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Correlation between Structural Design and Rigidity of Drift Racing Tire

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Abstract: The correlation between the structural design and rigidity of the drift racing tire was studied by taking the 285/35ZR18 101W drift racing tire as an example. Two reinforcement layers (reinforcement layer 1 and 2) were added to the upper and lower sidewall of the tire, respectively, and four strengthening schemes were designed as follows: in the scheme 1, rubber sheet with 90 degrees of Shore A hardness was used for reinforcement layer 1, and 467dtex/1×467dtex/1 nylon 66 fabric was adopted for reinforcement layer 2; in the scheme 2, rubber sheet with 90 degrees of Shore A hardness for reinforcement layer 1, and 2×0.30ST steel cord fabric for reinforcement layer 2; in the scheme 3, 2×0.30ST steel cord fabric for reinforcement layer 1, and 1670dtex/1 aramid + 1400dtex/1 nylon 66 mixed fabric for reinforcement layer 2; in the scheme 4, 2+2×0.25HT steel cord fabric for reinforcement layer 1, and 1680dtex/2 aramid fabric for reinforcement layer 2. The test results showed that, the total ground pressure, ground length and width of the scheme 4 tire were the largest, the footprint tended to be in oval shape, and the rectangular rate of the footprint was the smallest. Moreover, the radial rigidity and longitudinal rigidity of the scheme 4 tire were the largest, and the tire had the best loading capacity and braking performance, which was conducive to controlling the stability of the vehicle at extremely high speed and met the vehicle handling requirements under the conditions of high-speed and large angle tail drift.

Key words: drift racing tire; structural design; reinforcement layer; rigidity

普利司通加码东南亚橡胶园投资

日前,普利司通公司宣布计划加强对其在东南亚的天然橡胶种植园的投资。到2030年,该公司将在东南亚天然橡胶种植园投资2 670万美元。投资的目标是确保天然橡胶的可持续供应,并通过天然橡胶种植园的可持续运营,为整个价值链的循环经济和碳中和做出贡献。

普利司通公司称,其将可持续发展置于管理和业务的核心,旨在实现其“迈向2050年,普利司通作为可持续解决方案公司继续提供社会和客户价值”的愿景。为实现这一目标,公司正在加快推动循环经济和“碳中和”的举措,并推进其可持续

发展业务框架,以确保可持续发展活动与整个价值链中的业务之间的联系。公司认为,确保可靠的天然橡胶资源供应非常重要。

与2022年的预测相比,普利司通将在2035年使特定地区的天然橡胶收获量翻一番。此外,该公司还将引进具有稳定收获量的天然橡胶优良树种,确保普利司通拥有的天然橡胶种植园根据树龄和造林周期得到适当管理。公司还将利用人工智能图像分析来诊断和检测天然橡胶树疾病,以及利用大数据实施最佳种植以提高天然橡胶种植园的产量。

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