

Fiorelli



*Signore Fiorelli still personally oversees production of all Fiorelli frames. Notice that the Milano San Remo pictured is individually hand brazed on a jig, just as all Fiorelli frames have been since the days of the great champion Fausto Coppi. This vast experience in building beautiful, fast frames prompted **Bicycling Magazine** to write "Built one at a time, with quality touches such as brake bridge lugs and fork tang reinforcements. The Milano San Remo is a jewel among the ranks of similar priced, mass-produced bikes."*



World Hour Record Man Ole Ritter tries a different style of transportation at the Fiorelli Factory. Fiorelli Bicycles have twice been ridden to new Hour Records, first by Fausto Coppi in 1942, and again by Ole Ritter in 1968.

Tips on Race Frame Shopping

If you're shopping for a racing frame, you're interested in finding the most efficient frame possible. All the power you put into the pedals should go to the rear wheel, and not be wasted in side to side flex. It isn't difficult to design a frame that will do this well, and many companies have done so, including Fiorelli.

The problem is that it's counter productive to ride a frame that's so stiff that it becomes abusive to the rider in long races. It takes a lot of energy to withstand the pounding of a rough road, and that energy should be saved for the pedals on the last big hill or the final sprint to the line. For example, formula car racing drivers (who frequently train by bicycle riding) are in excellent physical condition, and yet they're exhausted after a race. Since the cars are very lightweight and steer easily, the calories expended to control the vehicle are minimal, but the beating the drivers take from the extremely stiff suspension wears them out.

It's clear then that the object in racing bicycle frame design is to design a frame that is not just efficient, but also rideable. Add to this the further requirements that a proper racing frame must have precise, neutral handling and good straight line stability, and one is presented with a formidable engineering problem.

There are some new arrivals on the bicycle scene that would have you believe that their computer's program, engineer's calculations, and space age materials can beat these problems overnight with technology. The validity of this argument is demonstrated by the Chernoble nuclear plant.

The truth is that in frame design there is no substitute for years of hard work by engineers, craftsmen, and top professional riders. Fiorelli Bicycles have a rich background of 50 years of refinement in their design.

All Fiorelli frames are precisely mitered and jig brazed, one at a time, by one man from start to finish. The average Fiorelli builder has 18 years of framebuilding experience as evidenced by their beautiful intricate work on the cut-out lugs. This attention to mitering and lug work detail ensures that the frame will have a long competition life.

The purpose of cut-outs in the lugs of a frame is to provide a window for the builder to monitor the flow of the brazing throughout the joint. Several bicycle companies have chosen to fake the cut-outs in their lugs, and in some instances, to fake the lugs and do no mitering whatsoever. Imitation is the sincerest form of flattery, but from the consumer's point of view, possibly not appreciated.

Besides the careful workmanship, Fiorelli frames are beautifully engineered for racing purposes.

First, the side to side flex of the frame is minimized by the use of oversized, oval section chainstays, which are the primary power transmitter from the crankset to the rear wheel. These chainstays are made even more efficient by keeping them as short as possible.

Seatstays are in a completely different situation. The seatstays are load bearing on touring bikes, and therefore necessarily large, but on racers exist mainly to keep the rear wheel from collapsing into the seat. Consequently, the up and down road shock which is so tiring in long competition can be minimized by using light, flexible seatstays as developed by Fiorelli engineers on the rough roads of Europe. Other companies have tried to accommodate this problem of road shock by simply laying back the seat tube, from the Fiorelli's 75° to a more relaxed 73° or 74°. The problem here is that a softer seat angle not only doesn't do much for ride stiffness, but it also requires longer chainstays, which again is terrible for a racing frame.

Other Fiorelli design advantages include fork stiffeners for better stability in sprints and descents, and a low bottom bracket which provides a reduced frontal area for better aerodynamics in time trialing.

Fiorelli bicycles are literally world famous for their performance, and this reputation has been hard earned in the most difficult theatres of professional competition over the last fifty years. The three Fiorelli brothers are engineers and craftsmen, and together with the great Italian rider Fausto Coppi, they designed and refined the Fiorelli frame into the finest high performance bicycle currently available. But after all, when you're planning to make the considerable investment required for a professional quality bicycle, you want the manufacturer to take every possible precaution to insure that the bicycle genuinely will perform to world class standards.