

Recent Factors Affecting Centre of Gravity (C.G.) and Moment of Inertia (M.I.)

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Abstract: *The center of gravity (C.G.) and moment of inertia (M.I.) are critical physical properties in structural, mechanical, and aerospace engineering. They influence the stability, balance, and dynamic response of structures and mechanical systems. Recent advancements in material science, manufacturing techniques, and design methodologies have introduced new factors that influence C.G. and M.I. This paper explores recent trends and factors affecting these parameters, including advancements in composite materials, additive manufacturing, automation in design optimization, and real-time control systems. The implications of these factors in the automotive, aerospace, and robotics industries are also discussed*

Keywords: Centre of Gravity, Moment of Inertia, mechanical, C.G., M.I.