

5 结论

本设计LT265/70R17 121/118Q 10PR MT半钢子午线轮胎的充气外缘尺寸、强度性能、耐久性能和高速性能均符合设计要求。该轮胎的成功开发丰富了公司的产品系列,为后续产品的开发提供了宝贵的经验。产品上市后获得客户的一致好评,提高了公司的市场占有率,同时取得了良好的经济效益。

参考文献:

- [1] 梁守智,钟延堃,张丹秋. 橡胶工业手册(修订版) 第四分册 轮胎[M]. 北京:化学工业出版社,1989.
- [2] 孙海燕,王帅,臧利国,等. 越野轮胎结构设计及抓地性能研究[J]. 重庆理工大学学报(自然科学),2019,33(10):40-46.
- [3] 卫东. 4×4越野轮胎泥地MT轮胎[J]. 汽车之友,2005(18):82-83.
- [4] 邵宪杰,陶真亚,徐英杰,等. T145/65R20 T型临时使用轿车子午线轮胎的设计[J]. 轮胎工业,2019,39(5):272-275.
- [5] 李海艳,陈健,郭志刚,等. 185/60R1482H TAXIPLUS出租车专用轮胎的设计[J]. 橡塑技术与装备,2021,47(1):43-46.
- [6] 王玉海,张琳,刘震,等. 液相混炼母胶在泥地越野轮胎胎面胶中的应用[J]. 橡胶科技,2021,19(3):121-124.
- [7] 王伟. 低生热PCR轮胎胎侧配方应用研究[J]. 中国橡胶,2017(1):46-48.
- [8] 黄兆阁,李长宇,孟祥坤,等. 235/45R18轮胎带束层帘线的优化设计[J]. 橡胶工业,2020,67(3):209-213.
- [9] 刘宇艳,万志敏,田振辉,等. 单向聚酯帘线增强橡胶材料疲劳特性研究[J]. 复合材料学报,1998,15(4):97-101.
- [10] 宋清华,王伯健,刘世锋. 胎圈钢丝的生产现状[J]. 金属制品,2006,32(4):12-13,16.

收稿日期:2022-04-08

Design on LT265/70R17 121/118Q 10PR MT Steel-belted Radial Tire

YANG Chao, SUN Lin, LI Renguo, CHENG Jianchao, ZHU Zuoyong

(Shandong Xinghongyuan Tyre Co., Ltd, Linyi 276200, China)

Abstract: The design on LT265/70R17 121/118Q 10PR MT steel-belted radial tire was introduced. In the structure design, the following parameters were taken: overall diameter 804 mm, cross-sectional width 268 mm, width of running surface 206 mm, arc height of running surface 10.8 mm, bead diameter at rim seat 435.2 mm, bead width at rim seat 228.6 mm, and maximum width position of cross-section (H_1/H_2) 0.932. In the construction design, the following processes were taken: using three-formula and four-piece structure for the tread, two layers of 1400dtex/2 nylon 66 dipped cord fabric for the crown and two layers of $2+7\times 0.28$ HT steel cord for the belt, 1670dtex/2-100EPD high modulus and low shrinkage polyester cord for the carcass, and using two-stage building machine to build tires and B-type hydraulic vulcanizing machine and nitrogen vulcanization process to cure tires. The test results of the finished tire showed that, the inflated peripheral dimension, strength performance, durability and high-speed performance of the tire met the design requirements.

Key words: MT steel-belted radial tire; structure design; construction design; finished tire performance

一种利用呋喃酚焦油制备橡胶油的方法

由江苏三吉利化工股份有限公司申请的专利(公布号 CN 114133948A, 公布日期 2022-03-04)“一种利用呋喃酚焦油制备橡胶油的方法”,涉及一种利用呋喃酚焦油制备橡胶油的方法,该方法包括如下步骤:(1)以拟薄水铝石为载体,加入钼酸铵和硝酸钴的混合溶液中,充分混合后先进行干燥,然后进行焙烧,制得加氢催化剂;(2)以

呋喃酚焦油为原料,在氢气气氛和所制加氢催化剂作用下进行加氢反应,可得芳烃型橡胶油。本发明制备方法设计科学合理,不仅解决了呋喃酚焦油的出路问题,变废为宝,而且呋喃酚焦油的组分大都含有苯环,且多环芳烃总量为 $0.276\text{ mg}\cdot\text{kg}^{-1}$,是理想芳烃橡胶油原料,制备的芳烃型橡胶油性能优异,可满足轮胎行业对橡胶油的需求。

(本刊编辑部 马 晓)