

率降低。

(2) 在比表面积相近的情况下,结构较低的炭黑胶料物理性能受炭黑用量的影响较小。

(3) 与炭黑N330和N326胶料相比,炭黑N660胶料的300%定伸应力、拉伸强度、拉断伸长率与炭黑用量的线性关系更明显。

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Effect of Amount of Carbon Black with Different Structure on Properties of NR

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Abstract: The effect of different amounts of carbon black N330, N326 and N660 on the properties of natural rubber compounds was studied. The results showed that, with the increase in the amount of carbon black, the Mooney viscosity, F_L , F_{max} , hardness, modulus at 100% and 300% elongation of different carbon black compounds were significantly improved, t_{30} and t_{90} changed little, and the tensile strength and elongation at break were reduced. When the specific surface area was similar, the physical properties of the compound with lower structure carbon black were less affected by the amount of carbon black. The linear relationship between the amount of carbon black and the modulus at 300% elongation, tensile strength, and elongation at break of the carbon black N660 compound was more obvious than that of carbon black N330 and N326 compounds.

Key words: carbon black; amount; specific surface area; structure; natural rubber; modulus; tensile strength

东海炭素推出两款高强度低滞后炭黑

为顺应电动汽车市场迅猛增长的趋势,东海炭素炭黑有限公司推出EV800和EV480两款高强度低滞后炭黑,以期成为电动汽车用橡胶制品企业的可持续合作伙伴,并为改善环境作出贡献。

炭黑EV800旨在为轮胎胎侧胶提供更高的强度和更低的滞后。电动汽车因需装配质量较大的电池,迫切需要提高轮胎强度同时又不牺牲必要滞后的炭黑产品,从而降低轮胎滚动阻力。在非轮胎橡胶制品中,使用炭黑EV800也可获得类似性能优势。炭黑EV480的设计目标则是达到更高的补强水平,赋予橡胶制品更高的强度。

东海炭素炭黑有限公司前身为美国理查德森炭黑公司,2018年被世界第五大炭黑供应商日本东海炭素株式会社收购。

(朱永康)

锦湖石化计划新建丁腈胶乳生产装置

为了应对全球手套和医疗行业快速增长的需求,锦湖石化公司(简称锦湖石化)计划投资2.25亿美元在韩国蔚山(Ulsan)的石化综合体新建年产23.6万t丁腈胶乳生产装置。新生产装置将于2023年年底完工。

锦湖石化预计到2021年年底其丁腈胶乳年生产能力将达到71万t。新生产装置的建设将使公司的丁腈胶乳产量到2023年年底接近100万t。如果后期市场需求继续增大,韩国蔚山新生产装置仍具有进一步扩建的空间,丁腈胶乳最大产能可达到47万t。

锦湖石化成立于1970年,业务范围覆盖合成橡胶、合成树脂和建筑材料等诸多领域,其中核心业务合成橡胶的生产能力居世界前列。

(朱永康)