

试验;若胎肩部出现损坏,则可以增大充气压力进行耐久性试验;若配套车型仅在市内进行运输,可以将试验速度降为 $80\text{ km}\cdot\text{h}^{-1}$,这也是国内城市路面的最高限速,同时增大负荷,以更好地模拟实际使用情况;若是轮胎损坏伴随着胶料老化的现象,则可以选择先烘箱老化,再进行室内耐久性试验。

5 结语

轮胎耐久性试验不必因法规要求而墨守成规,因为轮胎实际使用工况复杂,很难有一种试验方法可以检测所有可能的情况。轮胎设计人员应多收集市场上轮胎的实际使用条件与反馈情况,根据轮胎耐久机理和耐久性试验条件差异,选择合适的耐久性试验,以满足轮胎的使用性能要求。同时,也应该向驾驶人员加大安全使用轮胎

的宣传,避免超载现象,关注轮胎的充气压力,增强使用人员的安全意识。

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Durability Test Analysis of Light Truck and Bus Tire

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Abstract: This paper introduced the mechanism of tire durability test, and focused on the comparative analysis of the difference of the durability tests of light truck and bus tires between China standard and the US standard and their respective characteristics. Tire durability was mainly affected by the heat build-up, vertical deformation, driving speed of the tire and rubber aging. In general, tire durability tests could be divided into outdoor test method and indoor test method. The test speed of tire durability test in China standard and the US standard was the same. However, in China standard, the test load and temperature conditions were more stringent; besides, the inflation pressure was higher, which was tougher for the tire shoulder. In contrast, in the US standard test method, higher requirement was put on the bead durability by testing at a low inflation pressure. Generally, the tires needed to pass the durability tests stipulated by both Chinese and US standards. Moreover, suitable durability test conditions could be designed for verification according to the product performance objectives.

Key words: light truck and bus tire; durability; test standard; finite element analysis

支腿高度控制系统及方法、可读存储介质、 工程机械

由三一汽车制造有限公司申请的专利(公布号 CN 115675385A, 公布日期 2023-02-03)“支腿高度控制系统及方法、可读存储介质、工程机械”,提供了一种支腿高度控制系统及方法、可读存储介质、工程机械。支腿高度控制系统包括设

于轮胎上的监测器,用于检测轮胎的胎压值;设于工程机械本体上的控制器,用于根据胎压值控制支腿进行举升或回落。通过本发明技术方案,采用监测器检测轮胎的胎压值并根据胎压值控制支腿进行举升或回落,能够确保实现轮胎离开地面,减少轮胎磨损,提高轮胎使用寿命。

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