

20 Years of innovation



07 LeMond Racing Cycles









# TRIONAPHE

### - 2006 -THE LEGEND CONTINUES

Lemond

The 20th anniversary of Greg's first Tour de France win is the perfect time to introduce a groundbreaking new frame platform from LeNond Racing Cycles.



# All New! THE TRIOMPHE SERIES



One of the lightest carbon road frames on the market

Designed with the revolutionary LeMond Min/Max Theory

Size specific tube diameters and geometry

Proven LeMond Geometry and ride feel

Lemond

2007

### THE TRIOMPHE SERIES

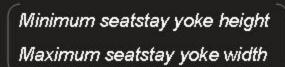
# Designed utilizing the LeMond Min/Max Theory (for every Min there is a Max)

Minimum Weight:: Maximum Performance

Minimum Energy Wasted :: Maximum Comfort

Minimum Horizontal Deflection :: Maximum Vertical Compliance

Minimum Compromise :: Maximum Ride Quality



Minimum frame deflection

Maximum handling precision

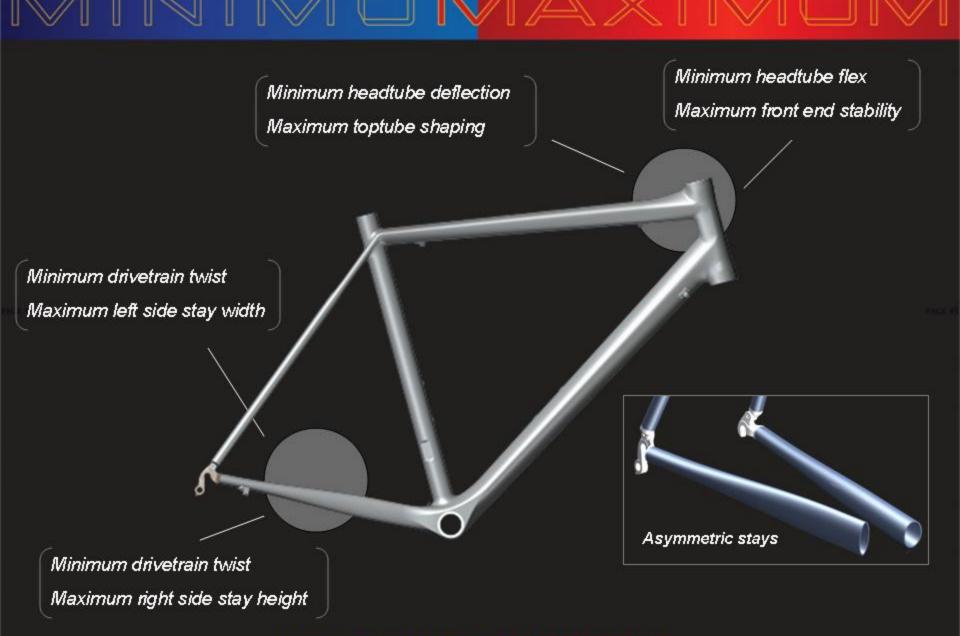


Minimum excess material & weight

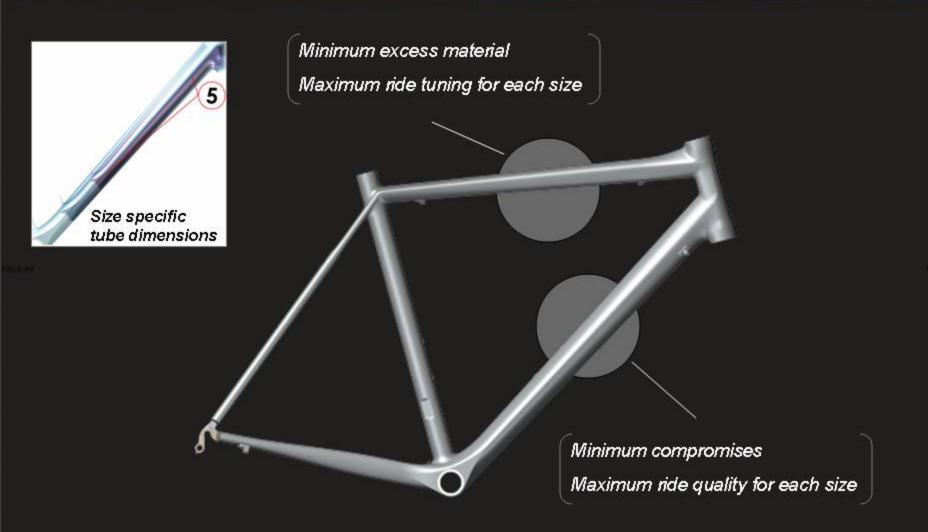
Maximum pedaling efficiency

Minimum chainstay yoke height Maximum chainstay yoke width

MIN WEIGHT = MAX DUTPUT



MIN WEIGHT = MAX DUTPUT



MIN WEIGHT = MAX DUTPUT

#### The Story ::

LeMond Racing Cycles has built its reputation on making elegant road bikes with a keen attention to ride quality. This is not lost for 2007. What is lost with the new Triomphe Series is a whole lot of weight. The new LeMond is one of the lightest production road frames in the world.

