

下,按照 GB/T 521—2003 进行测量,轮胎的充气外直径和断面宽分别为 843.0 和 240.5 mm,符合设计要求。

4.2 强度性能

按照 GB/T 4501—2008 进行成品轮胎强度性能试验,试验条件为:充气压力 750 kPa,压头直径 19 mm。试验结果表明,轮胎破坏能为 1 197.1 J,为国家标准规定值的 168.1%。成品轮胎强度性能良好。

4.3 耐久性能

按照 GB/T 4501—2008 进行耐久性试验,试验条件为:充气压力 750 kPa,额定负荷 1 850 kg,试验速度 65 km·h⁻¹。完成国家标准规定

程序后,每 10 h 负荷率增加 10%继续进行试验,负荷率达到 140%后不再增加,直到轮胎损坏为止。成品轮胎累计行驶时间为 162 h,试验结束时轮胎胎肩脱层,成品轮胎耐久性能良好,符合企业标准(≥77 h)要求。

5 结语

9.5R17.5 14PR 全钢载重子午线轮胎的充气外缘尺寸和强度性能符合相应设计和国家标准要求,耐久性能符合企业标准要求,产品性能优异,在国内外市场实际使用反映效果较好,为公司增加了新的利润增长点。

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Design of 9.5R17.5 14PR Truck and Bus Radial Tire

YU Hai-tao, WANG Pei-bin, ZHOU Peng-cheng

(Triangle Tire Co., Ltd, Weihai 264200, China)

Abstract: The design of 9.5R17.5 14PR truck and bus radial tire was described. In structure design, the following parameters were taken: overall diameter 838 mm, cross-sectional width 238 mm, width of running surface 176 mm, height of running surface 6 mm, bead diameter at rim seat 442.5 mm, bead width at rim seat 172 mm, cross-sectional level ratio (H_1/H_2) 1.018, pattern depth 14 mm, block/groove ratio 71.15%, pattern circular pitch 61, with the design of zigzag pattern. In construction design, the following processes were taken: 3+9×0.22+0.15 steel cord for carcass ply, 3×0.20+6×0.35 HT steel cord for 1[#] and 2[#] belt ply, 5×0.30 HI steel cord for 3[#] belt ply, 3×7×0.20 HE steel cord for 0° belt ply; using single stage two-drum building machine to build tires, and using curing press to cure tires. It was confirmed by the tests of finished tires that the inflated peripheral dimension and strength performance met the requirements of relative design and national standard, and the endurance performance met the requirements of enterprise standard.

Key words: truck and bus radial tire; structure design; construction design

含液相分散白炭黑胶乳混合物的矿山胎胎面胶料及其制备方法和应用

中图分类号: TQ336.1; U463.341⁺.5 文献标志码: D

由杭州中策橡胶有限公司申请的专利(公开号 CN 102807689A, 公开日期 2012-12-05)“含液相分散白炭黑胶乳混合物的矿山胎胎面胶料及其制备方法和应用”, 涉及的含液相分散白炭黑胶乳混合物的矿山轮胎胎面胶配方为: 液相分散白炭黑胶乳混合物 50~

200, 天然橡胶 0~80, 炭黑 20~40, 橡胶助剂 R50 2~8, 氧化锌 0~6, 硬脂酸 1~3, 微晶蜡 1~2, 防老剂 RD 0.8~1.2, 防老剂 4020 1~3, 充油硫黄 1~2, 促进剂 NS 1.5~2, 防焦剂 0.1~0.2。由于胎面胶配方采用白炭黑替代大部分炭黑, 降低了轮胎的滚动阻力, 提高了抗湿滑性能和耐磨性能, 可生产出节能环保轮胎。

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