Structure and Property of Extruded MVQ Sponge

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Abstract: The MVQ sponge was prepared by extruding and chemical blowing, and the influence of addition level of silica, blowing agent and curing agent on the cell structure and properties of the silicone sponge was investigated. The results showed that MVQ sponge contained large amount of closed cells, and sponges with different density had different cell structure and distribution. The silicone sponge with higher density and hardness was obtained when lower addition level of silica and blowing agent, higher addition level of curing agent were used. The compression stress-relaxation of MVQ sponge increased at first and then decreased as the density increased, and the maximum compression stress-relaxation was 18% as the density was 0.61 Mg · m^{-3}. The compression stress of silicone sponge with higher density increased more rapidly than that of silicone sponge with lower density at low stress range.

Key words: MVQ; extruding; blowing; sponge; stress-relaxation

一种热塑性橡胶在风力发电用软电力电缆上的应用

中图分类号: TQ336.4+2 **文献标志码**: D

由沈阳军航电源科技有限公司和大连科盟新材料有限公司申请的专利(公开号 CN 101792557A,公开日期 2010-08-04)“一种热塑性橡胶在风力发电用软电力电缆上的应用”,涉及的热塑性橡胶配方为:EPDM 20～80,聚烯烃树脂 5～50,乙烯/乙酸乙烯酯共聚物 2～20,酚醛树脂 0.2～5,有机过氧化物 0.2～5,其余为助剂。该热塑性橡胶应用于风力发电用软电力电缆上,可使电缆性能大大提高,制备工艺也得到简化。

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一种滑板式橡胶支座

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由中国重汽集团济南动力有限公司申请的专利(公开号 CN 201538209U,公开日期 2010-08-04)“一种滑板式橡胶支座”,提及的支座包括橡胶支座和钢板弹簧,两者之间通过滑板座活动连接。这种结构使得板簧和橡胶支座之间由紧固连接转变为滑动连接。当汽车在较恶劣的路况下行驶时,车桥上下跳动,板簧末端在滑板座内前后滑动的同时绕平衡轴转动,使橡胶支座只承受垂直作用力,消除了对橡胶支座的扭转和剪切,极大地提高了橡胶支座的使用寿命,降低了橡胶支座的损坏率。

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橡胶履带板

中图分类号: TQ336.5 **文献标志码**: D

由镇江同立橡胶有限公司申请的专利(公开号 CN 201538371U,公开日期 2010-08-04)“橡胶履带板”,涉及的橡胶履带板由橡胶体、钢管、斜面端卡板和 L 型端卡板构成,长条状橡胶体包覆在横穿橡胶体的钢管外,橡胶体的一端上部呈斜面状,另一端上部呈 L 型,斜面端卡板用螺栓连接在橡胶体斜面端的钢管之外,L 型端卡板通过焊接直接与钢管连接在橡胶体 L 型端的履带板之外。该橡胶履带板可用来解决橡胶履带板向内与低底盘工程机械底盘碰撞以及无法转动运转的问题,有望在低底盘工程机械中应用。

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