



三角平衡轮廓轮胎速度/( $\text{km} \cdot \text{h}^{-1}$ ): ■—30, ●—60, ▲—90;  
传统轮廓轮胎速度/( $\text{km} \cdot \text{h}^{-1}$ ): □—30, ○—60, △—90。

图8 不同速度下2种轮胎固有频率特性曲线

研究结论可为轮胎结构设计和车辆设计及动力性能分析提供理论参考。

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## FEA on Vibration Modes of Triangle Balanced Profile Tire

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**Abstract:** Based on Abaqus software, the 3D finite element models of the triangle balanced profile tire and the traditional profile tire were established. The inherent frequency and vibration model of the triangle balanced profile tire were studied, and the dynamic characteristics of both types of tires with rim constraint and road constraint were compared. The results showed that, compared with the traditional profile tire, the inherent frequency of the triangle balanced profile tire was higher, and the rolling resistance was lower.

**Key words:** tire; triangle balanced profile; traditional profile; finite element analysis; inherent frequency

## 一种氢化丁腈橡胶的制备装置及其制备方法

中图分类号: TQ333.7; TQ330.4+2 文献标志码: D

由张家港市进润彩印包装有限公司申请的专利(公开号 CN 104014283A, 公开日期 2014-09-03)“一种氢化丁腈橡胶的制备装置及其制备方法”, 提供了一种氢化丁腈橡胶的制备装置及其制备方法。该装置具有中空夹层可加热的筒体和置于筒体外侧的控制柜, 筒体外套设有保温套; 筒

体顶端设有进料口和催化剂进口; 筒体内悬挂搅拌轴, 搅拌轴一端伸出筒体与电机连接, 搅拌轴另一端连接搅拌叶片; 筒体底部设有氢气进口和排污口, 氢气进口通过管路连接曝气器; 筒体下半部设有出料口; 筒体顶端设有可监测筒体内压力和温度的压力表和温度计。该装置结构简单, 设计合理, 具有反应时间短、反应彻底、节能环保的特点, 可以提高生产效率。

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