3 结论

- (1)用RFL体系浸渍处理碳纤维线绳,既增大了碳纤维表面粗糙度,又为碳纤维与橡胶之间粘合提供了化学桥接,大幅提高了碳纤维线绳与橡胶的粘合性能。
- (2)碳纤维线绳与橡胶的粘合性能优于碳纤 维束。
- (3)用于提高碳纤维与橡胶粘合性能的RFL体系配制的优化条件为:间苯二酚/甲醛物质的量比为1/1.8,酚醛树脂/丁吡胶乳的质量比为0.18,丁吡胶乳吡啶质量分数为0.15,RFL体系在25 ℃恒温熟化处理。

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收稿日期:2017-07-31

Study on RFL Dipping System for Carbon Fiber Cord

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Abstract: The effect of resorcinol/formaldehyde/latex (RFL) dipping system on the adhesion properties between carbon fiber cord and rubber compound was investigated. The results showed that the optimum preparation conditions of the RFL dipping system for carbon fiber cord were as follows: the molar ratio of resorcinol/formaldehyde was 1/1.8, the mass ratio of phenolic resin/butadiene-vinylpyridine copolymer latex was 0.18, the mass fraction of pyridine in butadiene-vinylpyridine copylymer latex was 0.15, and the RFL system was ripening treated at the constant temperature of 25 °C. The carbon fiber cord impregnated by RFL system possessed higher surface roughness, and the chemical bridging of adhesion between carbon fiber and rubber compound formed. The adhesion property between carbon fiber cord and rubber compound was better than that between carbon fiber bundle and rubber compound.

Key words: carbon fiber cord; rubber compound; resorcinol-formaldehyde-latex dipping system; H pull-out force

泰国橡胶协会承诺执行天然橡胶减产计划

中图分类号:TQ332.1 文献标志码:D

据泰国中华日报2018年1月11日报道,泰国四大橡胶协会(泰国橡胶协会、泰国乳胶协会、泰国 橡胶手套制造商协会、泰国橡胶木材商协会)承诺响应泰国政府提高泰国国内天然橡胶价格的政策 安排,同时敦促政府尽快落实减小天然橡胶市场 供应量的一系列计划,如政府联合采购20万t天然 橡胶的计划。

减产计划为实施区域停割,目标是实现1.6万 hm²橡胶林在3个月的停割期内减产6 700 t天然橡胶。对停割期减产的胶农提供每1 000 m²橡胶林625泰铢的经济补偿。

(本刊编辑部)