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Title	TRIBOLOGICAL SUBASSEMBLY AND METHOD FOR EVALUATING ENERGY LOSSES IN GEARS
Authors	Viorel BOSTAN; Ion BOSTAN; Petru STOICEV; Gheorghe POȘTARU; Maxim VACULENCO; Alexandru BUGA; Ion BODNARIUC; Radu CIOBANU; Oleg CIOBANU.
Institution	Technical University of Moldova
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Description	The invention relates to the technique and methods of testing mechanical transmissions, including gear tooth materials.
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	In the tribological system and the proposed gear energy loss evaluation method, the energy loss in the gear is determined that the sum of the losses in the contacts of each pair of simultaneously conjugated teeth ki depending on the difference in the linear sliding speeds with friction, the load transmitted by the geometry contacts, gear tooth material

and lubrication conditions.

Also, the relative sliding with friction in the ki contacts between the simultaneously engaged teeth is represented by the external linear contact of two discs with different diameters, rotating at the same angular speed, loaded with a normal load equivalent to the load in the actual engagement of the teeth.

When transmitting motion, in the contact area of the gear with gears, various processes (mechanical, physical, chemical) occur that lead to energy and material losses. The intensity and consequences of the given processes depend on a number of factors (functional, constructive, kinematic) which, in the case of real transmissions, are difficult or impossible to estimate. For this reason, modeling is resorted to using standardized or internationally certified research facilities.

When modeling, the condition of geometric and kinematic similarity between the contact of the real gear and the model, represented by two cylindrical rollers, with relative convex-convex position, is imposed.