

Tire Purger/Dryer

Tire Purger/Dryer Helps Pro Road Racers Control Setup Variables

In order for high-performance tires to work as designed, they must operate within a particular temperature range. This means anticipating pressure growth is essential to maintain a well-handling racecar from green to checkered flag. The Intercomp Tire Purging/Drying System provides a racer the ability to control tire pressure growth throughout an on-track session. Joe Kantarik, a veteran crew chief and team manager, tells how the Tire Purging/Drying System helped the Minnesota-based Banner Engineering Race team compete in professional sports car series, including Trans Am and Grand Am.

"You had to roll off the trailer with a setup that was in the ballpark. With limited track time at most races, there isn't time to build a competitive chassis setup from scratch. Intercomp's Tire Purging/ Drying System allowed the team and driver to understand if a particular adjustment improved performance, or not."

— Joe Kantarik, Crew Chief/Team Manager — Banner Racing

Water vapor trapped inside the tire is the primary cause of inconsistent tire pressure. As a tire carcass flexes and adheres to the racing surface it heats up, and the air inside begins to warm and expand. Nitrogen, oxygen, and water make up much of the air we breathe. Pressure instability occurs when water from the air inside the tire transitions from a liquid to gas, returning to a liquid once it cools. The pressure fluctuates because steam and water do not have the same volume.

This instability causes drastic changes in the handling characteristics of a racecar as the amount of grip rises and falls. The best way to solve this problem is to remove the air containing water vapor and replace it with pure nitrogen. In most cases, manufacturer technicians or a regional distributor will mount new tires at the track. These technicians will often use compressed nitrogen to bead new tires, but moisture can still get trapped inside during this process.

Kantarik said using the Intercomp Tire Purging/Drying System is the easiest way to remove moisture from a tire, pulling contaminated air out and replacing it with nitrogen. The system simply requires a source of compressed air or nitrogen, allowing the Banner team to mount the system where it was most beneficial in the already-packed race trailer. Kantarik said the robust and simple design of the system made it an ideal piece of equipment to use at the racetrack or the race shop.



Intercomp's Tire Drying/Purging System allows racers the ability to simultaneously remove water vapor-contaminated air from a set of tires, and replace it with pure nitrogen.



This robust piece of equipment needs only a source of compressed air or nitrogen to function, making it ideal for use at the racetrack or the shop.



Using this system, drivers and crew members can more quickly determine whether a chassis adjustment helps maximize grip by controlling an important variable.

