

表7 成品轮胎低气压耐久性测试结果

项 目	测试阶段				
	1	2	3	4	5
负荷率/%	85	90	100	100	100
行驶时间/h	4	6	24	1.5	64.5
阶段结束时充气压力/kPa	260		310	230	

注:按FMVSS 139(低气压耐久)测试,温度为35~41℃,充气压力为260~200 kPa,最低充气压力为200 kPa,测试速度为120 km·h<sup>-1</sup>,额定负荷为1 030 kg。

轮胎高性能测试累计行驶时间为129 min,累计行驶里程为347.7 km,试验结束时轮胎冠部起鼓、崩花。

轮胎耐久性测试的累计行驶时间为64.18 h,累计行驶里程为7 702 km,试验结束时轮胎状态为胎圈上端裂口。

轮胎低气压耐久性测试的累计行驶时间为100 h,累计行驶里程为12 000 km,试验结束时轮胎状态良好。

## Development of 31×10.50R15LT 109Q 6PR Mud-terrain Tire

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**Abstract:** The development of 31×10.50R15LT 109Q 6PR mud-terrain tire was introduced. According to the performance requirements of mud-terrain tire, the large blocks with high and low staggered distribution were used, the grooves were deep and small blocks on the bottom was designed for effective mud removal. In addition, wide driving surface and high sidewall strength were applied. The blend of natural rubber/neodymium-based butadiene rubber was selected for the tread compound reinforced by nano-scale carbon black which provided high wear-resistance and excellent tear-resistance. It was confirmed by the finished tire test that, the inflated peripheral dimension, strength, bead unseating resistance, high speed performance, durability and low inflation pressure durability of the tire met the requirements of FMVSS and ECE related standards.

**Key words:** mud-terrain tire; tread pattern; structure; tread compound; finished tire performance

### 一种轮胎打包机

由南通至上机械有限责任公司申请的专利(公开号 CN 110002057A,公开日期 2019-07-12)“一种轮胎打包机”,包括主缸、顶部焊接架和底部焊接架等。本发明具有结构合理简单、生产成本低、安装方便,可以将小轮胎挤压至大轮胎内部,从而减小废旧轮胎储存及运输空间,将大号轮胎放入下扩杆之间,剪叉油缸驱动剪叉机构上升至最顶端,两侧涨开机构在侧推油缸作用下拉

### 3 结语

我公司开发的31×10.50R15LT 109Q 6PR泥地轮胎各项性能满足FMVSS和ECE相关标准要求,经过东南亚客户近一年的试用(20%高速公路和80%泥泞道路),反映该轮胎与某国外品牌轮胎质量相当,且更经济实惠。与普通轮胎相比,MT轮胎在泥泞路面行驶时抓着力大,自洁性好,不易打滑。目前该轮胎畅销东南亚地区,特别在印度尼西亚市场深受顾客好评。

### 参考文献:

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紧,涨开轮胎中间孔,剪叉油缸驱动剪叉机构下降,将轮胎中间扩大,人工放置小一号的轮胎至滚筒组中间,两侧滚筒组压紧,将轮胎压成椭圆形,主缸伸出,将小一号的轮胎压至下方轮胎内侧,下方归正油缸通过中间盘将小号轮胎归正,使大号轮胎完全包覆小号轮胎,人工再重复以上步骤放入更小号的轮胎,重复挤压轮胎至最小规格轮胎为止。

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