

表1 成品轮胎物理性能

项 目	测试值	GB/T 2981—2014 ¹⁾
邵尔A型硬度/度	68	≥50
拉伸强度/MPa	21.2	≥12.7
拉断伸长率/%	510	≥350
阿克隆磨耗量/cm ³	0.22	≤0.40
粘合强度/(kN·m ⁻¹)		
胎面-缓冲层	13.0	≥7.8
缓冲层帘布层间	11.2	≥6.8
缓冲层-胎体	10.3	≥5.8
胎体帘布层间 ²⁾	10.0	≥5.3
胎侧-胎体	10.1	≥5.3

注:1)《工业车辆充气轮胎技术条件》;2)胎体帘布层间粘合强度的平均值。

表1可以看出,成品轮胎的各项物理性能达到国家标准要求。

5.3 实际使用性能

经国内企业和韩国POSCO钢厂的重型动力平板运输车实际使用表明,355/65—15 TL 24PR E-3轮胎承载能力强,稳定性好,使用寿命接近国外同类产品水平,未出现肩空、肩裂以及胎圈爆破等问题。

6 结语

355/65—15 24PR TL E-3低断面无内胎重型动力平板运输车轮胎的外缘尺寸和物理性能达到设计要求,性价比优势明显。该产品的开发,很好满足了市场需要,为企业创造了良好的经济效益。

收稿日期:2016-12-26

Design of 355/65—15 24PR TL E-3 Low Profile Tubeless Heavy Duty Flatbed Truck Tire

ZHUANG Yusen, GAO Weidong
(Weihai Zhongwei Rubber Co., Ltd, Weihai 264200, China)

Abstract: This paper introduces the design of 355/65—15 24PR TL E-3 low profile tubeless heavy duty flatbed truck tire. In the structure design, the following parameters were taken: outer diameter 806 mm, cross-section width 362 mm, width of running surface 328 mm, arc height of running surface 4.6 mm, bead diameter at rim seat 385.5 mm, bead width at rim seat 247.5 mm, maximum width position of cross-section (H_1/H_2) 1.333, high through block pattern, pattern depth 22.5 mm, and number of pattern pitches 24. In the construction design, three formulation and five piece structure was used for tread, 12 layers of 1400dtex/3 and 2 layer of 930dtex/2V₃ nylon 66 cords were applied in the carcass ply and breaker ply, respectively, and double steel ring structure was adopted in bead. The tire was formed on finger-shaped turn-up building machine and cured on press curing machine. The test results showed that the inflated peripheral dimensions and physical properties of the finished tires met the requirements of the design and national standards, and the finished tires showed good performance in practical use.

Key words: flatbed truck tire; industrial vehicle tire; structural design; construction design

赢创公司新型助剂有效降低轮胎滚动阻力

中图分类号:TQ330.38⁺7 文献标志码:D

据印度《亚洲橡胶杂志》2017年2月15日报道,德国赢创公司开发了新型助剂Polyvest ST,以扩大其白炭黑/硅烷偶联剂体系技术在轮胎生产中的应用。Polyvest ST与白炭黑/硅烷偶联剂(如Si69或Si266)配合使用,可进一步改善白炭黑与橡

胶的相容性,降低轮胎的滚动阻力(比传统炭黑生产的轮胎滚动阻力低30%),使车辆的燃油消耗量和二氧化碳排放量显著减小。这些优势已经在以天然橡胶为主体材料的轮胎产品上得到证实。

Polyvest ST是赢创公司为轮胎行业开发的优质助剂,有利于轮胎制造商进一步优化产品。

(清 风)