

表1 成品轮胎滚动阻力试验结果

项 目	优化后	优化前
轮胎质量/kg	9.57	10.89
滚动阻力系数/(N·kN ⁻¹)	6.42	7.41
ECE滚动阻力标签等级	A	B

等级为A级水平,优化前轮胎为B级水平。

4 结语

以225/60R16 102H轿车子午线轮胎为研究对象,主要从胎面、带束层、胎体、胎侧和内衬层的结构设计、施工设计及胎面胶和气密层胶的配方优化方面进行方案调整。优化后的225/60R16

102H轿车子午线轮胎充气外缘尺寸、强度性能、脱圈阻力、高速性能及低气压耐久性能均符合相应设计和国家标准要求,滚动阻力性能明显改善,达到欧盟法规ECE R117标签A级水平,满足开发目标。

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Improvement of Rolling Resistance Performance of 225/60R16 102H Passenger Car Radial Tire

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Abstract: In this work, the improvement of tire rolling resistance performance was studied and achieved through optimization of tire structure design, construction design and compound formulation by taking 225/60R16 102H passenger car radial tire as the research object. It was confirmed by the finished tire test that, the inflated peripheral dimension, strength, bead unseating resistance, high speed performance and low pressure durability met the requirements of corresponding design and national standards, and the rolling resistance performance was significantly improved and reached the level A of ECE R117 label.

Key words: passenger car radial tire; structure design; construction design; formula optimization; rolling resistance; lightweight

一种废旧轮胎热裂解系统

由云南添源环保科技股份有限公司申请的专利(公开号 CN 110423630A, 公开日期 2019-11-08)“一种废旧轮胎热裂解系统”,包括高温预热罐、螺旋挤出机构、热裂解罐、精磨机、旋风分离器、冷凝收集器、压缩机、轮胎油储罐、热交换器、喷淋塔和UV光氧催化器。本发明实现了废旧轮胎整胎连续式的热裂解,无需将废旧轮胎破碎成块状,简化了工艺流程,降低了生产成本;同时对裂解过程中产生的不凝气态物进行净化处理,不产生二次污染,达到资源再利用的目标。

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可修补的静音轮胎

由青岛森麒麟轮胎股份有限公司申请的专利(公开号 CN 110395076A, 公开日期 2019-11-01)“可修补的静音轮胎”,包括胎面、胎圈和胎侧。其特征在于胎侧的内壁沿圆周方向设有带状吸音棉,吸音棉在轮胎修补时能保持原有的吸音性。本发明吸音棉沿胎侧内壁周向设置,在降低轮胎噪声的同时,实现轮胎被扎后的可修补性;轮胎修补过程不会对侧壁上的吸音棉造成损坏,在扎胎修补后依然可以保持原有的吸音性;降低了使用成本,增大了产品的市场竞争率。

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