
ONE OF THE APPROACHES TO DETERMINING THE GEAR BURN-IN PERIOD

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Abstract

The study suggests determining the burn-in period as the time of developing the initial production and technological defects, presumably present in the metal of the wheel tooth, to critical dimensions. For specific conditions, we calculated the maximum permissible size of the crack in the base of the wheel tooth and the time before the destruction of the tooth with a defect exceeding this size.

Keywords

Gear, burn-in period, critical crack size, reduction gearbox diagnostics, wheel tooth failure

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