

THE MOMENT OF INERTIA CALCULATION WITH AUTOCAD SOFTWARE

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Abstract: The moment of inertia is an important value that is used to determine the state of stress in a section, to calculate the resistance to buckling and to determine the amount of deflection in a beam. The moment of inertia of any body having a shape that can be described by a mathematical formula is commonly calculated by the integral calculus. Because the calculus is often laborious, suitable software would be very useful. The objective of the paper is to present an original computer program for determine the moment of inertia of a homogeneous plane plate and a 3D solid using AutoCAD software.

Key words: moment of inertia, AutoCAD software, calculus.