

Study on Combustion Characteristics of Carbon Black in Vulcanizates

JIA Airui, ZHANG Lijie, LU Bo, WEI Sheng

(Shandong Linglong Tire Co., Ltd., Zhaoyuan 265400, China)

Abstract: The relationship between the combustion characteristics of carbon black in vulcanizates and the properties of corresponding carbon black raw materials was studied, and the relationship between the two was used to analyze the varieties of carbon black in different vulcanizates and evaluate the dispersion of carbon black. The results showed that the combustion characteristic temperature of carbon black in vulcanizates had a significant linear relationship with the compression oil absorption number and nitrogen absorption area of the corresponding carbon black, and the correlation factors were 0.806 9 and 0.954 1, respectively. According to the combustion characteristic temperature of carbon black and the linear regression equation, the compression oil absorption number and nitrogen absorption area of carbon black in the vulcanizates could be deduced, which could determine the type of carbon black. The low combustion characteristic temperature of carbon black in the vulcanizates could indicate the good dispersion of carbon black to a certain extent.

Key words: vulcanizate; carbon black; combustion characteristics; thermogravimetric analysis; compression oil absorption number; nitrogen absorption area; dispersion; linear relationship

山东省淘汰3 117万条轮胎落后产能

近期山东省印发《全省落实“三个坚决”行动方案(2021—2022年)》的通知,涉及到轮胎产业落后产能退出。

到2022年,年产能120万条以下的全钢子午线轮胎(工程机械轮胎、航空轮胎、宽断面无内胎轮胎除外)、500万条以下的半钢子午线轮胎(缺气保用轮胎、赛车轮胎高端产品、超低断面轮胎除外)企业全部整合退出,退出产能可以进行减量置换,逾期未完成的直接关停退出。淘汰不能实现密闭式自动投料的炼胶机,淘汰不能实现冲氮工艺的子午线轮胎行业硫化设备。

根据文件,山东省本轮轮胎产能退出涉及18家企业。

涉及的8家全钢轮胎企业(产能)为:青岛途乐驰橡胶有限公司(70万条)、山东君诚橡胶科技

有限公司(30万条)、山东元丰橡胶科技有限公司(100万条)、潍坊市跃龙橡胶有限公司(107万条)、山东凯通轮胎制造有限公司(61万条)、山东银宝轮胎集团有限公司(80万条)、通伊欧轮胎(诸城)有限公司(48万条)、山东金斯坦轮胎有限公司(60万条)。共计产能为556万条。

涉及的10家半钢轮胎企业(产能)为:山东固可力轮胎有限公司(46万条)、青岛福轮科技有限公司(300万条)、青岛奥诺轮胎有限公司(120万条)、山田橡胶科技有限公司(450万条)、山东吉路尔轮胎有限公司(400万条)、滕州赛阳橡胶工业有限公司(410万条)、远新轮胎有限公司(300万条)、山东红光橡胶科技有限公司(60万条)、诸城市泸泰橡胶制品有限公司(100万条)、山东皓丰轮胎工业有限公司(375万条)。共计产能为2 561万条。

(本刊编辑部)

启事 自投稿之日起30天内未收到编辑部录用通知的作者请与编辑部联系,确认未被录用或已收到录用通知的作品方可投向其他刊物,切勿一稿多投,谢谢合作!