

# Tire defect sensing system is developed

April 3 2006

---



Purdue University engineers in West Lafayette, Ind., have developed a system that uses sensors and mathematical models to detect defects in new tires.

The new system is said to produce better results than conventional inspections, promising to help the tire industry meet more stringent federal tire-durability requirements.

The diagnostic technique works by analyzing vibration waves passing through a tire to detect damage that leads to cracks in the bead area -- where the tire connects to the steel rim of the wheel. Such cracks can spread around the tire, causing the tire to lose air or otherwise fail.

The research was led by Douglas Adams, an associate professor of mechanical engineering, who developed the system with doctoral student Timothy Johnson.

*Copyright 2006 by United Press International*

Citation: Tire defect sensing system is developed (2006, April 3) retrieved 18 April 2024 from <https://phys.org/news/2006-04-defect.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.