Material Compounding

carbon black, additives and some rubber compound. After allowed standing, the recycle oil was separated into clear oil in the upper layer and residue mixture in the middle and bottom layers. The upper layer clear oil was then added into aromatic oil and showed no negative effect on the normal use of the aromatic oil if the percentage of recycled oil did not exceed 4%. The residue mixture in the middle and bottom layers was applied in the tire flap at the addition level of 2 phr. By adjusting the mixing process, the processing properties and physical properties of the rubber compound showed no change, and the performance of the finished flap met the requirements of enterprise standard. The experimental results also showed that, there was no stain or oil bleed, no color change or appearance change after storage of the finished products. The application of recycled oil in the aromatic oil and the flap compound would deliver good economic and environmental benefits.

Keywords: recycled oil; tire; flap; aromatic oil



特拓推出VMA胶料流动性分析仪

经过2年的研究,特拓(青岛)轮胎技术有限公司日前正式推出VMA胶料流动性分析仪,见图1。

我国橡胶工业长期以来使用门尼粘度仪检测胶料生产过程中的加工性能,但对胶料的流动性表征不直观。VMA胶料流动性分析仪填补了我国胶料流动性检测设备的空白。

VMA胶料流动性分析仪可用于轮胎、胶囊和胶鞋等行业,其主要特点有: (1)适用于母炼胶和终炼胶; (2)在高剪切速率下能准确检测胶料流动性,更真实地反映胶料实际生产过程中的加工性能; (3)可模拟混炼胶下一段工序的加工性能; (4)灵敏地检测原材料和加工工艺的波动; (5)检测时间不超过60 s(只需门尼粘度检测时间的1/6),提高工作效率并节省人工成本; (6)精准控制可编程逻

辑控制(PLC)系统与触摸系统,及时采集分析数据信息;(7)实时调取测试报表进行追溯分析;(8)全程自动化取料。



图1 VMA胶料流动性分析仪

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