

## • APPLICATION NOTE • Precision Hub Scale System

## Intercomp Precision Hub Scale Removes Need for Setup Wheels and Tires

The ultra-competitive nature of modern day professional racing requires an increased level of precision chassis setup. Advances in several areas, including chassis design, suspension theory and tire compounds, have drastically increased the level of achievable performance. Intercomp's Precision Hub Plate Scale System makes it possible to push racecars closer to the performance limit.

Intercomp's Precision Hub Scale System allows engineers and mechanics to remove inconsistencies with wheels and mounted tires that can affect the optimal setup on a racecar.

Traditionally, racers measure corner weights with a wheel/tire set mounted and inflated to identical pressures to remove many of the unknowns that could produce false readings. Depending on chassis sophistication, level of desired performance and other factors, tire pressure equalization may not produce satisfactory readings due to things like inconsistencies in wheels and tires.

Many teams dedicate a single set of wheels and tires used only to obtain corner weights with a pad-type scale system, but that takes up additional space in an already packed transporter, garage or paddock space. Intercomp's Hub Plate Scale System, the industry's first alignment system with an integrated wireless scale in the hub stand, is the solution that allows for consistent scale values without the need for dedicated scale tires and wheels.

Hub stands for the system, made of 6061-T6 Aircraft-grade Billet Aluminum, pair superior materials and engineering with 360° Ball Transfer Bearing Technology, which allows the suspension to settle without binding. Without mounted wheel/tire assemblies, mechanics can easily adjust chassis settings while suspension alignment is read with Intercomp's Digital Caster/Camber Gauge attached to each hub stand using factory-installed steel inserts.

"Intercomp's Hub Scale System has produced a more repeatable and precise result for us, when compared to a scale pad system," said Lone Star Racing Team Manager AJ Peterson. The team has campaigned the No. 80 Mercedes-AMG GT3 in the IMSA (International Motor Sports Association) WeatherTech Championship and the Pirelli World Challenge series.

"The system is also compact and allows for easy transport and storage," added Peterson when asked about additional benefits when competing in a national-level race series.

Built-in RFX $^{\text{TM}}$  technology increases the usability of the system with simultaneously displayed data on a wireless indicator or PC with RaceWeigh software. A variety of pre-made hub adaptors, including a blank adaptor that allows for custom machining for custom hubs, allow for flexibility in vehicle applications.



Intercomp's Precision Hub Scale System further removes variables, such as setup tires, from the process of measuring corner weights of high-end racecars.



Precision CNC-machined hub stands from 6061-T6 billet aluminum with magnetic inset to incorporate Digital Caster/Camber Gauge use.



360° Ball Transfer Bearing Technology allows suspension to settle without binding, while still allowing for free movement of suspension and steering components.