

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51×14.00—23 50PR轮胎D'和B'分别为1 299和399 mm,均符合设计要求。

4.2 物理性能

成品轮胎的物理性能如表1所示。从表1可以看出,成品轮胎的各项物理性能均达到企业标准要求。

5 结语

本设计51×14.00—23 50PR矿用工程机械轮胎外观质量优良,外缘尺寸和物理性能分别达到设计和企业标准要求,批量生产后产品受到用户

表1 成品轮胎物理性能

项 目	实测值	企业标准
胎面胶性能		
邵尔A型硬度/度	68	≥60
300%定伸应力/MPa	16.3	≥5.5
拉伸强度/MPa	23.7	≥19.5
拉断伸长率/%	500	≥450
阿克隆磨耗量/cm ³	0.269	≤0.31
粘合强度/(kN·m ⁻¹)		
胎面-缓冲层	15.5	≥10.0
缓冲层帘布间	13.1	≥10.0
缓冲层-胎体	15.1	≥6.5
胎体帘布间	7.6	≥6.5
胎侧-胎体	10.6	≥6.0

一致好评。该轮胎的开发,很好满足了市场的需要,为企业创造了良好的经济效益。

收稿日期:2017-06-07

Design of 51×14.00—23 50PR Mining OTR Tire

YU Yongwei,JIANG Xinmin,JIAO Shixin

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

Abstract: The design of 51×14.00—23 50PR mining OTR tire was described. In the structure design, overall diameter was 1 282 mm, cross-sectional width was 390 mm, width of running surface 312 mm, arc height of running surface was 6 mm, bead diameter at rim seat was 579 mm, bead width at rim seat was 280 mm, maximum width position of cross-section (H_1/H_2) was 0.793 3, mixed tread pattern was used, number of the pattern pitch was 26, and block/total ratio was 24.22%. In the struction design, tread was molded by laminating/winding process, 18 layers of high strength 1870dtex/2 nylon 66 cord were applied in the carcass ply, 2 layers of 1400dtex/2V₃ nylon 66 cord were applied in the breaker ply, and three-ring structure was used for bead. The tire was built using turn-up bladder building machine and cured using type-B press. The inflated peripheral dimension and physical properties of the finished tires met the requirement of design and enterprise's standard respectively.

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

利用废旧轮胎和废食用油生产生物燃料

中图分类号:TQ330.9 文献标志码:D

美国橡树岭国家实验室(ORNL)与维克森林大学和佐治亚理工学院合作开发出一种利用废旧轮胎和废弃食用油生产生物燃料的简单方法。

该方法先将废旧轮胎中回收并改性处理的新型碳材料与硫酸混合,然后再将混合物与植

物油(含有游离脂肪酸)混合,生产出可用的生物燃料。

该方法为利用廉价、环保、高附加值的废旧轮胎衍生品直接大规模生产生物燃料提供了新途径,有利于促进废旧轮胎回收再利用,也为废食物油的循环利用提供了一个新方法。

(钱伯章)