

时间也较长,所以 EPDM 和 HNBR 可以较好地共硫化。

以上分析表明,虽然 EPDM 和 HNBR 相容性不是很好,但由于它们能较好的共硫化,因此,即使没有加入增容剂,仍然可以得到物理性能良好的共混物。

3 结论

(1)HNBR/EPDM 共混物无论采用过氧化物还是硫给予体,硫化共混物的扯断伸长率保持率均在 60%以上,即都具有优异的耐热氧老化性能。

(2)随 HNBR 用量的增大,HNBR/EPDM 共混物的定伸应力、拉伸强度和撕裂强度都有所升高,而且磨损明显降低。

(3)HNBR 和 EPDM 共混物为不相容体系,两者的硫化仪曲线显示它们的硫化速率较为接近,能较好地共硫化。

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Study on structure and properties of HNBR/EPDM blends

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Abstract: The influence of the blending ratio on the properties of HNBR/EPDM blend was investigated by using peroxide DCP and sulfur donor DTDM as crosslinking agents respectively, the compatibility of two polymers was analysed by means of DSC and TEM, and their covulcanization was also discussed. The results showed that the elongation retentions after thermal-oxidative aging of the blends cured with two different curing systems respectively were higher than 60%; the modulus, tensile strength and tear strength of blend improved, but the abrasion resistance decreased as the HNBR proportion in the blend increased; and HNBR/EPDM was an incompatible system, but the curing rates of two polymers were closer on the rheometer curve, therefore the two polymers in the blend could well be covulcanized.

Keywords: HNBR; EPDM; blend; compatibility

双星研制成功中底缝帮预热机

中图分类号: TS943.3⁺3 文献标识码: D

最近,青岛双星集团研制成功中底缝帮预热机,解决了皮帮鞋面皱褶的难题。

皮鞋鞋生产中,用传统工艺将中底缝帮套入鞋植上,由于皮质较硬,鞋材皱褶多,给操作整理带来较大困难。双星研制出的中底缝帮预

热机是将中底缝帮套入预热机提前几秒钟预热,可使鞋面快速软化,鞋面帮材皱褶在蒸汽作用下快速舒展开,经软化操作后整理速度快,皱褶消失,并避免了操作时帮面破裂。该预热机既提高了鞋的外观质量,又提高了劳动效率,由原来的班产量 1 200 双提高到现在的 2 000 双。

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