Properties and Application of Domestic Deproteinized Natural Rubber

Cai Keping ¹, Huang Shengliang ², Li Puwang ³, Chen De ¹, Hu Songping ¹, Gao Tianming ³, Liu Yuan ¹

(1. ChemChina Zhuzhou Research and Design Institute for Rubber and Plastics, Zhuzhou 412003, China; 2. Zhuzhou MIYO Rubber and Plastic Co., Ltd., Zhuzhou 412002, China; 3. Institute of Agriculture Product Processing Research, Chinese Academy of Tropical Agricultural Science, Zhanjiang 524001, China)

Abstract: The properties of domestic deproteinized natural rubber (DPNR) were studied, and its application in damping rubber products was investigated. The results showed that, compared with ordinary natural rubber (NR), the nitrogen content of DPNR was lower, the heat build-up in dynamic compression test was less, the compression set was smaller, the flexibility and electrical insulation properties were better, but the tensile strength and elongation at break were slightly lower, and the aging resistance was slightly lower. The rubber side bearing for locomotive by using domestic DPNR as the main material possessed good dynamic properties, enhanced fatigue resistance, excellent dimension stability, good elasticity, low heat build-up, low creep and small compression set.

Keywords: deproteinized natural rubber; damping rubber product; rubber side bearing



东洋轮胎公司马来西亚工厂投产

日前,日本东洋轮胎和橡胶公司在马来西亚新建的大型轮胎工厂投产。据悉,该厂充分利用日本母公司的技术优势,采用东洋轮胎公司的A.T.O.M 专利轮胎生产系统,生产世界一流水平的高性能轮胎和节能轮胎。到2013年底该厂轮胎年产能将达到250万条,到2015年将提高至500万条,未来产能计划进一步扩大。

近年, 东洋轮胎在北美、亚洲和中东特别 是海湾地区颇有收获。海湾地区尤其是沙特阿拉 伯对东洋轮胎的需求量不断增长, 而东洋轮胎公 司在日本本土的工厂产能无法满足全球市场的需 求。在马来西亚建立新工厂是东洋轮胎公司为满足沙特阿拉伯市场需求采取的一大举措。新厂的东洋轮胎产量更大,而且价格更具有竞争力,需求有望进一步增长。新厂将为沙特阿拉伯市场提供现有几种不同规格的TEO Plus轮胎。TEO Plus轮胎是专门为乘用车和运动型车辆配套的,具有在湿滑路面上操控性良好、驾乘平稳而舒适的特点。

东洋轮胎公司在沙特的独家经销商为阿尔穆迪控股公司(Al-Amoudi Holding Company)。该公司经销东洋轮胎已有60多年历史,在沙特阿拉伯各地设有18个分公司。 宇 虹