
ON THE QUESTION OF HARMONIC FRICTION DRIVE DESIGN

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Abstract

Strain wave gearing appears impossible to be used in devices that require high kinematic precision and smoothness of operation because of its inherent cyclic rotational errors. Friction drives are an alternative to gears in this type of transmission. The article deals with the problem of computing harmonic friction drive parameters. We note a considerable difference in the design of these two types of wave drives. Hence, we describe a method for computing parameters of the flexspline found in strain wave gears, consider its specifics and the feasibility of performing the same computations for harmonic friction drives.

Keywords

Harmonic friction drive, rotational motion

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