Tire Surveys: Are they worth the time and effort?

Whenever I visit a commercial fleet, regardless of the fleet size, one of the first questions is “can you walk around the yard and see what you think about how my tires are performing?” Of course it is great to take the opportunity to scan your tires by doing a walk-around but it is better to do a serious tire survey on a regular basis.

A good tire survey includes measuring tread depths, looking for any signs of irregular tire wear, checking air pressures using calibrated pressure gauges, and recording any sidewall cuts/snags and punctures in the tread area. It is strongly recommended that you also include a scrap tire pile analysis in your tire survey. Why, because you can learn more from looking at tire removal reasons and remaining tread depth than you can from doing a walk-around survey on tires currently running. Tire surveys should be consistent and performed on a regular basis; once every quarter is a good rule of thumb. A good survey team would include associates from your tire maintenance department and also from your tire servicing dealer. Working closely with your “tire professional” will always be a benefit.

Tires perform quite differently depending on the vehicle make/model and service voca- tion so your database needs to include these data points along with specific wheel positions. Most fleets use a numbering system for wheel positions moving from left to right down the vehicle to make data entry simple. It is very typical to discover many correlations with wheel position and tire removal mileage/irregular wear, so lumping all the tire data into a single pot will not help you analyze survey results correctly.

Recording as much information regarding the tires as well as the specific vehicle is important. A simple excel spreadsheet will allow you to analyze the results and look for trends within your tire data. Your results may show that a specific tire performs particularly well on the steer position of your Kenworth tractor produced after 2008 but not nearly as good as they did on your older Kenworth’s. Or you may find that the tires on trailers with the 10’ spread axles are scrubbing the rubber so quickly that you should just go with the least expensive tire or retread to help reduce your tire budget. Identifying tire wear conditions directly related to vehicle alignment can solve a lot of tire irregular wear issues. For example toe-in and toe-out steer axle alignment conditions typically manifest themselves as fast shoulder wear on both outside tire shoulders or both inside shoulders or one outside and one inside steer tire.

But don’t forget that scrap tire pile analysis in your survey. The best scrap tire pile for analysis would have tires that have been removed from service because they have been worn down to the minimum tread depth (or pulled at your specified tread depth specification). Tires should have nice smooth wear. And of course, if you run retreads, 95% of the scrap tires should be retreads and not new tires. A good example of learning something from a scrap tire pile is when you find out that most of the retreads in the pile have most of their tread rubber remaining. This would indicate that you may be retreading either too many times and the casing is just not durable enough or it could be that there is an issue with the retread process.

Bottom line is that data analysis with regular comprehensive tire surveys is the key to success in reducing your tire expenses.

Q&A PSI ANSWERS YOUR QUESTIONS

Q. I heard that CSA 2010 is being replaced by a new program called just "CSA". What’s going on?
A. CSA 2010 is the new Comprehensive Safety Analysis program managed by the Federal Motor Carrier Safety Administration. It is currently being rolled out (slowly) and will be mandated in 2011. Since the new program actually goes into full effect in 2011, the new name is simply “CSA”.

On July 5, PSI began shipping MTIS™ with new green Thru-T’s and green striped delivery hoses to illustrate the true environmentally friendly benefits of the product.