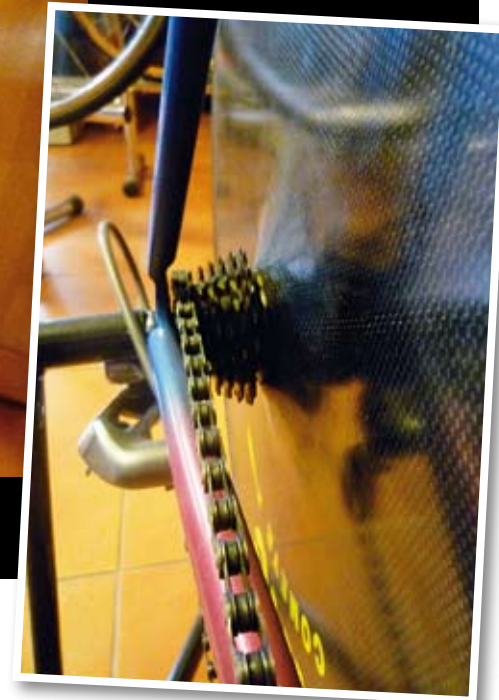


Fitted to the Mavic Comete disc — which has a structural foam core and is flat in profile, unlike the latest hollow, lenticular version — is a 12-up seven-speed Dura-Ace cassette, which is perfect for time trialling.

The bladed Columbus 650c fork is as aerodynamic and lightweight as it was possible to get using steel. The rest of the front end comprises a Mavic 88 24-hole radially spoked wheel with Vittoria Juniores tub and Dura-Ace caliper.



BIKES THAT CHANGED HISTORY part V

cycling WEEKLY

INSIDE TECH

Phil Anderson's 1988 Zullo lo-pro

THE FIRST NON-EUROPEAN to wear the yellow jersey in the Tour de France gave his time trial bike back to the man who built it when he changed teams, and Tiziano Zullo has displayed in his shop in Castelnuovo del Garda, Italy, ever since

PHIL Anderson's history-changing moment was when the Aussie became the first non-European to wear the yellow jersey in the Tour de France. In 1981 the 23 year old famously upset the establishment and incurred the wrath of Bernard Hinault on stage six from St Gaudens to Pla d'Adet in the Pyrenees when he sat on his wheel, refused to be dropped and then offered Hinault a drink from his bidon — which 'the Badger' swiped out of Anderson's hand with a snarl. "I thought I was being sportsmanlike," a bemused Anderson said later. Anderson crossed the line third, just behind Hinault, with Lucien

Van Impe 27 seconds ahead of the pair, but it was enough to put him in yellow and put Australia on the map as a road cycling nation to be reckoned with. In his 15-year career as a Continental pro, which ran from 1980 to 1994, Anderson notched up stage race overall wins including the Dauphiné Libéré, Tour de Suisse, Tour of the Med, and he won stages of the Tour de France and Giro d'Italia. This bike is a piece of memorabilia from Anderson's two-year stint with the Dutch TVM team, when Italian company Zullo supplied the frames. Steel was still the only serious choice for most frame-builders, with carbon and aluminium

still unproven at the top level. Tiziano Zullo had been building with steel tubing made by fellow Italians Columbus since the early Seventies. Learning his trade in the tradition of the artisan builders east of Milan, by the time Zullo sealed the deal with TVM in 1985, his factory was producing 4,000 frames a year and 10 people were working there. Zullo, based on the western end of Lake Garda, was virtually next-door neighbours with Columbus at Settala, just outside Milan, so whoever rode Zullo frames could be certain they

were benefiting from the latest in tubing technology — and this was certainly the case with Anderson's Zullo lo-pro. **To the Max** Columbus Max tubing had just been introduced, and was the first tubeset to move away from the tradition of conventional diameters. Max tubes are not round in profile, but elliptical, with the major axes opposed in the direction of the stresses for increased stiffness. In other words, at one end the tube looks fat from above and thin from the side; at the other end it looks thin from above and fat from the side. Zullo fillet-brazed rather than lugged the frame's junctures. By now traditional lugs were becoming unfashionable as the best frame-builders laboured over beautiful, smooth joints where one tube looked as though it flowed into the next. A fillet-brazed frame also saved the weight of a lugset, and although

