

## Industrial Applications of Non-Circular Gears

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### ABSTRACT

*Non-circular gears and industrial applications that rely on these gear basic functionality, i.e the performing of variable displacement and velocity for the driven components in a gear train, are briefly presented in the paper. In the past, the implementation of non-circular gears in motion or power transmissions was limited, due to the lack of understanding their complex design and manufacture technology. Nowadays, the development of computer-controlled machines and softwares enables new approaches on the non-circular gears to be produced and new industrial applications use their performances. Based on the gear centrode shapes, especially designed to perform the required motion, several types of non-circular gears are identified that are successfully replacing mechanisms with cams and linkages and even the electric servo-drives.*

**Keywords:** *non-circular gears, non-circular gear centrode, non-circular gear applications*

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