

耐久性能和高速性能均优于参比轮胎。同时,去除粘合胶配方中的钴盐,符合绿色轮胎的发展方向。

参考文献:

- [1] 赵翔,赵玉娜,宋美芹,等. 3+9×0.175NT钢丝帘线在轻型载重子午线轮胎胎体中的应用[J]. 橡胶科技,2020,18(1):34-36.
- [2] 李彤,贺惠英. 3+8×0.23ST钢丝帘线在半钢轻型载重子午线轮胎带束层中的应用[J]. 轮胎工业,2020,40(3):167-170.
- [3] 彭红兵,唐尧.国内外帘线用高碳钢线材质量对比[J].金属热处理,2019,44(12):44-48.
- [4] 朱晓,徐丽红,牟守勇,等.绿色产品的评价标准及其在轮胎产品中的应用[J].橡胶科技,2020,18(11):651-654.
- [5] 黄兆阁,李长宇,孟祥坤,等.235/45R18轮胎带束层帘线的有限元优化设计[J].橡胶工业,2020,67(3):209-213.
- [6] 齐向阳.2+7×0.30ST超高强度钢帘线研制[J].金属制品,2019,45(5):15-18.
- [7] 马达.钢帘线生产工艺研究[D].沈阳:东北大学,2018.
- [8] 杨巍峰,钱庆生,杨小芹.钢帘线用热浸镀黄铜钢丝的微观组织及力学性能[J].电镀与涂饰,2019,38(7):305-310.
- [9] 王佳莉.天然橡胶与钢丝帘线的粘合及微观结构研究[D].青岛:青岛科技大学,2017.
- [10] 万宝意.V微合金化冷拉帘线钢丝的组织 and 力学性能[D].武汉:武汉科技大学,2014.

收稿日期:2021-03-06

Application of 4+3×0.35ST Ternary Alloy Coated Steel Cord in Belt of Truck and Bus Radial Tire

ZHANG Zhengwei, LIU Xiaofang, WEI Sheng, CHEN Xuemei, ZHANG Haiyi, LI Mei, WEN Xiuyan

(Shandong Linglong Tire Co., Ltd., Zhaoyuan 265400, China)

Abstract: The application of 4+3×0.35ST ternary alloy coated (TAWI[®]) steel cord in the belt of truck and bus radial tire was studied. The results showed that, under the condition of high temperature and high humidity, the extraction force retention rate and surface rubber coating retention rate of 4+3×0.35ST TAWI[®] steel cord in the optimized cobalt free compound were significantly higher than that of 4+3×0.35ST brass coated steel cord with cobalt salt compound. The combination of 4+3×0.35ST TAWI[®] steel cord and cobalt free compound possessed good calendaring and building process performance, and the strength, durability and high speed performance of the finished tire were equal to or better than the tire using 4+3×0.35ST brass coated steel cord and cobalt salt compound.

Key words: truck and bus radial tire; steel cord; ternary alloy coating; belt; adhesion force; performance of finished tire

益阳橡机数字化制造基地首批产品发货

日前,益阳橡胶塑料机械集团有限公司(简称益阳橡机)生产的GE420/GE800T大规格串联式密炼机、416双锥双螺杆挤出机顺利通过国内客户的在线试车验收,成功发货。这是该公司在全新的智能型橡胶机械数字化制造基地生产的第1批产品。其中,GE420/GE800T大规格串联式密炼机从2020年第1台套新产品下线至目前已有4台套发往客户。用户表示,益阳橡机生产的环保大串联密炼机具有大产量、高效率、低能耗等优点,给予了高度好评。

为打造更多高精度密炼机、轮胎硫化机、平板

硫化机和双螺杆挤出机产品,益阳橡机以智能型橡胶机械数字化制造为目标,购置进口数控加工设备、焊接机器人和高精度龙门式三坐标测量机检测设备等,确保为客户提供精良的橡胶机械产品。预计益阳橡机智能型橡胶机械数字化制造基地每年可形成密炼机、轮胎硫化机、平板硫化机和双螺杆挤出机等橡胶机械300台套以上的生产能力。益阳橡机在新基地加工产品可缩短近1/4的加工周期,目前密炼机加工效率提升30%~50%,转子体的钛合金加工效率提升20%~30%。2021年益阳橡机的生产任务一直处于持续高峰状态。

(摘自《中国化工报》,2021-07-21)