

TIRE MANAGEMENTPressure, Temperature & Wear

Tire Management Toolbox

Tire management can be complex, but no other component of a racecar has as big an impact on performance than its tires. On average, the contact patch of each tire is equal to the area of a credit card. The use of Intercomp measuring equipment can help maximize the relationship between contact patch and racing surface.

[Tire management] is very important, one of the most important parts to a good day at the track. You need a good air gauge, like Intercomp, but I also use a probe pyrometer to make sure the tires are performing at their best. I use my durometer to make sure I have the best tires on the car. - Scott Atkinson, No. 18A Hilmerson RV & Sports Center Modified

Air pressure is the primary setting affecting tire performance, meaning a reliable gauge is critical. Intercomp's Digital and Analog Air Pressure Gauges allow racers to easily read and adjust tire pressures. With an accuracy of 0.1%, Digital Air Gauges allow precise adjustments down to 0.01 PSI, while Analog Gauges provide an economical, rugged alternative. In general, higher pressures produce less grip and higher tire temperatures due to the tire's reduced contact patch, while low pressures provide more grip and sidewall flex.

Air pressure affects how a tire builds and sustains temperature, a vital component to the grip provided by performance tires. Intercomp offers three options to monitor tire temperatures: Deluxe Probe Pyrometer, Infrared Temperature Gun and Thermal Imager. The IR Gun and Thermal Imager read the surface temperature of the tire, while the Pyrometer's probe is pressed into the tire tread to read the rubber's internal temperature. Each method will provide usable data through consistent measuring across the tread — inside, middle, outside — once the car is parked.

Tire design and compound conclude the primary factors that directly affect tire performance. Intercomp's Digital and Analog Durometers measure the hardness of tire compounds, while Digital and Analog Depth Gauges measure tread wear. With these tools, racers can better understand characteristics of a particular tire brand, compound and construction.

Many uncontrollable factors can affect tire performance, but properly monitoring and adjusting the relationship among tire pressure, temperature and wear can equate to serious gains. Well-performing tires are not necessarily a 'silver bullet' to dominate the competition, but good finishes are impossible without proper management of the only component connecting the car to the racing surface.



Intercomp's Digital Air Gauge provides racers the ability to make the precision air pressure adjustments that allow racing tires to perform at their best.



An IR Temp Gun, Deluxe Pyrometer and Thermal Imager help to monitor on-track performance and keep each corner of the car providing optimal grip when needed most.



A Tread Depth Gauge and Durometer provide the information needed to assess the condition of any tire, ensuring the most effective tires are on the car at all times.

