

## INTO THE RIDE #39

**Big Wheel Keep on Rollin'**

by Randy Schlitter



Dual big wheels start looking normal after awhile, and for good reason.

In our factory is a hallway connecting the major fabrication shops. Visitors are escorted into this hallway at the start of a tour and greeted by a row of 20 to 30 recumbent and crank forward bikes. The lineup pretty well represents the RANS line of bikes, and they are for demo, testing, and quality assurance. Last year our first LWB big wheel bike was rolled into this lineup, and at first we all thought it to be the odd duck. But perceptions change. All the worry that was circling in our minds about how such a bike would have been received was wiped away by the still present high demand. The Stratus XP was a good move, not only for RANS but the entire recumbent industry. Why?

It comes down to making a better bicycle, and when something is created that has a measurable difference, a difference you can even feel when rolling the bike down the hall, you know you are onto a new plateau. It is a great place to be, and I am sure we will not be alone, as others will want to emulate the success of the Stratus XP. And the Formula 26 now offers a choice in dual big wheel format, that for some may be even better suited. The bottom line is big wheel bikes are here to stay, lets take a close look at why.

**MONSTER BENTS and WEIGHT OVER WHEELBASE**

I think it was either Bob Bryant or Bryan Ball (say that three times fast), both editors of fine reading about bents, coined this phrase. At first we took exception, then my ad man suggested using it in ads. There is nothing like spotlighting to help change perceptions. The numbers tell the story, so are they that monster, being 3 to 4 inches greater in overall length? And how does it effect weight distribution? Many have voiced concern about weight over wheelbase, sighting it as the reason they would never buy such a machine. The 3 to 4 inches, well if your living quarters or transport means are that tight, you probably need to go with a Crank Forward, or SWB.

But just how different is weight over wheelbase compared to, let's say, the bikes the design was derived from? Below is a table showing four bikes, two Stratus, and two V2's. It is interesting to note front wheel loadings changed 2 and 3% less load on the bigger wheel bikes. That was measured with the same rider with the seat adjusted at the same angle. 2 to 3%, now is that something you as a bent rider can discern, and is it enough to significantly change handling? Obviously we did not think so; otherwise we would not have offered the bikes. We did however strive to keep the weight distribution as close to their ancestors as possible, not wanting to stray too far from the "known". In our experience keeping the weight distribution within a 5% change, was under the average rider's feel. More experienced riders will claim a greater sensitivity, and I don't know whether to be

sorry or supportive about that. It could mean missing out on some fun riding, like a princess losing a good night's sleep over a pea.

Model	Frame Size	WT. on Fr. wheel	% WT. distribution	WT. on rear wheel	% WT. distribution	Total WT. Bike & Rider
Stratus	Std.	74lbs.	34.20%	139 lbs.	65.30%	213 lbs.
Stratus XP	Std.	68lbs.	32.20%	143 lbs.	67.80%	211 lbs.
V2	XL	82lbs.	38.30%	132 lbs.	61.70%	214 lbs.
V2 Dual 26	XL	76lbs.	35.60%	137lbs.	64.40%	213 lbs.

Even with the 2 to 3% change to a lighter loaded front wheel, the reports came back positive. The dual big wheel long wheelbase bike handled better, and most all agreed, went faster. The latter an expected response, the former, a hoped for, because in the end bike handling is not always a function of numbers and heady stuff engineers do, it is often about taking a risk to try something new, because the trade off to gain one thing is greater than the possible loss of the other trait. In time even that 2 to 3% may melt away, as clever designers will attempt to fraction up performance.

Riding a Stratus XP or Formula 26 is a noticeably different experience over the more common small wheel, big wheel combo, which by the way, we may never see go completely away (we are as afraid to stop making the Classis Stratus as Coke is to change their classic). I have a top-ten list of reasons for dual big wheel LWB bents.

1. Exhibits better cornering traction
2. Smooths out the road
3. Enhances handling due to 1 and 2
4. Same tires and tubes
5. Greater selection of tires and tubes
6. Wheel sets easier to match
7. And greater selection of wheels
8. Faster, no doubt about that
9. People identify with is as a more “adult” bike
10. Safer

The last one places us in a paradox, because if it is safer, why even bother building the other combination? The easy answer is like this; safer is also a perspective. Look at it like this; an SUV is safer than a sedan, a sedan is safer than a sports car, and a sports car is safer than a motorbike. All this is common perception. I am sure you can make arguments for each case to contradict this lineup, but you get the point. Notice also that typically sliding toward more risk is more fun, but lucky for Stratus XP and Formula owners, the fun quotient is as high if not higher in the dual big wheel world.

In Summary: The big wheels will keep on rolling percent this or that difference, top ten list or not, they are a good way to make bikes, and in the end keep you into the ride. Thanks for stopping by, and ride safe and stay into the ride!

*INTO THE RIDE*