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Preparation, Structure and Properties of High-performance MWNT-COOH/NR Composite

WU Ning, WANG Zhen-hua, ZHANG Li-qun

(Beijing University of Chemical Technology, Beijing 100029)

Abstract: Carboxylated MWNT-COOH(MC)/NR composite was prepared by spray drying method from NR latex filled with supersonically dispersed suspension of MC, and the effects of coupling agent Si69 and KH-550 on filler dispersion and properties of composite were studied. The results showed that the dispersion of MC in MC/NR composite prepared by spray drying method was good. Coupling agent Si69 and KH-550 chemically reacted with carboxyl group on MC, which led to further improvement on the dispersion of MC. When the addition level of MC was more than 10 phr, KH-550 modified MC/NR composite showed excellent physical properties and electrical conductivity.

Key words: MWNT-COOH; NR; composite; spray drying; silane coupling agent

普利司通在美国境内轮胎日产量 将增加 13 000 条

中图分类号: TQ336.1 文献标志码: D

美国《现代轮胎经销商》(www.moderntire-dealer.com)2011年9月26日报道:

普利司通美洲公司正在建设 20.83 万 m² 的厂房,以扩大其美国境内轮胎产量。此外,该公司还将对其位于田纳西州沃伦郡的工厂投资 3 660 万美元。

上周该公司声称,将在其南卡罗来纳州艾肯郡的轿车和轻型载重轮胎厂再新增 4.41 万 m² 厂房,之前,该公司于 2010 年 7 月已经宣布在此厂增建 2.47 万 m² 的厂房,该厂厂房总计将扩张近 7 万 m²。艾肯厂原日产能为 25 000 条轿车和

轻型载重轮胎,这次扩产将使其日产能在原来的基础上新增 12 000 条轮胎。

在艾肯厂附近将新建面积为 13.95 万 m² 的新工程机械子午线轮胎厂。新厂将生产大型和巨型工程机械轮胎,这些轮胎目前仅由其日本下关和北九州厂生产。预计新厂将使该公司在美国的工程机械子午线轮胎日产量接近 100 条。

对田纳西州沃伦厂的投资将使其载重轮胎日产能增加 900 条,届时沃伦厂的日产能将达到 8 000 条载重轮胎和公共汽车轮胎。

当所有在建项目竣工时,普利司通在美国的轮胎日产能将增加约 13 000 条,即其在美国 6 家工厂总产能提高 15%,投资超过 13 亿美元。

(赵敏摘译 吴秀兰校)