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The invention relates to machine construction, in particular to precessional transmissions.

The problem that the invention solves is to simplify construction, increase reliability by reducing dynamic loads and reducing the level of noise and vibration.

Description

The precessional transmission includes the housing (1), in which the satellite block (2) with toothed crowns (3) and (4), fixed central gears (5), rigidly connected with the transmission cover (6), and furniture (7) are located, rigidly connected to the driven shaft (8). The satellite block (2) is installed on the inclined bushing (9), connected by means of the pin (10) with the driving shaft 11. The pin (10) is located in the groove (13), executed in the inclined bushing (9), ensuring longitudinal axial microdisplacements the node of the inclined bushing (9) with the satellite block (2). At the same time, the inclined bushing (9) is made of material with a low friction coefficient. When rotating the driving shaft (11) with the input angular velocity ω_1 , the satellite block (2), installed on the inclined bushing (9), performs regular precession movement around the precession center O (12).

The location of the connecting pin of the driving shaft (11) and the inclined bushing (9) in the longitudinal groove (13) allows the node "*inclined bushing (9) - satellite block (2)*" to perform longitudinal axial micro-displacements, which ensures the compensation of this possible error Δa .