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DIFFERENT TYPES FAILURE IN GEARS-A REVIEW

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ABSTRACT

The purpose of this study is to discuss current advances in the field of gear fault detection. We may learn about several sorts of finding defects and analyzing approaches that are used to minimize gear failure with the help of this research. The primary reasons for gear failure are misaligned of gear, spalling, pitting, and other factors that are identified in this work. The purpose of this paper does not provide a detailed overview of the factors that cause of gear failings, but to concentrate on the different kinds of research methods that have been used by various researchers in the past few years to find out the causes of gear failings or what the end result is to decrease gear failure. The purpose of this study is to discuss current advancements in the field of gear failure analysis. We may learn about several sorts of failure detection and analyzing techniques that are used to reduce gear failures with the help of this study. The most common causes of gear failure include misalignment, spalling, pitting, and other factors. When the working stress surpasses the maximum allowed stress, gears usually fail. In current history, advancements in engineering technology have increased demand for gear teeth that can function at ever-increasing load capacities and speeds. When tooth stress exceeds the safe limit, the gears usually fail. The technology of gears is described in this paper, as well as the numerous sorts of failure that gears have. The reasons for these failures are investigated. This paper describes the sort of stress-related gear tooth failure caused by stress concentration (fatigue failure).

KEYWORDS: *Gear Failure, Gear Wear, Misalignment, Pitting, Spelling.*

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