The invention relates to mechanical engineering technologies, in particular to the machine processing of gear-wheels. The process for machine processing of precession gear teeth consists in that the tool is communicated a motion that simulates the real operating conditions by coordinated motions relative to the moving coordinate system X_1 , Y_1 , Z_1 and the fixed one X, Y, Z, the origin of which coincides with the center of precession motion, and the tool, made in the form of a disk, profiled at the end, with a radius R, is communicated an oscillatory motion relative to the X_1 and Y_1 coordinate axes and an additional linear motion along the tooth at an angle $\delta \ge 0$ with the plane formed by the X_1 and Y_1 axes, at the same time the tool is also communicated an alternating motion on the tooth profile by means of a pair of gear-wheels with variable radius with the transmission ratio i=1, installed between the crankshaft and the main axle of the machine tool.

Claims: 1 Fig.: 2