

# CINEMATICS AND DYNAMICS OF THE TECHNICAL SYSTEM TRACTOR - SUBSOILER WITH ACTIVE OSCILLATORY OPERATING PARTS

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**Abstract:** *The works of deep soil loosening are big consumers of power, reason for which their execution is preferred with special equipment on caterpillar chain or with high power tractors. The concrete condition of the Romanian agriculture compel the farmers to use for such works tractors on wheels of middling power, which will be intensely used. The authors of the paper present the dynamic and the mathematical model of the tractor system with equipment for deep soil loosening; by solving this model, the solicitations at any points in the tractor transmission can be identified. Through comparisons with the values experimentally obtained, the authors validated the dynamic and the mathematical model of the technical system.*

**Key words:** *tractor, subsoiler, working process, dynamic solicitation.*

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