

滚动阻力较低。说明 PBR4003 可以在提高胶料抗湿滑性能的同时不损失滚动阻力性能。

(4)PBR4003 配合白炭黑使用性能更优异。

第 17 届中国轮胎技术研讨会论文(三等奖)

Application of Solution Styrene-butadiene Rubber PBR4003 in Tread Compound for High Performance Tire

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Abstract: The properties of high performance tire using silica and carbon black filled solution styrene-butadiene rubber (SSBR) PBR4003 were studied and compared with SSBR 5025-2 HM and 2438-2 HM. The results showed that the Mooney scorch time of PBR4003 compound was similar to 2438-2 HM and 5025-2 HM compound, but its t_{90} was a little longer. The modulus at 100% and 300% elongation of PBR4003 vulcanizate were higher comparing with 2438-2 HM and 5025-2 HM vulcanizates, but the elongation at break was lower. The $\tan\delta$ at 0 °C of PBR4003 vulcanizate was higher which indicated the wet skid resistance was better, and the $\tan\delta$ at 60 °C was lower which indicated the rolling resistance was lower. It was found that better properties of PBR4003 compound could be achieved by using silica as filler.

Key words: solution styrene-butadiene rubber; high performance tire; tread compound; rolling resistance; wet skid resistance

固特异 3 款 Fuel Max 翻新轮胎 通过 SmartWay 认证

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美国《现代轮胎经销商》(www.moderntire-dealer.com)2012 年 12 月 13 日报道:

据美国环保署(EPA)消息,固特异 G316 AT Fuel Max, G572 LHD Fuel Max 和 G305 ATS Fuel Max 系列专利翻新轮胎最近通过 SmartWay 认证。

EPA 于 2012 年对翻新载重轮胎提出了低滚动阻力要求。据 EPA 称,通过认证的低滚动阻力翻新轮胎必须使卡车至少降低燃料消耗 3%。

固特异商业轮胎系统长途运输及综合服务部品牌经理 Brian Buckham 称,其通过 SmartWay 认证的翻新轮胎有助于车队及个体经营者执行加利福尼亚空气资源委员会的规定。另外,在这些高技术产品中应用的节能胶料将有助于在任何地方运营的车队都降低燃料消耗。G316 AT Fuel Max, G572 LHD Fuel Max 和 G305 ATS Fuel Max 是优异的全地形产品,除了卓越的燃料效率外,还可提供宽范围优良的使用性能。

有 9 款固特异品牌和 3 款邓禄普品牌的载重轮胎已通过了 SmartWay 认证。据 Buckham 称, Fuel Max 轮胎和翻新轮胎的特点是采用低生热胶料和有利于提高燃料效率以优化节能的结构。

- G316 AT Fuel Max 预硫化翻新轮胎断面宽为 8.8.5, 8.75 和 9 英寸的 4 个规格。其中 8.5 和 9 英寸的 2 个规格还用于 295/75R22.5, 11R22.5 和 285/75R24.5 固特异 UniCircle 轮胎。

- G572 LHD Fuel Max 预硫化翻新轮胎断面宽为 8.5, 8.875 和 9.25 英寸的 3 个规格(UniCircle 轮胎不久也将采用该产品)。

- G305 ATS Fuel Max 预硫化翻新轮胎断面宽为 8.5, 8.75 和 9 英寸的 3 个规格(UniCircle 轮胎不久也将采用该产品)。

展望未来, Buckham 说固特异计划提交更多的载重翻新轮胎产品进行 SmartWay 认证,并称符合 SmartWay 认证的要求是公司长期战略的重要组成部分,而且为他们始终将焦点放在帮助用户降低总运营成本树立了榜样。

(吴秀兰摘译 田军涛校)