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**Width modification for gears with low contact ratio.** (English) Zbl 1258.70007

*Meccanica* 44, No. 5, 613-621 (2009).

Summary: In this study, teeth width modification on spur gears with low contact ratios is introduced. The modification essentially relies on maintaining constant Hertz surface pressure along single and double teeth profiles. With this aim, adjustments were made in tooth width along the single mesh area. It is intended that, with this modification, negative effects caused by high Hertz pressures along the single mesh area will either be minimized or completely removed.

**MSC:**

70B15 Kinematics of mechanisms and robots

Cited in 1 Document

**Keywords:**

gear; tooth modifications; width modification; Hertz surface pressure

**Full Text:** [DOI](#)

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