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Welcome

bf1systems is a specialist motorsport engineering company. Trusted by engineers around the world and working at the highest levels of motorsport, it has an extensive range of loadcells for use in NASCAR.

bf1systems offers highly accurate solutions for F1, WRC, NASCAR, IRL, LMP, GT and other leading formulae. We believe that we can offer accurate, high resolution solutions for aero, suspension and powertrain measurement.

If you would like further information about our strain gauges or any of our other products such as composites, wiring harnesses or TPMS, then please contact us and we would be delighted to discuss projects.

Regards,
Simon Roberts
simon.roberts@bf1systems.com
strain gauge manager

+44 1379 646 212



NASCAR Issue

Damper bump stop
Spring top hat
Tie rod
Damper
7 post rig scale

Damper Bump Stop Loadcell for Track and 7 Post Rig

The bf1systems Damper Bump Stop Loadcell accurately measures individual bump stop forces on each damper. This allows the bump stop rubbers to be accurately analysed and characteristics obtained during seven post rig and on track testing.

Hardened and ground washers are supplied to evenly distribute the bump stops contact patch over the loading face of the loadcell to improve repeatability.

This part offers previously unseen levels of accuracy for damper bump stop measurement throughout the whole temperature range.

Spring Top Hat Loadcell



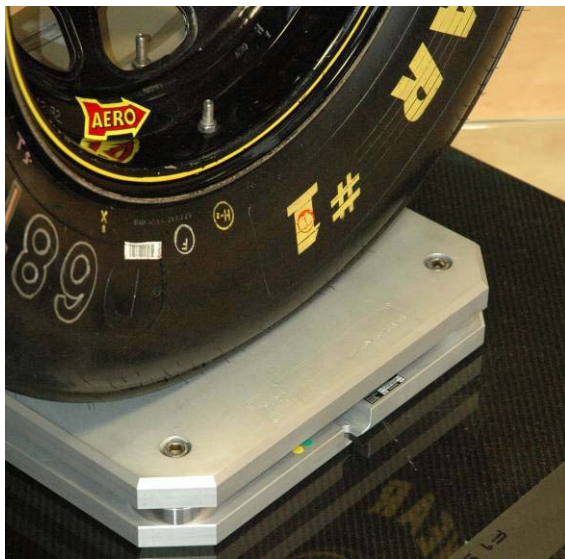
The bf1systems NASCAR Spring Top Hat loadcell is a direct replacement for the standard spring top hat. Fitted with our "Intelligent Amplifier" the spring top hat has been specifically designed by bf1systems to work as a loadcell and offers very repeatable and accurate data that is not affected by ride height changes, spring 'wind up' or temperature changes.

A thrust bearing is fitted between the screw jack and the spring top hat loadcell that prevents the top hat from rotating during ride height adjustments, this also prevents torque from being applied to the spring top hat loadcell during spring 'wind up'.

Dimensional variants are available on request to suit specific teams applications.

High Accuracy Corner Weights For All Series

The use of high accuracy loadcells to obtain suspension, powertrain and chassis data is increasing in GT and touring cars. Our chassis dyno test rig, proven in NASCAR is now being used by GT and Touring Car teams to ensure repeatability and accuracy. Using four loadcells per corner, the data obtained allow engineers to optimize set up to maximize track time.



Tie Rod Loadcell



The bf1systems NASCAR Tie Rod Loadcell is a direct replacement for the standard tie rod. Fitted with our "Intelligent Amplifier" it offers superb levels of accuracy throughout the whole temperature range. The tie rod has been specifically designed by bf1systems to work as a loadcell and offers very repeatable and accurate data that is not affected by temperature changes.

Expanding Portfolio

bf1systems are always seeking recommendations from teams for new products. If you have a force measurement requirement for which there is no known product currently on the market, please contact simon.roberts@bf1systems.com who will be pleased to discuss your requirements in detail.



NASCAR Damper Loadcell

The bf1systems NASCAR Damper Loadcell is designed to measure the individual damper forces on each corner of the car. It consists of three main components, loadcell, damper end cap and rod end. The damper end cap and the rod end are custom designed components that are specific to the type of shock fitted to the car. The custom designed damper end cap replaces the standard part fitted to the shock. This forms the mounting point for the loadcell. Fitted to the centre of the loadcell is the rod end that then mounts to the chassis at the normal shock mounting point. Please consult bf1systems for current damper fitments.