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# Experience of creation and use of virtual models of mechanisms in the course of Theoretical Mechanics

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*In the article some results of one of the work directions of the Department of Theoretical Mechanics named after Professor N.E. Zhukovsky are presented to scope information technologies in education — creation of a virtual collection of the mechanisms most often meet when studying a course of Theoretical Mechanics.*

*Models developed in the Department are urged to help students to see behind the flat kinematic schemes really moving mechanisms in volume representation. Models of the slider-crank mechanism, the crank-and-rocker mechanism, two types of the link gear, the ellipsograph, the turned ellipsograph, some types of planetary trains and differentials, the Maltese mechanism and some other are described.*

*Many of the presented models allow not only to show movement, but also show possibility of parameters change — numbers of degrees of freedom, the direction of movement of separate elements, their speeds. In some models detailed methodical comments are added to demonstration process of movement. Some aspects of a virtual collection use in different types of occupations — at lectures, seminars and during the independent work of students are considered.*

**Keywords:** *information technologies in education, models of mechanisms, theoretical mechanics.*

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