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Behavior Of Polymer Gears Operating Under Different Lubricating Conditions

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Abstract

The authors worked on behavior of polymer gears operating under different lubricating conditions. Their experimental work included calculation of theoretical lub oil film thickness, friction coefficient between mating parts and their influence on polymer gear trains. The authors further did extensive work on wear of spur gears in dithering motion with polyether gears. Their conclusions elaborated on contact wear of tooth, precise evaluation of gear wear with special reference to heat transfer rate of lubricants. National aeronautics, have published their findings on development and validation of advanced gear drive systems with reference to lub oil properties like heat transfer rate, cooling and friction factor of the lubricants.