

一种混炼工艺条件下的结果进行研究,其规律对其它硫化促进剂体系和混炼工艺是否适用有待进一步研究。但它还是说明了利用混炼工艺各参数预测焦烧是可行的;利用相关分析来了解混炼各参数对焦烧性能的影响是有用的。

4 结论

(1)在一种硫化促进剂体系的胎面胶料三段混炼的条件下,塑炼段和总能量消耗对焦烧性能有较大的影响,温度的影响比较复杂。

杂。

(2)使用混炼过程参数建立的数学模型可实现对混炼过程结束后混炼胶的焦烧性能进行预测。模型的普遍性和预测精度还有待进一步提高。

参考文献

- 1 张 海,贺德化,关毅璋,等. 焦烧预测. 特种橡胶制品,1998(2):23
- 2 张小蒂. 应用回归分析. 杭州:浙江大学出版社,1991. 161~291

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Effect of Mixing Parameters on Mixture Scorchiness in Internal Mixer

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Abstract Based on the statistical analysis of the parameters in a 3-stage mixing of tread compound, it was found that the plastizing stage and the second mixing stage had greater influence on the mixture scorchiness; the correlation coefficient of energy consumption to scorchiness was greater than those of time, temperature and power; the influence of temperature on scorchiness was more complex, and their correlation coefficient might be plus or minus. The three mathematic models to predict mixture scorchiness were established by regressing the parameters respectively from 3 mixing stages, the plasticizing stage and the 3rd mixing stage, or only the 3rd stage. The correlation coefficients were respectively 0.941, 0.835 and 0.814, and the predictive average relative errors were 12.9%, 9.94% and 12.95%. These models were used to predict and control the mixture scorchiness.

Key words internal mixer, scorchiness, mixture, mixing

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部门牵线搭桥,两单位共同协商一致同意由郑州中原轮胎橡胶股份有限公司兼并第二橡胶厂。具体兼并事宜已洽谈结束,并经市有关部门批准,原第二橡胶厂的职工经培训后已全部上岗。

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