

## Analysis of dynamical response of a Stewart platform operating in six degrees of freedom

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*Abstract:* Stewart platforms belong to a wide range of forcing devices and form the basis for positions testing properties and dynamic responses of various objects (e.g., vehicles, machine parts, combat machines, moving components of production lines and others). Mechanical enforcement in the form of various functions of position, velocity or acceleration must be precise, because it serves as a reference point (dynamic reference) in the assessment of the response of objects placed on the platform table and subjected to excitation. This work describes several performance tests of the tested platform, as well as the reaction rate for selected forms of excitation is recorded. In LabVIEW environment, on the basis of the readings from the motion sensors, the time delays of the open control system were determined, the system was qualitatively evaluated and the time response characteristics of the dynamic response were presented.

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