

Regenerative Braking and Safety Protection System

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Abstract: *Regenerative braking is a revolutionary technology that has garnered significant attention in the automotive and industrial sectors. This abstract provides a concise overview of regenerative braking, highlighting its principles, applications, advantages, and future prospects.*

Regenerative braking involves the capture and conversion of kinetic energy generated during braking into usable electrical energy. This process not only improves energy efficiency but also extends the range of electric and hybrid vehicles, reduces brake wear, and contributes to environmental sustainability by lowering emissions.

The advantages of regenerative braking, coupled with ongoing advancements in technology, pave the way for a future where energy-efficient transportation systems and industrial machinery play a crucial role in mitigating climate change and promoting sustainable development.

This abstract encapsulates the essence of regenerative braking as a transformative solution that bridges the gap between energy conservation, technological innovation, and environmental stewardship.

Keywords: Regenerative braking

REFERENCES

- [1]. How Does Regenerative Braking Works In Electric Vehicle || What Is Regenerative Braking System by Life Ada.
- [2]. Regenerative Braking System on NevonProjects