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## Design on 265/65R18LT All-steel Light Truck and Bus Radial Tire for Off-road

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**Abstract:** The design of 265/65R18LT all-steel light truck and bus radial tire for off-road was introduced. In the structural design, the following parameters were taken: overall diameter 809 mm, cross-section width 282 mm, width of running surface 210 mm, arc height of running surface 11 mm, bead diameter at rim 459 mm, bead width at rim 215.9 mm, maximum width position of cross-section ( $H_1/H_2$ ) 0.972 9, off-road pattern for tread with reserved nail positions, pattern depth 14 mm, block/total ratio 55%, and number of pattern pitches 40. In the construction design, the following processes were taken: 2-layer design of crown compound and base compound for tread,  $3 \times 0.20 + 6 \times 0.35$  HT steel cord for 1<sup>#</sup> and 2<sup>#</sup> belt, 930dtex/2 nylon 66 dipped cord for cap ply,  $3 + 9 \times 0.22 + 0.15$  steel cord for carcass. The performance test results of the finished product indicated that the inflated peripheral dimension and various properties of the tire met the requirements of national standards. The rectangular ratio of tire foot print was 1.01, and the shoulder settlement was 1.05, which was consistent with the finite element analysis results.

**Key words:** all-steel light truck and bus radial tire; off-road pattern; structural design; construction design; performance of finished product; finite element analysis

### 方兴橡胶与比利时贝卡尔特钢帘线 签署2024年度合作协议

日前, 东营市方兴橡胶有限责任公司(简称方兴橡胶)与比利时贝卡尔特钢帘线公司正式签署2024年度合作协议, 双方将继续建立战略合作关系, 吹响品质“冲锋号”, 为高性能轮胎生产再添强引擎。

方兴橡胶重视原材料与橡胶机械设备品质, 引进先进的生产工艺, 强化科研创新, 深耕国内外中高端市场, 挺进豪车和赛车配套领域。在不断加强高端化发展的进程中, 形成了以HIMALAYA为引领的八大品牌体系(还包括OPALS、GLEDE、NAAATS、贵马、龙霸、军马、前驰), 力求为用户提供安全、舒适、环保的高性能轮胎产品。

(本刊编辑部)

### 一种轮胎硫化机内压泄漏呼吸法检测系统

由瑾鸣机械(上海)有限公司申请的专利(公布号 CN 116353124A, 公布日期 2023-06-30)“一种轮胎硫化机内压泄漏呼吸法检测系统”, 涉及的轮胎硫化机内压泄漏呼吸法检测系统包括硫化模具、轮胎和胶囊, 硫化模具通过导管Ⅲ连接罐体; 罐体通过导管Ⅱ连接自动清理内压泄漏物质的呼气装置, 并通过导管Ⅰ连接自动收集内压泄漏物质的吸气装置。其中, 罐体内设有传感器, 传感器连接PLC控制系统。该检测系统基于仿生学手段并结合实际, 实现了自动化提取样本, 采用数据智能分析以及数据研判, 大大缩短了发现轮胎硫化机内压泄漏的反应时间, 降低了轮胎硫化次品率。

(本刊编辑部 赵敏)