



MOMENT OF INERTIA

Roush is a leading supplier of Moment of Inertia/Center of Gravity (MOI/CG) testing. Test items typically include engines, transmissions, assembled powertrains, axles, differentials, and wheels; however, we can test almost anything. The results are typically used by Roush and our customers for dynamic simulations using ADAMS or LS-DYNA Software. We can calculate the MOI/CG of augmented and assembled structures using ADAMS Software.

www.roush.com

We're focused, we're efficient, and we're at our best when we're challenged to think outside the box — critical traits when our customers' success depends on how quickly we can take their visions from the sketchpad to the marketplace.

For more information, please [click here](#).



Roush uses the torsional pendulum method to determine the moment of inertia for six different orientations. The principal axes and moments of inertia about the axes are then calculated using an inverse matrix technique. The center of gravity is measured during MOI testing using the pendulum method. The torque roll axis is also determined.

The results are reported in the form of a principal moment matrix and a direction cosine matrix. Typical accuracy is +/- 5 % for MOI and +/- 10 mm for CG.



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