

5.2 施工设计

除机头宽度及个别参数略有不同,反弧形轮胎施工设计与普通轮胎施工设计基本相同。

6 反弧形成品性能

6.1 外缘尺寸

安装在标准轮辋上的成品轮胎在标准充气压力下的 D' 和 B' 分别为1 054和为323 mm,符合国家标准要求,且成品轮胎胎冠部位基本平滑,未出现弧形鼓起。该设计解决了成品轮胎胎冠部位早期磨损问题,提高了轮胎的使用性能,延长了使用寿命。反弧形成品轮胎的断面照片见图4。

6.2 物理性能

成品轮胎各项物理性能良好,均符合国家标准要求。

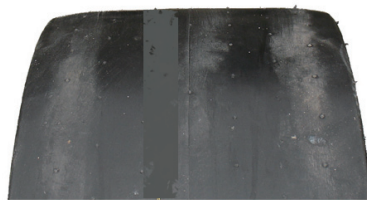


图4 反弧形成品轮胎的断面照片

7 结语

对13/80—20 16PR压路机轮胎胎冠中心部位进行反弧形设计,可以解决充气后胎冠中心部位鼓起成弧形的问题,提高了轮胎的使用性能,延长了轮胎的使用寿命。

收稿日期:2019-10-16

Design on 13/80—20 16PR Reverse-arc Road Roller Tire

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Abstract: The design on 13/80—20 16PR reverse-arc road roller tire was described. In the structure design, the following parameters were taken: overall diameter 1 028 mm, cross-sectional width 304 mm, width of running surface 322 mm, arc height of running surface 10 mm, bead diameter at rim seat 514 mm, bead width at rim seat 230 mm, maximum width position of cross-section (H_1/H_2) 0.992 2, smooth tread pattern, and reverse-arc design for the tire crown. In the construction design, the following processes were taken: co-extruded tread, 1680dtex/2V₁ nylon 66 dipped cord for inner layer (8 layers) of carcass, 1680dtex/2V₂ nylon 66 dipped cord for outer layer (2 layers) and breaker ply (4 layers) of carcass, using flat-core building machine to build tire, and single-mold curing press to cure tire. The performance test results of the finished tire showed that the inflated peripheral dimension and physical properties met the requirements of national standards, the problem of bulging and arcing in the center of tire crown was solved, the tire performance was improved and service life was prolonged.

Key words: road roller tire; tire crown; reverse-arc; structure design; construction design

一种基于太阳能预热及裂解废旧轮胎的装备

由青岛科技大学申请的专利(公开号 CN 110105975A, 公开日期 2019-08-09)“一种基于太阳能预热及裂解废旧轮胎的装备”,包括集热装置、进料预热装置、裂解装置、油气分离储存装置、固体产物回收装置和自动控制系统,各装置之间相互连接,其中集热装置能吸收太阳能为废旧轮胎裂解提供必要的温度。本发明解决了现有技术

中传统热解方式对化石燃料或电的强烈依赖,以及太阳光因天气和不同时段等导致供热不足的缺点,提高了经济效益,减少了碳排放。裂解装置结构紧凑,提高了热量的利用效率;加热方式能够实现自动控制,方便快捷;油气管路设有换热装置,预热的惰性气体通入裂解炉内促进油气的产生和排出,提高了能量的利用效率。

(本刊编辑部 储 民)