Influence of Discharge Temperature of Single-step Mixing Process on the Properties of Tread Compound of TBR Tire

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Abstract: The influence of discharge temperature of single-step mixing process on the properties of the tread compound of TBR tire was studied. In the discharge temperature range of $145{\sim}165~^{\circ}\mathrm{C}~$, when the temperature increased, the hardness, modulus at 100% elongation, modulus at 300% elongation and tensile strength of the tread compound changed a little, the ratio of modulus at 300% elongation and modulus at 100% elongation increased, and the elastic modulus and loss factor were more affected. When the discharge temperature was selected at $165~^{\circ}\mathrm{C}~$, the heat build-up of the compound was low and the rolling resistance of the tire was low.

Keywords: single step mixing process; discharge temperature; modulus; elastic modulus; loss factor



大陆集团扩建轮胎研发中心

目前,大陆集团斯洛伐克普霍夫轮胎厂的研发中心扩建项目竣工。大陆集团为该项目已拨款 940 万美元,包括购置轮胎耐久性能试验机和建设轮胎分析实验室等。该研发中心设备先进,拥有 53 间实验室和 10 个会议室,研发人员增加 15%。研发中心主要为普霍夫轮胎厂

提供支持。普霍夫轮胎厂的轿车轮胎和轻型载 重轮胎的年产能为 1600 万条。大陆集团也投资 1.35 亿美元,使普霍夫轮胎厂的轻型载重轮胎 年产能增大 40 万条,使轻型载重轮胎总年产能 达到 300 万条。

西安

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崔小明