

4 成品性能

4.1 外缘尺寸

在标准充气压力下安装在标准轮辋上的成品轮胎 D' 为1 535 mm, B' 为640 mm, D' 和 B' 均符合

设计要求。

4.2 物理性能

成品轮胎的物理性能见表1。从表1可以看出,成品轮胎的物理性能达到设计要求。

表1 成品轮胎的物理性能

项 目	测试值	设计指标	项 目	测试值	设计指标
胎面胶性能			粘合强度/($\text{kN} \cdot \text{m}^{-1}$)		
邵尔A型硬度/度	64	≥ 60	胎面-缓冲层	18.8	≥ 10.0
300%定伸应力/MPa	10.8	≥ 5.5	缓冲层帘布间	13.0	≥ 10.0
拉伸强度/MPa	21.3	≥ 19.5	缓冲层-胎体	12.8	≥ 6.5
拉伸伸长率/%	500	≥ 450	胎体帘布层间	8.8	≥ 6.5
阿克隆磨耗量/ cm^3	0.082 9	≤ 0.20	胎侧-胎体	8.8	≥ 6.0

5 结语

本设计60×25.00—25 50PR煤矿井下用工程机械轮胎生产工艺稳定,成品轮胎外观质量优

良,外缘尺寸和物理性能达到设计要求。该产品批量生产并投放市场后受到用户一致好评,为企业创造了良好的经济效益。

收稿日期:2016-04-05

Design of 60×25.00—25 50PR Coaling Mining OTR Tire

YU Wengang,JIANG Xinmin,JIAO Shixin

(Xinjiang Kunlun Engineering Tire Co.,Ltd,Korla 841011,China)

Abstract: In this paper, the design of 60×25.00—25 50PR coal mining OTR tire was presented. In the structure design, overall diameter was 1 515 mm, cross-sectional width was 625 mm, width of running surface was 520 mm, arc height of running surface was 6 mm, bead diameter at rim seat was 629 mm, bead width at rim seat was 495 mm, maximum width position of cross-section (H_1/H_2) was 0.794 8, mixed asymmetric tread pattern and large block design were used, and number of pattern pitch was 16. In the construction design, tread was molded by winding process, 20 layers of high strength 1870dtex/2 nylon 66 cord were applied in the carcass ply, 4 layers of 1400dtex/2 nylon 66 cord were applied in the breaker ply, and three-ring structure and large apex were used for bead. The tire was built using turn-up bladder and cured using type-B curing press. It was confirmed by the test of finished tires that the inflated peripheral dimension and physical properties of the finished tire met the design requirements.

Key words: OTR tire; mining tire; structure design; construction design

韩泰越野概念轮胎荣获红点设计大奖

中图分类号:TQ336.1 文献标志码:D

韩泰轮胎公司与维伯拉姆(Vibram)公司共同开发的多彩越野概念轮胎Dyna SYNC获得2016年“红点设计概念大奖”。该轮胎胎面采用蜂窝状花纹,在山区地形环境下有更好的牵引力、抗刺扎性能、减震性能和操控性能;胎侧胶有多种颜色可供

选择,以便于车主根据车身颜色进行搭配。

“红点设计大奖”(Red dot design award)是国际公认的全球工业设计顶级奖项之一,与德国“iF奖”、美国“IDEA奖”并称为世界三大设计奖。有来自60个国家的4 698件作品参加了本次设计大赛。

(卢 岸)