Mountain Klein provides a wonderful sense of security and confidence. On paved roadways all you need do is jump on the pedals and the Mountain Klein takes to the street like an urban guerrilla.

Mountain Bike Magazine: "It climbs like a Duhl Sheep with hardly ever a loss of traction even when standing... the bike eats up out-of-the-saddle climbing... The Mountain Klein continues to amaze me after a month of riding it steadily. I find myself riding through sections that previously always forced me off the bike... The bike has expanded my cycling limits and there's not much more that can be asked of a bike than that... For less than a thousand bucks you can own a 25 pound, totally tricked out, aluminum racing bike!"

The off-road tests performed by magazines have presumed that this is a pure competition machine. The Mountain Klein is also the finest go-anywhere touring bike you can find. The frame comes standard with rack and fender mounts and there are optional custom front rack mounts available as well.

HOW TO ORDER A KLEIN.

Every Klein is available as a frameset or as a complete bicycle with a full set of components. Several component packages are offered for each frameset. If you'd rather choose your own components individually, the Klein framesets are just the thing. In either case, you'll be riding the best frame in the world.

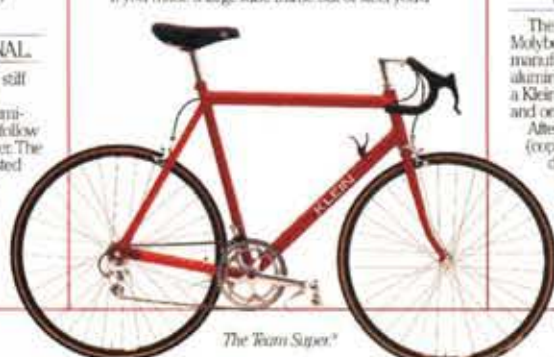
For those wishing to order a complete bicycle, the order form indicates the component packages available on each model as well as basic options, color choices and prices. A word about component choices.

Even the best frame in the world needs well-matched components to achieve superior performance. That's why Klein has assembled selections from a wide array of quality suppliers to create some of the best component combinations the world has to offer. After all, why make the best frame and then burden it with mediocre components?

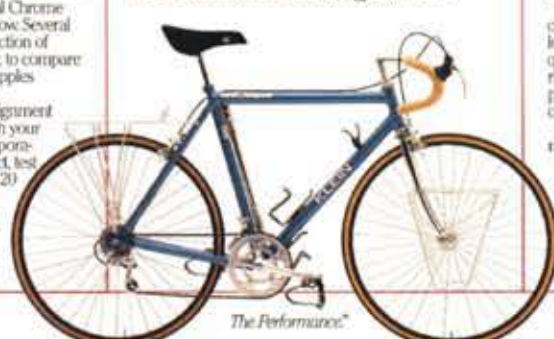
Each component package is designed to work in perfect unison and is particularly well-matched to the riding characteristics and intended uses of the frame for which it is recommended.

Component choices are always subject to change because of availability, technical advances or additional information indicating that something else may last longer or function better.

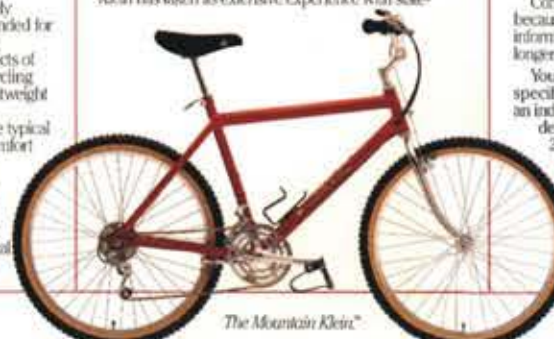
Your comprehensive Klein ordering form includes specifications, component combinations, prices and an individual fitting profile. See your nearest Klein dealer—or contact Klein Bicycle Corporation, 207 South Prairie Road, Chehalis, WA 98532; (206) 262-3305.



The Team Super™



The Performance™



The Mountain Klein™