

(2)通过 RV2 结合双螺杆挤出机对轮胎胶粉进行工业化应用再生试验,结果表明,通过密集剪切,使硫化橡胶的交联密度下降,实现了轮胎胶粉的再生。

(3)RVR 与 NR 母胶共混试验结果表明,与轮胎胶粉相比,RVR 与基质胶的亲 and 性较佳,硫化胶的物理性能优异。

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Environmental-friendly Recycling Technology for Waste Rubber

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Abstract: In this paper, the reclaim of vulcanized natural rubber (NR) powder by a new rubber reclaiming agent RV2 was investigated. Meanwhile, the waste tire rubber powder was tested with RV2 in a twin screw extruder. The results showed that, when 2.5 phr of RV2 was used to treat the vulcanized rubber powder at the temperature of 60 °C and then the mixture was sheared for 5 min, the swelling degree, tensile strength and elongation at break of the resulted compounds increased, which indicated that good devulcanizing effect was obtained. Further increase of shearing was then applied by using a twin screw extruder, and it was found that the tire rubber powder could be effectively reclaimed by intensive shearing to reduce the crosslinking degree in combination with RV2. The reclaimed rubber (RVR) was tested by blending with regular NR and showed better compatibility compared with the blend of tire rubber powder/NR. In addition, the RVR/NR vulcanizates possessed excellent physical properties.

Key words: waste rubber; rubber powder; recycling technology; environmental-friendly

Hercules 推出 H-704 驱动轮胎

中图分类号:TQ336.1;U463.341 文献标志码:D

美国《现代轮胎经销商》(www.moderntire-dealer.com)2014 年 11 月 12 日报道:

Hercules 轮胎在 2014 拉斯维加斯专业设备市场联盟(SEMA)展上推出 Hercules H-704 高端闭合胎肩深花纹驱动轮胎(见图 1)。

- * 高负荷全钢胎体;
- * 23.8 mm 高的胎面花纹;
- * 坚硬的胎肩设计可抵抗不规则磨损;
- * 高抓着性花纹块;
- * 宽花纹沟有助于阻止石子镶嵌。

公司营销副总裁 Joshua Simpson 说:“我们提供的 H-系列中型载重轮胎压倒性地得到了客户接受,自然我们也希望 Hercules H-704 轮胎进入客户接受的行列,因此,我们正采取措施使 H-



图 1 Hercules H-704 轮胎

系列产品线更加强大而实用。”

Hercules H-704 轮胎为长途运输设计。特征如下:

Hercules H-704 轮胎采用 EcoFT 胶料生产,具有低滚动阻力,正在等待通过 SmartWay 验证。该产品线推出了 6 个 14 和 16 层级规格。

(肖大玲摘译 吴淑华校)