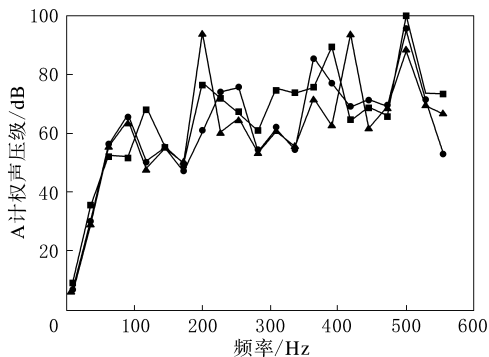




▲—方案1; ●—方案2; ■—方案3。

图7 带束层宽度对轮胎噪声的影响

轮胎接地压力分布更均匀,有利于改善轮胎的抓着力和舒适性;随着带束层角度的增大,轮胎径向刚度降低,低频辐射噪声可以得到有效抑制;接地压力分布与轮胎噪声有直接关系,接地压力偏差值减小,轮胎噪声呈现降低的趋势。

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Effect of Belt Structure on Footprint and Noise of Truck and Bus Radial Tire

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Abstract: The effect of belt structure on the footprint and noise of truck and bus radial tire were investigated by 3D modeling on Abaqus non-linear FE software. The results showed that, as the width and angle of belt increased under normal load and inflation pressure, the footprint tended to get better and the noise in the low-frequency range was reduced. It was also found that the low-frequency vibration noise related to the contact pressure distribution of the tire ground contact area.

Key words: truck and bus radial tire; belt structure; footprint; noise; finite element analysis

改性超细凹土橡胶补强剂的生产工艺

中图分类号: TQ330.38+3 文献标志码: D

由江苏玖川纳米材料科技有限公司申请的专利(公开号 CN 101985529A, 公开日期 2011-03-16)“改性超细凹土橡胶补强剂的生产工艺”, 提供了一种改性超细凹土橡胶补强剂的生产工艺, 即: 将偶联剂水解液按偶联剂与凹土以 1:(10~50)质量比洒在晒干的凹土上, 浸泡 24 h 后, 用间距控制在 2 mm 的对辊和三辊进行挤

压, 制得片状凹土; 将片状凹土堆放 48 h 以上, 然后将其放入不锈钢打浆池, 按片状凹土与水质量比为 1:5 加水, 升温至 80 ℃, 高速搅拌 3 h, 得到悬浮液; 将悬浮液静置、冷却至室温, 压滤分离, 得滤饼; 将滤饼在 105 ℃ 下烘干至水质量分数小于 0.02, 然后进行破碎、气流粉碎, 制得产品。该改性超细凹土与橡胶相容性较好, 可以部分或全部替代炭黑和白炭黑, 起到较好的补强效果。

(本刊编辑部 赵敏)