To remove this much weight we needed to draw upon the most advanced analytical tools in the cycling industry. In our analysis we determined the minimum surface area required to achieve our desired stiffness goals. This minimalist surface area leads to the lightest possible structure. The result is an exceptionally light bike that has a premium ride quality, and can carry a lifetime warranty.

The Triomphe Series achieves this combination of ride quality and durability by applying our brand new Min/Max philosophy of design. This philosophy maximizes the use of tube shaping and minimizes material usage. It's what gives these bikes their unique look. It's a design of dramatic transitions, each with a defined purpose. At LeMond, function drives form.



The Triomphe Series features the most dramatic axial top tube transition in the cycling world. The tube starts as oversized and vertical at the headtube to resist frontal forces. It transitions to horizontal, almost flat, and exceptionally wide at the seat tube. This design feature resists twisting along the entire front triangle. The top tube flows seamlessly into the seat stays to the dropouts. It's a very similar flow for the down tube into the chainstays.



Both the top and down tubes, as they intersect the seat tube have maximum width in the horizontal plane, and minimum vertical height. The maximum width uses triangulation, the strongest geometric shape, to keep the head tube in the same plane as the seat tube. This results in precise and predictable handling. It also keeps the rear of the bike exceptionally stiff, transferring all the pedal input into forward motion.

The minimum vertical height of the top and down tubes at the seat tube intersection has two major benefits. First, it offers a measure of compliance, allowing some deflection of larger road bumps. Second, it is the most conservative and spare use of carbon material for less weight



The Min/Max philosophy is also applied to the rear triangle. The chainstays are asymmetric because the drive and non-drive side stays are tasked with different functions when the bicycle is under pedaling load. Each is engineered to handle different forces and clearances. Chain force wants to twist the rear wheel in the dropouts.

To prevent this twist the non-drive stays are maximized/oversized horizontally to resist the lateral movement of the twist. The driveside stays, in line with the drivetrain, are vertically oversized to resist drivetrain pull (the vertical movement of the twist). The driveside also needs to provide proper clearances and chainline for flawless shifting.



#### Size Specific ::

The Triomphe carbon fiber tubing diameters and shapes are size specific, which is unique for a production carbon bike. That means that each frame size is engineered to have a similar ride quality, frames at the ends of the size range don't suffer performance drawbacks.

Also the bottom bracket drop is size specific, meaning that we get each size optimum cornering ability as crank lengths change across sizes. If someone is pedaling through a corner they all have the same cornering angle.

Each Triomphe size also gets a dedicated chainstay length.



- •Min/Max construction philosophy for tuned ride performance
- •Tubing diameter and shape optimized to minimize weight and maximize rider power output
- •Internally molded headtube for precision internal bearing fit, high strength, and light weight
- Headtube junctions shaped for maximum frontal strength
- Exclusive intermediate biased carbon fibers for a stronger structure with less material
- Asymmetric chainstays counteract chain torque twist

#### Size Specific ::

- Size specific front triangle tubing means ideal ride quality for all sizes
- •Size specific bottom bracket height for same cornering characteristics on all sizes
- •Size specific chainstay length shortest possible for best power transfer on all sizes
- Proven LeMond Geometry is confidence inspiring and predictable

- •950 gram Triomphe frame (painted)
- •850 gram Triomphe Ultimate frame (painted)
- Limited Lifetime Warranty on all models



The Triomphe platform has been designed so that each and every component of the frame is optimized to deliver premium ride quality and strength at a minimum weight.

#### Early 2007 Release Details ::

- •7 models (5 men's & 2 women's)
- •Triomphe Summer 2006
  - Versailles June
  - Versailles Women's July
  - •Buenos Aires July
  - ·Buenos Aires Women's August
  - Zurich August
  - Victoire September
- Triomphe Ultimate Winter 2006
  - Tete de Course
- Ready for order June 1<sup>st</sup>