

The present invention relates to the machining of precession gear teeth, namely to honing of teeth. The process for honing of precession gear teeth includes honing of teeth of the gearwheel (5) with a tool-satellite (1), which simulates a real transfer and includes two rings with driving (3) and machining (2) rollers, on the surface of the latter being deposited strips of metallic bond with abrasive or diamond grains, distributed uniformly, between which are formed chips removal channels. Rollers (2, 3) are made in the form of a truncated cone with the vertex to the rings of the tool-satellite (1). Between the tool-satellite (1) and the gearwheel (5) is fed lubricoolant. The tool-satellite (1) is communicated a precession motion with a continuous axial feed or periodic axial feed with its rotation sequentially in both directions, after which the tool-satellite (1) performs a free run-in sequentially in both directions.

Claims: 5

Fig.: 7

