

Light Years
Ahead.



The Way It Works Is Simply Brilliant.

Titanium. It's hard to get, harder to work with and it costs a fortune. But nothing else comes close to its performance.

Titanium weighs in at just 60% of steel. Yet its strength to weight ratio is significantly higher than steel or aluminum.



It also never rusts or corrodes.

Originally developed for use in space, engineers soon discovered that titanium was so light, so strong and so corrosion resistant, it became the material of choice for aircraft hydraulic lines and piping in corrosive chemical plants.

It was so difficult and expensive to work with, however, that

other applications were impractical. But with the development of new titanium alloys came considerably improved properties and wider use.

These latest advances in the technology are commercially available only in the United States.

The 3-2.5 Advantage.

With the development of the Merlin 3-2.5 Titanium tubeset, Merlin established the standard

by which other bicycles frames are judged.

The aircraft certified high-strength alloy in a Merlin is 94.5% titanium, 3% aluminum and 2.5% vanadium.

Tig welded titanium construction forms a continuous titanium structure, for stronger and more consistent mechanical properties.

Titanium's unique flexibility makes tapering unnecessary, yet offers a smoother ride.

Lighter, easier to service, better sealed bottom bracket shell sets a new industry standard.

Seat binder machined from solid titanium bar, built to hold even after innumerable seat height changes.

No glue and no joints between dissimilar materials means no problems later on.



It offers a combination of strength, liveliness and flexibility that makes possible a ride that can be fine tuned to an unprecedented degree.

Details Are Our Strength.

Choose your Merlin titanium as if you were going to ride it for the rest of your life.

You probably will.

But it isn't just the metal that makes Merlin the best possible bike frame.

It's the craftsmanship and care that goes into every little piece of the Merlin.

For instance, we don't just buy parts to assemble onto your Merlin. We're one of the few frame manufacturers in the world to make our own brake bosses, shifter bosses, bottom brackets, dropouts and cable stops.

The only process we don't do in-house is the water-jet cutting on the titanium alloy dropouts.

We're strong on details like this because every aspect of a Merlin has been developed to work perfectly with every other part of the bicycle. Because less than maximum performance would be inappropriate. Which means you'll get the best ride possible.

Beat It.

You can beat your Merlin Titanium all you want. But the competition won't be able to.

Merlin frames combine the strength and durability of steel with the low weight of aluminum.



Seat tube inserts welded and precision reamed for effortless seat height adjustment and positive grip when tightened.

Untapered stays welded to quarter-inch plate dropout provide maximum structural integrity for seat and chain stays.

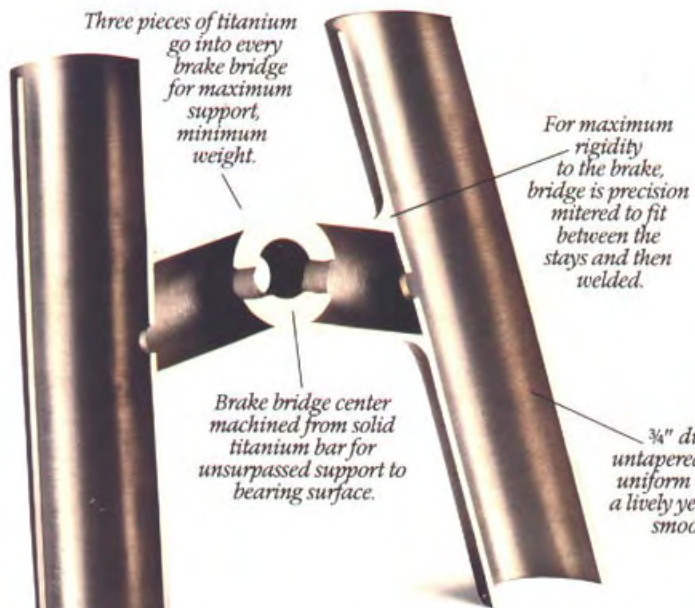
The titanium in our dropout is even tougher than our tubing, to stand up to many years of abuse.

The derailleur hanger on any bicycle is vulnerable. Merlin fabricates the strongest one you can buy.

Vertical drop for repeated perfect wheel alignment, strength and instant wheel changes.

Yet unlike steel and aluminum, they won't

corrode. And they also eliminate a host of problems that are inherent in aluminum and composite frames, such as poor fatigue resistance, low strength



Three pieces of titanium go into every brake bridge for maximum support, minimum weight.

For maximum rigidity to the brake, bridge is precision mitered to fit between the stays and then welded.

Brake bridge center machined from solid titanium bar for unsurpassed support to bearing surface.

$\frac{3}{4}$ " diameter untapered stays offer uniform rigidity for a lively yet uncannily smooth ride.

Though this may sound like just the ride you've been looking for, the only way to actually experience what we're describing is to take a ride on a Merlin. You'll see how all the details that go into one add up to a ride like none you've taken before.

Get Ready To Shine.

Get in touch with Merlin Metalworks for more information, or to find out where you can see for yourself the most advanced bicycle frame ever.

With its unbeatable durability, smooth ride and enduring good looks, you're likely to conclude that the Merlin Titanium has indeed been built for a lifetime.

Yours.

and delamination. Most important, the ride on a Merlin is uniquely satisfying.

Take it out on the roughest road you can find. You'll find it can stand up to the worst punishment you can dish out.

Though the frame is much tougher than steel, the ride is as forgiving as that of the lightest bicycles with frames made of aluminum or carbon fiber. Because it flexes, it absorbs the shocks so you don't have to.

This comfortable ride results from the metal's ability to flex over bumps. But its steel-like stiffness keeps the ride lively and responsive.



Maintenance-free double sealed bottom bracket bearing.

The strongest aluminum rivnuts hold a large water bottle even over brutal trails.

Solid titanium machined to create brake bosses, shifter bosses and cable stops.

Stainless steel button head cable guide bolt is impervious to rust.

Rust-free titanium top tube cable guide.



GEOMETRY BY *Jim Murray*



GEOMETRY BY *Tom Hallogg*

The Best & The Brightest.

When Merlin Metalworks decided to build the ultimate bicycle frame, they turned to some of the most knowledgeable people in the business.

Joe Murray, who's won more races than any competitor in the history of mountain biking, specified the geometry of the Merlin Titanium Mountain Bicycle. He also competed with it successfully for several seasons.

Tom Kellogg is one of the few frame builders who actually races. He specified the geometry for the Merlin Titanium Road Racing Bike. He knows firsthand what it takes to make a bicycle that doesn't compromise.

What does all this talent and experience add up to?

Performance that has become the ultimate frame of reference for judging all other bicycles.



Joe Murray, two-time NORBA champion.



Tom Kellogg has spent over a decade building frames for Olympic competitors and world champions.

**MERLIN**

285 Washington Street, Somerville, Massachusetts 02143 617-628-7855