

Design on 385/65R22.5 All-season Truck and Bus Radial Tire

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Abstract: The design of 385/65R22.5 all-season truck and bus radial tire was introduced. In the structure design, the following parameters were taken: overall diameter 1 067 mm, cross-section width 385 mm, width of running surface 308 mm, arc height of running surface 13 mm, bead diameter at rim seat 570.5 mm, bead width at rim seat 311 mm, maximum width position of cross section (H_1/H_2) 1.01, using symmetrical strip pattern, pattern depth 16.5 mm, number of pattern pitches 55, block/total ratio 70%, and using closed design for tire shoulder pattern. In the construction design, the following processes were taken: using 0.25 + 6 + 12 × 0.225HT steel cord for carcass, 3 + 8 × 0.33HT steel cords for 1[#] and 2[#] belts, 1 × 5 × 0.30HI steel cord for 3[#] belt, 3 × 7 × 0.20HE steel cord for 0° belt, double composite structure for tread, using one-stage building machine to build tires and hot plate curing press to cure tires. The test results of the finished tire showed that the inflation peripheral dimension, durability, rolling resistance, noise, wet skid resistance and snow performance of the tire met the corresponding design requirements.

Key words: truck and bus radial tire; all-season tire; structure design; construction design

我国橡胶机械行业继续牛市

2022年上半年我国橡胶机械行业继续牛市,主要经济运行情况如下。

(1) 产销两旺,销售收入小幅增长。据中国化工装备协会橡胶机械专业委员会统计,2022年上半年我国20家主要橡胶机械企业总销售收入为38.01亿元,同比增长4.8%。以此推算,上半年我国橡胶机械行业总销售收入达到56.2亿元,同比增长5.1%。销售收入较高的企业主要有软控股份有限公司、大连橡胶塑料机械股份有限公司、中国化学工业桂林工程有限公司、万向新元科技有限公司、天津赛象科技股份有限公司、桂林橡胶机械有限公司等。销售收入增长较多的企业为青岛海琅智能装备有限公司、万向新元、中化桂林工程等,增幅达20%以上。前三强的销售收入为22.96亿元,占行业总销售收入的40.9%,集中度增长0.7%。前十强的销售收入为32.2亿元,占行业总销售收入的59.1%,集中度下降2.2%。生产销售产品主要集中在工程机械轮胎设备,乘用车及载重轮胎设备产销量较往年大幅下降。大多数橡胶机械企业产销两旺,开机率保持较高水平,下半年订单基本排满,但部分橡胶机械订单因轮胎项目问

题而取消或延迟交货。下半年橡胶机械行业承接订单偏少,部分企业生产有少量缺口。预计2022年我国橡胶机械行业销售收入以个位数增长。

(2) 利润同比大幅增长。上半年,参与统计的20家企业利润同比增长70%,亏损企业4家,4家上市公司软控股份、赛象科技、新元科技、沈阳蓝英工业自动化装备股份有限公司的利润同比较大增长。申报企业新产品产值同比增长20%。钢材等原材料价格下降,下半年订单主要集中在工程机械轮胎设备,毛利率有望提高。预测2022年行业利润较大幅度增长,赢利水平有望继续提高。

(3) 出口创汇大幅增长。上半年,参与统计的20家企业的出口交货值为11.4亿元,同比增长66.7%,占总销售收入的30%,同比增长10.3%。推算上半年行业总出口创汇达到2亿美元,同比增长60%。出口交货值较高的企业有软控股份、大连橡塑机械、天津赛象科技、青岛海琅装备、中化桂林工程、益阳橡胶塑料机械集团有限公司等。我国轮胎行业海外投资放缓对下半年橡胶机械出口有一定影响。预计2022年下半年橡胶机械行业出口继续向好,全年出口交货值以两位数增长。

(陈维芳)