

MD.6.

Title	Precessional planetary transmission
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Description	The technical result of the invention consists in the following: - compensation of the execution errors of the transmission parts, which influence the position of the contact point in the gear (eccentricity of the inclined part of the crankshaft, eccentricity of the base surface of the satellite block,
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eccentricity of the installation surface of the conical rollers of the toothed crowns etc.), by ensuring the possibility of micro-displacements in the three directions of the XYZ coordinate system;

- priming the shock loads on the gear by ensuring the micro-displacement of the units in the form of cells in the direction of the action of the normal force in the gear;

- reduction of slip friction losses by ensuring the micro-displacement of the cell-shaped units in the direction of the action of the friction force.

The precessional planetary transmission includes the housing (1), in which the satellite block (2) with the conical roller crowns (3) and (4), the fixed central gears (5), rigidly connected to the gearbox cover (6), and the furniture are located. (7) rigidly connected to the driven shaft (8). The satellite block (2) is installed on the bearings (9) on the inclined sector (10) of the crankshaft (11). The precession center O (10) is the point of intersection of the axes of the conical roller generators (3) and (4) with the axes of the crankshaft (11) and the inclined sector (12), on which the satellite block (2) is installed on the bearings (9) . Due to execution and assembly errors, the precession center O can be moved with the value a , which generates the eccentricity e . A thin layer of plastic (14) is applied to the surface of the teeth (13) of the central gears 5 and 7 (14). with shock-initiating properties, consisting of rhombohedral cell units in rhombohedral structures, located with the possibility of microdeplacement in the three XYZ directions.