

## Application of Zinc-free Processing Aid HT207 in Tread Compound of Passenger Car Tire

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**Abstract:** The application of zinc-free processing aid HT207 in the tread compound of passenger car tire was studied. The results showed that by adding processing aid HT207 in the tread compound, the Mooney viscosity and shear viscosity of the compound decreased, the Mooney stress relaxation time was shortened, the hardness of the vulcanizate changed little, the wear resistance decreased, the physical properties of the vulcanizate after aging were unchanged, the loss factor decreased, the rolling resistance of the tire decreased, and the appearance quality of the semi-finished compound was improved. As the dosage of processing aid HT207 increased, the Mooney viscosity, storage modulus and shear viscosity of the compound decreased, the Mooney stress relaxation time was shortened, and the hardness before aging and the physical properties after aging were kept unchanged.

**Key words:** processing aid; passenger car tire; tread compound; Mooney viscosity; physical property; dynamic mechanical property

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日前,倍耐力在北京发布了DIABLO ROSSO<sup>TM</sup>系列最新一代产品DIABLO ROSSO<sup>TM</sup>IV。此款产品延续了倍耐力品牌在汽车运动领域的高性能基因,在胎面花纹、胶料以及产品结构方面继续优化,从而实现了更强的抓着力以及精准的车辆反馈和操纵性能,为车辆发挥极致运动性能提供了保障。

国内机动车数量越来越多,消费者对轮胎的需求与日俱增,多功能、高性能轮胎已经成为汽车、机车爱好者的必换产品。倍耐力亚太区首席运营官Livio Magni表示:“在中国,倍耐力的乘用车轮胎、摩托车轮胎和自行车轮胎,无论在原配轮胎市场还是在替换轮胎市场都有巨大的潜力。为了顺应市场趋势,抓住机遇,我们通过原配轮胎市场实现拉动替换轮胎市场增长。”Livio Magni介绍到,倍耐力在亚太地区有印度尼西亚和中国两座工厂,“这一布局可以帮助倍耐力为亚太地区市场特别是中国市场研发和生产定制化的产品。”

倍耐力摩托车轮胎大中华区、韩国销售经理

杨育红表示,伴随着中国乘用车市场逐渐进入微增长期,乘用车轮胎业务的增长遇到瓶颈,但中国摩托车行业,特别是高端摩托车发展迅猛,这与倍耐力的特质十分相符。“倍耐力的产品主要面向高端摩托车轮胎以及踏板车轮胎市场。因此,对于倍耐力来说,中国市场十分重要。”杨育红说,倍耐力摩托车轮胎业务从2014年进入中国以来一直表现良好。因此,倍耐力总部对中国市场也给予非常大的期待,“倍耐力一直致力于为终端市场提供性能更高的轮胎。倍耐力每年都会将收益的约6%投入研发中。我们将为中国消费者提供更好的产品。”

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