

The present invention relates to mechanical engineering, in particular to processes for hardening the teeth of bevel or precession gears.

The process for hardening the teeth of bevel or precession gears includes the preliminary preparation of the gear surface with a tool in the form of a metal brush with the formation of a microrelief, the simultaneous feed into the zone of contact of the metal brush with the gear surface of the lubricoolant fluid (LCF), after which is carried out knurling of the gear surface with a tool with balls and/or rollers. The above-mentioned instruments execute rotational, spatial-spherical and oscillating movements, perpendicular to their axes, and LCF contains copper chloride, copper sulphate, acetamide, urea, stearic acid, distilled water, pure glycerin and molybdenum disulphide in the following component ratio, mass %:

copper chloride	3...12
copper sulphate	2 ...16
acetamide	4...10
urea	0.25...1.0
stearic acid	2.5...25
distilled water	0.5...1.0
pure glycerin	1...2
molybdenum disulphide	the rest.

Claims: 3

Fig.: 6