aerodynamics were improving in the 1980s, weight was still the primary consideration. Even Zullo had his work cut out with Columbus Max tubing — what happens when you have to braze an elliptical profiled tube to another one which has its elliptical profile 90 degrees in the other direction? The answer is that it takes more brass and more time, but it is possible and it adds to the artistry in the frame. However, Zullo, who is still building steel frames but on a much smaller scale and mostly to order, says he won't fillet braze any more. Anderson's lo-pro, built for a 650c front wheel, has the bladed steel Columbus fork to match, with an aerodynamic crown. Zullo's paintwork was, and still is, all done in-house and the metallic purple/blue fade is a



The Columbus Max tubes flatten as they approach the bottom bracket, ending in a smooth and attractive join at the shell. Anderson used 175mm Dura-Ace 7400 cranks, fitted to the square-taper bottom bracket of the day. From this angle the close-ratio chainrings are also visible.

"Columbus Max was the first tubeset to move away from conventional diameters"

Seatstays are set behind the seat tube to keep them out of the wind. Internal brake cable routing also improves aerodynamics.



Anderson focuses before a chrono

typical scheme of the era, in TVM colours. Bearing the scars of its time on a team car roof, the paint has rubbed off down to the steel on either side of the down tube.

Anderson used the bike for two seasons, before joining Motorola in 1991, where he found himself on the same team as a young Lance Armstrong. His last ride on his Zullo lo-pro, and for TVM, was in 1990 at the last ever edition of the Trofeo Baracchi, the classic two-up time trial, where he was 10th with Jörg Müller.

Bike keepsake

The course of the Trofeo Baracchi ran close to the Zullo factory, and of course Tiziano Zullo and his wife Elena were there to watch. Afterwards, Elena remembers, Anderson handed them his bike, and asked them to keep it to remember him. "He was a gentleman, a very nice person," says Elena.

Zullo supplied TVM's bikes for another two seasons, but after that the seven-year partnership finished when the big money arrived. Dutch manufacturer Gazelle paid three million guilders (about £1 million), according to Elena Zullo, to be TVM's bike sponsor. Even in the good times, the Zullos couldn't compete with that.

Zullo's fortunes took another turn for the worse with the

advent of aluminium welded frames, and then carbon-fibre. The demand for high-end handmade steel racing bicycles all but disappeared as cycling bought into mass-produced carbon frames from the Far East. The company moved to smaller premises with a bike shop attached, and Zullo now produces 180 frames a year,

most of which, ironically, go to the Far East, bought by steel bike fans who are looking for a genuine Italian handmade frame built by one of the masters. But Zullo, now 58, is happy to supply a smaller quantity of custom frames to a new breed of discerning customer, and with the resurgence of interest in steel, now has a growing waiting list.

NEW STATUS FOR ITALIAN FRAME-BUILDER

Zullo in the 21st century

TIZIANO Zullo is one of the relatively few Italian frame-builders who haven't sold out and gone carbon. Now he is thankful that he stuck to his guns, as he is enjoying a new-found status as one of the originals, with an order book that reflects it. The revival of interest in steel has meant that his little factory in Castelnuovo, on the banks of Lake Garda, is a very busy place indeed.

There's hardly time to drink espresso, which every Italian business runs on, but Zullo did manage to take a week out to display his work at the North American Handmade Bicycle Show in February, a custom frame-builders' convention that is more art exhibition than bike show, and

will be at the European version in May. In his factory shop he has examples of what he's making at the moment.

Highlights include frame number one of 20 new Columbus Max tubesets built with the last ever Max lugs produced. That's it, finito. All 20 have been snapped up and most are Japan bound. There's also the Inqubo race bike, painted deep brown with coffee bean graphics and made from Dedacciai 16.5 steel; the Verano made from the latest Columbus stainless steel tubing, XCr; and the Vintage, made from lugged Columbus tubing. Mosquito Bikes (www.mosquito-bikes.co.uk) is to bring Zullos into the UK later this year — watch this space for more news.